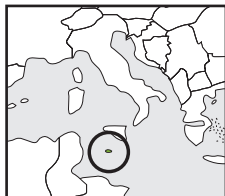


## Time to wake up



In order to promote a sustainable future that meets today's needs without compromising those of future generations, the Maltese must begin to think of themselves less as "owners" of the environment and more as its "trustees and stewards." Citizens must realize that environmental degradation and unjust resource sharing are a result of their selfishness, indifference and complacency and become more prudent in using their limited natural resources. The process of caring for the environment should involve subsidiarity – a principle associated with the decentralization of power and the provision of an enabling environment, including material assistance to decentralized units – and translate into more effective integration and co-ordination among responsible entities.

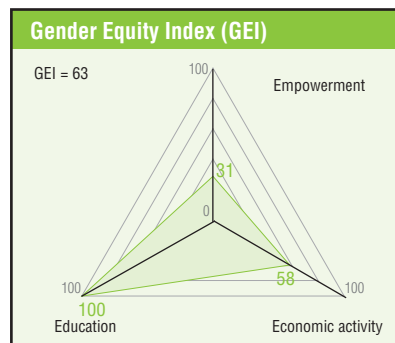
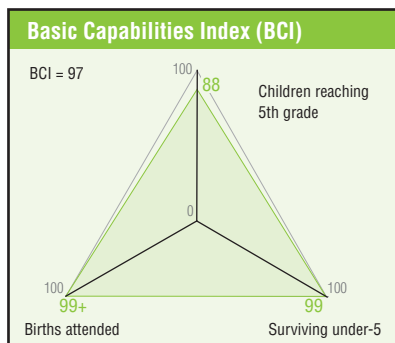
Koperazzjoni Internazzjonali (KOPIN)  
J.M. Sammut

Malta's commitment to the ideals of the United Nations, particularly regarding environmental issues, is evident in the leading role the country played in 1967 when it introduced the concept of the Common Heritage of Mankind with regard to the international seabed and ocean floor and its subsoil. This led to the adoption of the 1982 United Nations Convention of the Law of the Sea and to the 1989 initiative on the protection of the global climate for present and future generations of humankind.

Although Malta was one of the pioneers in recognizing global environment issues, its first national sustainable development strategy was not published until December 2006.<sup>1</sup> It is the numerous environmental NGOs in the country that have been regularly covering the different environmental issues. Some have been active since the 1960s and continue to respond to the challenges that growing commercial and domestic demands pose for Malta's land, sea and air. Studies show that, as a small densely populated archipelago, Malta has to be very prudent and ethical in the use of limited natural resources.<sup>2</sup> Unbridled market forces and highly consumerist lifestyles, with their emphasis on satisfying profit and individual needs, may be working against the social well-being of Maltese society not only in the present but also in the future.

### Climate change

The mean annual air temperature in Malta has risen by 0.23°C per decade over the past 50 years.<sup>3</sup> Global warming is expected to lead to more extreme and haphazard weather patterns in the country with prolonged Saharan heat-waves, shorter, more intense rainy periods and longer dry spells that will be detrimental to both the inhabitants and the tourist industry. The rise in temperature will be accompanied



by severe water shortages as rainfall over the central Mediterranean is drastically reduced.

From 1990 to 2008, Malta's greenhouse gas emissions showed an average annual increase of 2.1%. The greatest rise occurred in 1991 when an increase of 8.7% was recorded. The only years which saw a reduction were 1995, 2004 and 2008.<sup>4</sup> From 2000 to 2008 the energy sector was the major contributor to greenhouse gases, emitting on average 90.4% of the total. Energy production industries, with an average of 73.5% of emissions, dominated this sector. These were followed by transport with 19.8% of the sector's total on average. Malta has 721 licensed road vehicles per 1,000 inhabitants.<sup>5</sup> To help reduce emissions and over-dependence on private cars, a new bus system was introduced in July 2011.<sup>6</sup> The Government should also establish incentives towards the purchase of low-polluting cars while discouraging demand for cars that pollute more, such as older models.

The National Strategy for Policy and Abatement Measures Relating to the Reduction of Greenhouse Gas Emissions<sup>7</sup> states that, as an EU member state, Malta is committed by 2020 to reduce carbon dioxide

(CO<sub>2</sub>) levels by 20% from the level recorded in 1990 and ensure that 10% of energy is generated from clean alternative sources. In the transport, agriculture and waste management sectors it pledged that, by 2020, gas emissions would be not more than 5% higher than in 2005. The country needs to scrupulously implement the measures laid down by the Climate Change Committee,<sup>8</sup> look for more efficient use of energy generation and move decisively towards maximum utilization of renewable energy sources such as wind and photovoltaic energy to cut back on CO<sub>2</sub> emissions. Failing to reach such targets would have negative social and economic repercussions.

### Land use

With an area of 314km<sup>2</sup> Malta has approximately 412,970 residents (1,307 persons per km<sup>2</sup>) and is visited by about 1.2 million tourists annually.<sup>9</sup> Statistics show that in 2005 27.7% of the island was urbanized.<sup>10</sup> Overdevelopment is Malta's most pressing environmental problem and has been the cause of a great loss of biodiversity and natural resources as well as of much land for agriculture.<sup>11</sup> Yet the 2005 Population and Housing Census revealed that there were over 53,000 vacant properties. More than a quarter of Malta's housing lies empty.<sup>12</sup>

The Malta Environment Planning Authority (MEPA) regulates land use and also runs the environ-

1 National Commission for Sustainable Development, *A Sustainable Development Strategy for the Maltese Islands 2007–2016*, (2006).

2 Malta Environment and Planning Authority (MEPA), *The Environment Report 2008*, (2008), <www.mepa.org.mt/ter>; S. Martin, *The Environmental Deficit: The Reform of MEPA and Other Environmental Regulatory Authorities*, (Valletta: Today Public Policy Institute, 2008).

3 MEPA, op. cit.

4 Eurostat, *Greenhouse Gas Emissions*, <app.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tsdcc100>.

5 National Statistics Office, *Malta in Figures 2010*, (Valletta: 2010).

6 D.Lindsay, "New Public Transport System Unveiled," *The Malta Independent*, (7 November 2010), <www.independent.com.mt/news.asp?newsitemid=114978#top>.

7 Ministry for Resources and Rural Affairs, *National Strategy for Policy and Abatement Measures Relating to the Reduction of Greenhouse Gas Emissions*, (Valletta: September 2009), <com.gov.mt/file.aspx?i=1439>.

8 Ibid.

9 National Statistics Office, *Malta in Figures 2010*, op. cit.

10 National Statistics Office, *Sustainable Development Indicators for Malta 2010*, (Valletta: 2010).

11 Ibid.

12 National Statistics Office, *Census of Population and Housing 2005: Preliminary Report*, (Valletta: 2010).

ment protection agency. There have been numerous breaches in land use plans, especially in building outside the Official Development Zone (ODZ),<sup>13</sup> and the Authority has been criticized for its response to those breaking development regulations, being strong with the weak and weak with the strong.<sup>14</sup> The extension of the building development zones on the eve of a closely fought parliamentary election<sup>15</sup> and a number of other high-profile incidents have led to a perception of political interference in the planning process and undermined MEPA's credibility.

Construction and demolition create around 90% of the country's annual waste.<sup>16</sup> Moreover they are also causing problems due to the generation of fine particles, leading to air pollution.<sup>17</sup> The recycling and reusing of old stones, concrete bricks and ceilings is an issue that has not been addressed. Considering the scarcity of land, careful management of the built environment is urgently needed so as to ensure the best possible quality of life, with minimal risks to human health, while fostering the cultural and social identity of settlements. Maltese environmental NGOs keep reminding politicians and public authorities about the degradation of the natural heritage.<sup>18</sup>

MEPA personnel need to abide by the code of conduct<sup>19</sup> presented to MEPA directors and employees in 2008 and design systems and procedures to ensure transparency, effectiveness and accountability for sustainable land use and to eliminate land speculation. It is essential that the members of the MEPA board not be political appointees but include planners, environmentalists and other concerned members of civil society. Only then can MEPA be considered to be safeguarding the environment.

## Water

Water is a scarce commodity in the country. The average rainfall is 600 mm per year.<sup>20</sup> Both the quantity and quality of ground water are at risk mainly due to over-exploitation by the public water supply and

private uncontrolled pumping.<sup>21</sup> This is leading to increased salinity and to contamination by excessive nitrates from agriculture and other pollutants.

More than half the water production is carried out by reverse osmosis in very costly desalination plants that contribute to greenhouse gas emissions.<sup>22</sup> Lately there have been periodic adjustments to water tariffs that contribute to decreased overall water demand. Malta has three sewage treatment plants that generate a substantial volume of second-class water. While the oldest sewage treatment plant, which started operating in the 1980s, provides this water to farmers for irrigation, the more recent treatment plants discharge their water into the sea.<sup>23</sup> Instead, it should be used in agriculture or utilized by industries that require extensive use of water.

The Government needs to invest in better water management, such as rainwater catchments that allow water to be siphoned back into underground aquifers. It should regulate private water collection and make it obligatory for all new building applications to include a cistern to harvest rainwater from the roof and encourage other households to invest in such a cistern. It should also run continuous public information campaigns on more efficient use of water.

## Positive signs

For three years MEPA published a yearly environment report that shows there are positive signs of environment sustainability. *The Environment Report 2008*<sup>24</sup> notes that 99% of bathing sites around Malta and Gozo are in conformity with the EU's bathing water standards (as outlined in the EU Bathing Water Directive).<sup>25</sup>

The report also stresses that the overall trend since 2000 has been towards a relative decoupling of energy consumption from economic activity, indicating that Malta's economy is becoming more energy efficient. There has also been an increase in material efficiency. Initial estimates show that Malta's domestic material consumption – which measures the quantity of material consumed by the national economy – declined between 2004 and 2006, indicating increased efficiency in the use of materials used for economic activities.

## Conclusion

There is a need for more integrated resource management to conserve the environment for future generations. Malta should exploit emerging economic opportunities opened up through science and technology and develop sustainable development skills and related job opportunities. The Government must allocate funding to university graduates for research and development and help industry develop innovative products and processes.

Public awareness and education also play a key role in ensuring that the environment is respected and cared for. Environmental studies should have an important place across the National Minimum Curriculum. There is also a need for the creation of lifelong educational programmes that focus on enabling meaningful learning experiences that foster sustainable behaviour in educational institutions, the workplace, families and communities. The Government must create different awareness points so that all sectors of the population can benefit from formal, informal and non-formal education for sustainable development. Education, communication and information dissemination can help communities identify important issues, recognize problems, acknowledge opportunities and devise solutions. Better awareness enables citizens to make responsible and informed choices about their attitudes, behaviour and lifestyle.

Political will plays an important role in the enactment and implementation of sustainable environmental regulations and laws. Environmental standards may not be met unless they are backed up by laws enacted by Parliament. Political involvement has at times hindered enforcement actions by MEPA officials and environmental NGOs.<sup>26</sup> The courts must ensure that the administration of justice reflects the seriousness of the offence. The "polluter pays" principle, which has already been introduced in some areas, must be expanded.<sup>27</sup> Environmental taxes and eco-contributions should be used to encourage a change in behaviour by penalizing high emitters of pollution, and investing the money in sources of clean renewable energy or research in sustainable development. Malta must reduce greenhouse gas emissions to meet its targets as an EU member.

Everyone has a role to play in the promotion of sustainable development. Civil society representation and participation should take place at all levels of decision-making. Representatives of civil society bodies, nominated by their own entities, should sit on the boards of national institutions such as the MEPA, the Malta Council for Economic and Social Development (MCESD), the Malta Resources Authority (MRA) and the Malta Transport Authority (MTA). ■

13 National Statistics Office, *Sustainable Development Indicators for Malta 2010*, op. cit.

14 Sciluna, op. cit.

15 Ibid.

16 National Statistics Office, *Solid Waste Management: 2004–2008*, (25 January 2010), <[www.nso.gov.mt/statdoc/document\\_file.aspx?id=2672](http://www.nso.gov.mt/statdoc/document_file.aspx?id=2672)>.

17 Ibid.

18 Nature Trust Malta, "Rape of Natural Heritage Continues," *Gozo News*, (July 2007), <[gozonews.com/986/rape-of-natural-heritage-continues-nature-trust/](http://gozonews.com/986/rape-of-natural-heritage-continues-nature-trust/)>; *The Times*, *2,500 Outside Development Zone Permits Issued in Two Years*, (24 March 2008), <[www.timesofmalta.com/articles/view/20080324/local/2-500-outside-development-zone-permits-issued-in-two-years.201333](http://www.timesofmalta.com/articles/view/20080324/local/2-500-outside-development-zone-permits-issued-in-two-years.201333)>; Nature Trust Malta, *NTM Amazed on What Grounds MEPA Issued the Permit to a Fish Packing Factory at Imgiebah*, (2011), <[www.naturetrustmalta.org/news/ntm-amazed-on-what-grounds-mepa-issued-the-permit-to-a-fish-packing-factory-at-imgiebah/](http://www.naturetrustmalta.org/news/ntm-amazed-on-what-grounds-mepa-issued-the-permit-to-a-fish-packing-factory-at-imgiebah/)>.

19 MEPA, *Good Conduct: A Code of Ethics and Code of Practice for MEPA Staff and Appointees*, (2008), <[www.mepa.org.mt/file.aspx?f=256](http://www.mepa.org.mt/file.aspx?f=256)>.

20 National Statistics Office, *Malta in Figures 2010*, op. cit.

21 K. Sansone, "Farmers Extract More Groundwater than WSC," *The Times*, 23 March 2010. Available from: <[www.timesofmalta.com/articles/view/20100323/local/farmers-extract-more-groundwater-than-wsc](http://www.timesofmalta.com/articles/view/20100323/local/farmers-extract-more-groundwater-than-wsc)>.

22 National Statistics Office, *World Water Day 2009*, (Valletta: 2009), <[www.nso.gov.mt/statdoc/document\\_file.aspx?id=2446](http://www.nso.gov.mt/statdoc/document_file.aspx?id=2446)>.

23 M. Cremona, "Averting a Water Crisis," *Malta Today*, (7 March 2010), <[archive.maltatoday.com.mt/2010/03/07/cremona.html](http://archive.maltatoday.com.mt/2010/03/07/cremona.html)>; J. Debono, "Malta Dumps 6,500 Cubic Metres of Water a Day," *Malta Today*, (12 October 2008), <[archive.maltatoday.com.mt/2008/10/12/t14.html](http://archive.maltatoday.com.mt/2008/10/12/t14.html)>.

24 MEPA, op. cit.

25 European Commission, *The 2006 Bathing Water Directive*, (2006), <[ec.europa.eu/environment/water/water-bathing/index\\_en.html#2006](http://ec.europa.eu/environment/water/water-bathing/index_en.html#2006)>.

26 Sciluna, op. cit.; F. Vella, "Mistra Development: Calls for JPO to Resign, While He Waits for Police Inquiry to End," *Malta Independent*, (19 March 2008); P. Cachia and N. Laviera, "DCC, MEPA Chairman Reacts to Auditor's Report on 'Irregular Supermarket Permit,'" *Di-ve News*, (28 February 2008), <[www.di-ve.com/Default.aspx?ID=72&Action=1&NewsID=50003&newscategory=36](http://www.di-ve.com/Default.aspx?ID=72&Action=1&NewsID=50003&newscategory=36)>.

27 MEPA, *Polluter Pays Principle*, <[www.mepa.org.mt/tf04\\_ppp](http://www.mepa.org.mt/tf04_ppp)>.