

State of the Environment Report for Malta 2002

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# **Environmental Planning, Management and Sustainability**

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## 2.1 Introduction

Environmental management deals with a number of aspects but at its core lies humankind's interaction with, and intervention on, the life support systems. Our ability to manage the environment in a sustainable manner depends on our understanding of the various components of the earth-air-water-life system and of the interactions and mechanisms that make it work.

Environmental management is not only to do with environmental protection; it has more to do with sustainable resource use. Paramount concern in environmental management is to maintain the earth as a suitable place for human beings to live in for the foreseeable future. This is what most people mean by sustainability.

However, comprehensive human well-being is dependent on maintaining a sustainable balance throughout the whole environment, for humans are an integral part of the single life-support system.

The weight given in environmental management to specifically human needs as against the "rights" of other organisms is an important ethical and theological question. However, man's capability of inflicting immense harm to most other organisms and to the environment in general through chemical and mechanical means, underlines the importance of controlling and managing human activities.

The philosophy of environmental management is founded on 3 assumptions:

- a) that there is a sustainable level of renewable resource use from activities such as agriculture and fishing and that technology can be found to extend the supply of non-renewable resources, involving more efficient extraction and/or use of the resources and by substitutions of traditional materials with new ones;
- b) that a suitable combination of policy measures can rectify environmental damage and conserve resources (this is where EIAs, SEAs, Environmental Management Systems and Environmental Audits come in); and
- c) that environmental objectives can be agreed and conflicting interests reconciled (this is where the role of NGOs, Local Councils, scientists and the general public is particularly important).

*Burnham, P., Wye College, 1998*

Environmental concerns are all pervading. No longer is environmental protection and management the concern of a sector of society. Environmental issues affect everyone and everything and all activities and processes affect the environment itself. Good environmental management and policy formulation requires abundant and varied information as well as a concerted effort at integrating policy-making, management and planning.

## 2.2 Integration of Environmental Considerations in Other Policies

### 2.2.1 Introduction

All over the world, and not least in Malta, we have started to experience a move towards greater integration at an institutional, management and policy level. Various programmes, including inter-regional and international projects, aiming at such integration have become a common event. Possibly one of the most interesting development is the integration of environmental management, sustainable development and environmental protection issues in various policy areas, including transport, health, planning, energy, waste, and so on.

Locally, the development and promulgation of environmental legislation and policy is a recent phenomenon, starting in the late 1980s and picking up considerable momentum in the late 1990s.

Over this decade, locally legislation and policy have undergone considerable change, which, together with the setting up of a number of institutions and government entities entrusted with the various environmental responsibilities has been nothing short of remarkable.

Although several pieces of legislation existed that had some form of environmental remit, one can safely say that the first really environmentally oriented legislation and policy were formulated in the early 1990s. These were the Structure Plan for the Maltese Islands, which first introduced the concepts of integrated planning approaches in dealing with the various environmental and land-use issues on the Islands, the Environment Protection Act (Act V of 1991), which introduced the concepts of environmental protection and regulation and the Development Planning Act (Act I of 1992), which set up the first comprehensive land-use planning system for the Islands.

From these first pieces of comprehensive environmental legislation, there was no turning back and the 1990s have been replete with the promulgation of new environmental legislation, the introduction of environmental issues in existing or new legislation related to areas such as fisheries, veterinary services, maritime activity, planning, agriculture, tourism, resource management, energy, etc.

Malta's bid to join the European Union has provided a further impetus to the overhauling of local legislation, the setting up of administrative structures and the greater integration of policy instruments and a general upgrading of working methods<sup>1</sup>.

### 2.2.2 Sustainability & Sustainable Development

For over a decade, the term sustainable development has been used extensively in environmental, economic and political circles in an attempt to define the future of human society as we know it and of the planet we call home (Mallia, 2001). So much so that today there are over seventy known definitions of sustainable development (Pachauri, 2001). Nonetheless, there is still very little clarity on how the concept of sustainable development can really become operational. Hence, this subject remains one of extremely lively debate, which is likely to continue for years to come. This is partly due to the inability of the political leaders, decision-makers and the community at large to measure sustainable development but, more importantly, the fact that research in this field has not really come to grips with the choices that exist and the differences that can be identified for evaluating what is sustainable in development and what is not (Pachauri, 2001).

Whatever operational definition of sustainable development is used, they are all variations on that put forward by the World Commission on Environment and Development (Brundtland Report) in their 1987 report:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

*WCED, 1987*

It contains within it two key concepts:

- the concept of "**needs**", in particular the essential needs of the world's poor, to which overriding priority should be given; and
- the idea of "**limitations**" imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

*Earth Council website, 2002*

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<sup>1</sup> Nonetheless, one must add that a number of new entities being set up as a result of the promulgation of new pieces of legislation or the streamlining of activities seem to be causing problems with overlapping roles and remits, which though not surprising due to the often isolationist way of thinking and lack of communication among potentially rival entities, requires a radically different approach to the problem.

Thus, sustainable development is all about our needs and those of our children and the balance between the two. It revolves around a number of concepts, such as:

- a) the conservation of biological diversity,
- b) the sustainable use of resources,
- c) an encouragement of traditional uses and cultural practices compatible with conservation or sustainable use,
- d) the regulation or management of biological resources,
- e) the promotion of environmentally sound and sustainable development,
- f) the assessment of environmental impacts of development projects, and
- g) public participation in decision-making.

*Mallia, 2000*

Its sister concept, sustainability, goes beyond weighing up impacts or preventing environmental damage of individual projects, or even plans, programmes and policies. It requires that the environment is protected to a level and condition that would allow it to continue performing its various functions over time, at least at levels to avoid future catastrophe and, at most, at levels that give future generations the opportunity to enjoy an equal measure of environmental consumption (Mallia, 2001).

Sustainability is not about maintaining the status quo or reaching perfection. A sustainable community seeks to maintain and improve the economic, environmental and social characteristics of an area so that its members can continue to lead healthy, productive and enjoyable lives there. It is related to the capacity of the planet to support life.

Sustaining the environment implies that:

- o There should be a reduction to as minimum a level as possible in the rate of consumption of finite natural resources (including fossil fuels);
- o Non-renewable resources should, as much as possible, be substituted with renewable ones;
- o Waste management should aim at minimisation of the waste produced first; followed by a drive to recycle or reuse the wastes produced and any remaining wastes assimilated into the natural environment with the least pollution possible; and
- o Natural and physical features and other amenities should be managed for the long term.

Indicators of sustainable development should centre on the following five themes:

- o Consumption of non-renewable resources
- o Air, water and land pollution
- o Social values and issues
- o Biodiversity and landscape
- o Cultural resources

These themes are further elaborated upon in this and other sections of this State of the Environment Report

Sustainability can also be manifested in two different “positions” of sustainability - Strong Sustainability and Weak Sustainability (Turner and Pearce, 1992; Pearce, 1992).

Weak sustainability focuses on maintaining the over-all capital stock (man-made, human and natural). Such a sustainability policy, however, would be consistent with running down any part of the overall stock as long as the degradation in one area is substituted with investment in another area. Strong sustainability, on the other hand, argues that it is not acceptable to run down any of the environmental assets; this for several reasons, including the uncertainty of the consequences of the loss, irreversibility issues (lost species cannot be replaced), life-support functions of ecological assets and loss aversion. Nonetheless, although the strong sustainability position has much to commend it, institutional response to it has been varied.

Locally, the concepts of sustainable development have only recently been enshrined in legislation, with the recent amendments to the Development Planning Act (Act XXI of 2001) and the new Environment Protection Act (Act XX of 2001) adopting the concept of sustainable development as a major objective.

Development Planning Act, 1992 (as amended by Act XXI or 2001):

5(1) The functions of the Authority shall be the following:

- (a) ***the promotion of proper planning and sustainable development of land and at sea, both public and private;***

Environment Protection Act, 2001:

The (competent) Authority shall advise the Minister “***in the formulation and implementation of policies relating to the promotion of sustainable development, protection and management of the environment and the sustainable management of natural resources,....***”

The Environment Protection Act also provides for the establishment of a National Commission for Sustainable Development (NCSD), which shall be chaired by the Prime Minister or, in his absence, the Minister responsible for the Environment and be composed of all Ministers *ex officio*, two members of the House of Representatives, the Chairman of the MCESD *ex officio*, a representative of the local Councils, representatives of public entities relevant to the functions of the Commission, other organisations, academic bodies, etc (Article 8(2) of Act XX of 2001).

The functions of the Commission are:

- (a) to advocate sustainable development across all sectors of Malta, review progress in the achievement of such sustainable development and to build consensus on action needed to achieve further progress;
- (b) to identify any relevant process or policy which may be undermining sustainable development and propose alternative processes or policies to the Government for adoption;
- (c) to identify trends which may significantly give rise to unsustainable development and which will not be reversed on the basis of current or planned action, and recommend action to reverse such trends;
- (d) to increase awareness of the need that development must be sustainable;
- (e) to encourage and stimulate good practice in the use and management of natural resources, in particular their minimal use and maximum reuse by recycling in an environmentally sustainable manner;
- (f) to prepare a National Strategy for Sustainable Development; and
- (g) to carry out such other functions in relation to sustainable development as may be assigned to it by the Prime Minister.

*Act XX of 2001*

The NCSD was formally set up in February 2002.

Local Agenda 21 activities have been largely inexistent in Malta. There is certainly much more scope for local initiatives to be undertaken, by both central and local government, public authorities and private companies.

There is a need for the establishment of National environmental strategies on the lines of the Structure Plan for the Maltese Islands. Similarly, the promotion of environmental audits and environmental management systems is equally important. These, together with State of the Environment reporting form the basic data required to take forward Local Agenda 21 initiatives and environmental management in general.

As required by sustainability principles, it is important to assess the stock of environmental resources – our “capital”. This stock should not be allowed to decrease beyond a certain threshold so that future generations can enjoy an equal level of wealth and well-being. Audits and State of the Environment Reports are “stock takes” of these resources and highlight certain critical environmental aspects that need addressing or protection.

There may be scope for transforming State of the Environment Reporting into State of Sustainability Reporting to take into consideration a wider view that does not solely focus on the environment.

### 2.2.3 Planning and Environment Protection

Arguably, the two areas where most development has been registered over the review period have been spatial planning and environmental protection.

These two major areas of policy development have had their fair share of criticism, sometimes justified, sometimes not. Nonetheless, the way that they have developed is encouraging for their future development.

Locally, planning and environmental protection systems have largely developed in tandem, although the land-use planning system has had a more meteoric development path than has been manifested by the environmental protection systems.

Nonetheless, both policy areas have had their own successes and failures. Unfortunately, these two streams of government policy have often been pitched against each other, largely as a result of empire-building notions or false ideas of institutional overlaps or takeovers. This has not at all been healthy and has often resulted in exasperatedly prolonged and unfruitful arguments, which have only resulted in inaction. The scarce human and other resources available for the effective implementation of policies in these areas urgently require some brave decisions to be taken, coupled with a managerial approach to the problems that have plagued these systems.

It is for this reason that the recent decision to form a new organisation responsible for environmental protection and spatial planning by merging the Environment Protection Department and the Planning Authority has been largely welcomed. The criticism to date has been in the form of doubts as to whether the environmental protection arm can hold ground against the planning and development control arm of the same authority or whether a separate and completely independent environment agency would have been a better option. Obviously one can only speculate at this stage, however assuming that the environment protection branch of the authority will have equal strength to the planning directorate, then this arrangement should result in greater consideration being given to environmental issues in decisions on development than has been manifested to date.

The following sections outline the development of the planning and environmental protection systems in Malta.

### 2.2.4 Planning

Any discussion on environmental issues is rendered complex by the extensive nature of environmental concerns. These may range from the management of natural resources and the ecological conservation of habitats, flora and fauna through the protection and enhancement of man-made environments and the control of pollution, provision of sanitation and waste disposal facilities. The management of these matters, therefore, extends across many arms of government in a similar way to the spread of the planning system with which it has much in common.

Generically, “planning” implies a systematic addressing of problems and the exploration of future expectations by defining goals and new strategies, identifying measures and means of resolving the problems and identifying actions for follow-up. In fact, planning is perceived as a rational process aiding the attainment of goals in a most efficient and effective manner, driven by the best possible allocation of resources, according to their suitability and availability (Mallia, 2000). Planning has evolved over time as a facilitating process of conflict mediation associated with the development of land and property, the creation of local economic development and community regeneration opportunities, environmental enhancement and protection and the provision of infrastructure (Illsley *et al.*, 2000).

Land-use planning is an integrated framework for the rational and sustainable use of land through zoning policies, development control and protection measures. These zoning restrictions typically control activities such as construction and mining but are increasingly being used world wide to protect natural habitats through such measures as protection orders for specific sites, use of special zoning in



local plans or the prohibition of habitat alteration through permit conditions (Mallia, 2000). It has become an accepted and legitimate activity intended to address the wider social and community conflicts associated with the use and development of land and property (Cassar, 2002a).

Planning practice is increasingly being influenced by developments in the fields of economic development, environmental management and transport. "At the same time there is a remorseless push for horizontal integration of the work of related professions" (Thompson, 2000). There is a growing desire for "joined-up government" with greater emphasis upon co-ordination of sectors and the involvement of communities as stakeholders (Cassar, 2002a).

This has led to the development and promotion of the concept of spatial planning, which broadens the approach to issues across a wider perspective than the traditional "town and country planning". Spatial planning deals with the pre-emptive co-ordination of human activities having an impact on development. Hence, we are no longer focusing simply on development but rather emphasising activities and their impacts on development (including social and economic development of a country or region). Spatial planning aims to allocate different land-use functions and activities as efficiently and effectively as possible, with allocation aimed at maximising the benefits at a given location (Mallia, 2000). The whole process is obviously co-ordinative and participative.

In view of the challenges currently facing development (economic globalisation, devolution of decision making, urbanisation processes, environmental deterioration), and in view of the new development paradigms (sustainable development, agenda 21, public participation), spatial planning has to adopt the role of anticipating development, proposing alternatives and measures and co-ordinating sector activities.

The new challenge for planning is therefore the management of change and uncertainty, which can only be achieved if integration is the guiding principle in devising planning approaches.

### **2.2.5 The Structure Plan**

The Structure Plan, which was adopted in 1992, is a written statement formulating the national planning policy and general proposals in respect of the development and other use of land including measures for the improvement of the physical and natural environment and the management of traffic. It also interprets the relationship of national policies in terms of physical and environmental planning in so far as these policies concern the integration of economic, social and environmental issues.

The plan's main concern is Malta's future environment, both man-made and natural, as it can be moulded through resource creation, resource management and protection. It deals with the creation of economic wealth through provision of adequate resources (such as land) for the creation of community facilities, residential and other amenities and generally providing opportunities for all through fostering of an inclusive society. This it does in a resource management framework that aims to provide enough resources while protecting the natural and cultural environment, the character of the Maltese Islands, non-renewable resources and essential supplies.

The basic objective of the Structure Plan is therefore that of "optimising the physical use and development of land which respects the environment and, at the same time, ensuring that the basic social needs of the community are, as far as is practical, satisfied". It tries to achieve this by laying general guidelines for development of the country within a 20-year period, based on an analysis of the existing situation and the projected needs of the community. It also sets the framework for the preparation of Local Plans, which will effectively translate the various Structure Plan strategic policies into site-specific guidelines for each locality considered (Cassar, 2002b).

The planning system has a major role to play in furthering environmental protection. In principle, any consideration that relates to the use and development of land is capable of being a planning consideration. Thus, it is conceivable that any environmental factor could be seen as a material consideration in planning decisions. Indeed, issues such as emissions of greenhouse gases, loss of natural habitats etc, are well-established material considerations (Cassar, 2002a).

Every planning decision has a resource use implication of some kind. The more resource efficient the outcome can be, the better chance we have of achieving long term sustainability. Specific components of the link between planning and environmental protection include the impacts upon land, biodiversity, air, water and land quality, and amenity.

## 2.2.6 The Planning Authority's Achievements

The massive urban sprawl and increasing environmental degradation that occurred in the Maltese Islands between 1945 and the late 1980s gave rise to a lot of concern among the population, especially in the later years. This brought about changes in legislation (see above) and the establishment of a comprehensive land-use planning system for the Islands.

Since its set up in 1992, the Planning Authority has been faced, first with the ambitious but massive task of instituting the necessary legislative, organisational, procedural and policy mechanisms and, then, with implementing its functions. In parallel it has sought to stimulate the growth of a culture for planning within and outside government and to raise public awareness about development in a sustainable manner (Cassar, 2002b).

### 2.2.6.1 Legislation and Policy

Progress in this field has been rapid, with several subsidiary pieces of legislation (including amendments to the principle Act), subject and local plans, policy guidance, and briefs prepared in a span of ten years. Since 1991, over 90 planning legislation and guidance documents have been published, together with over 40 circulars to architects, 34 Legal Notices and 3 Government Notices.

These, together with other initiatives such as establishment of a national mapping and GIS resource function, land surveying services, transportation planning, research and information and environmental management and impact assessment functions have led to a dynamic and flexible organisation that has, over the years, established itself as one of the central organisations on the Islands.

### 2.2.6.2 Development Control

The major proportion of the resources of the organisation is geared towards the control of development. Annually, the Planning Authority receives around 7,000 new applications for development permission. With decisions averaging 7,500 per year, the live caseload averages at around 3,000 applications at any one time.

**Table 2.1** provides more detail on the number of decisions and the live caseload in recent years.

**Table 2.1 - Applications Determined and Pending Caseload**

Year *	Decided	Pending caseload
1995 – 1996	8,169	3,913
1996 – 1997	7,444	4,392
1997 – 1998	9,243	2,757
1998 – 1999	5,635	3,699
1999 – 2000	7,393	2,855
2000 – 2001	6,385	2,742

\* A year starts on 1 October and ends on 30 September

Source: Cassar, G., 2002b

Legislative amendments, greater management control and a positive response by staff have resulted in a consistent improvement in service delivery over the nine-year period since the Authority's inception.

The number of applications determined each year has increased significantly. Efficiency, as demonstrated by the speed of determination, has also improved, as has the quality of decision-making. This can be illustrated through a comparison of the percentage of refusals as against approvals per year, as shown in **Table 2.2**, which indicates a slow but steady increase in the rate of refusal over the past eight years.

The introduction of the General Development Order in 1993 (amended in 1997 and replaced by the Development Notification Order in 2001), exempted a number of minor development types from the requirement of development permission. Nonetheless, despite the ease with which these systems operate, they have not resulted in a decrease in the “overall” number of “applications” received by the Authority. Rather, the total number of development applications and notifications received has steadily increased. This may partly be due to an increased knowledge of the planning system and a greater degree of compliance by developers.

**Table 2.2 - Proportion of Approved and Refused Applications**

Year	Approvals %	Refusals %
1992 –1993	83.02	16.54
1993 –1994	82.86	14.15
1994 –1995	83.53	14.98
1995 –1996	74.21	17.99
1996 –1997	72.10	20.42
1997 – 1998	73.38	21.31
1998 – 1999	72.79	21.83
1999 – 2000	73.62	22.17
2000 – 2001	72.62	22.30

*Source: Cassar, G., 2002b*

### 2.2.7 Environmental Protection

The term “environment” has been used to mean several different things and is possibly the topic that brings out the most disparate of emotions in people - not least in Malta.

In a country such as Malta, with a high population density, decades of environmental inaction, and high dependence on tourism, the need for achieving a wider level of environmental awareness and protection is even more paramount.

Since the land area of the Maltese archipelago is finite, the most important environmental issues are normally connected to land-use or misuse. With the islands boasting a long building tradition (with the oldest free-standing structures in the world), this is hardly surprising. The move to merge the environmental protection and planning organisations under one entity<sup>2</sup> is therefore considered to be a move in the right direction, as long as the two functions are kept independent but service each other in an integrated fashion.

Environmental protection revolves around a number of key concepts, such as climate change, pollution (including air, water, land, noise and light pollution), biodiversity protection and its exploitation and loss, resource use (including concerns on efficiency of use) and consumption, with the increasing threat to a number of earth’s resources. Other issues include problems of distribution – both between people (at both local and global scales, with poorer people suffering the consequences of environmental

<sup>2</sup> In December 2001, the Government announced that the responsibilities connected with environmental protection will be transferred to the Planning Authority. The merger was given effect on the 1 March 2002, with the Planning Authority being designated the competent authority on environment protection. The Planning Authority, which will eventually be called the Malta Environment and Planning Authority (MEPA), will be composed of two directorates – the Planning Directorate and the Environment Protection Directorate.

damage) and over time, including intergenerational issues, with future generations bequeathed huge environmental problems by the current generation.

### **2.2.7.1 The Environment Protection Department**

It was way back in 1972 when the need was felt for the first time in Malta to create a structure to protect the environment. At that time, it was the norm for every entity to protect the environment as it deemed fit, depending on its remit at law. This however led to an uncoordinated approach to environmental protection, which was obviously not acceptable. At that early stage, however, the multidisciplinary nature of the task ahead and the wide repercussions that this would have were only partially understood. What was however very clear is that environment protection could never be the prerogative of a single entity and that an integrated approach was necessary due to the ramifications of environmental matters.

In 1976, an Environment Protection Unit, consisting of a small nucleus of people, was set up in the then Ministry of Health and Environment. In 1980, this Ministry assumed responsibility for the newly-created nature reserves. In the late 1980s, the unit was shifted to the Education Ministry, which became the Ministry responsible for environmental matters.

The Environment Protection Unit was transformed into the Secretariat for the Environment in 1992, which started reporting to a Parliamentary Secretariat for the Environment, within the Ministry for the Environment, which was also responsible for public works. The Secretariat for the Environment eventually became the Environment Protection Department (EPD). In October 1996, the EPD started reporting to the Ministry of Foreign Affairs and the Environment and, with the change in Government in 1998, the Department shifted back to the Ministry for the Environment.

These shifts from one Ministry to another, though seemingly unsettling for the Department, prove the multiple relationships that exist between the environment protection and other sectors, such as health, education, development control and foreign affairs. Experience has shown that there are equally strong relationships with agriculture, tourism, industry, local government, public information and finance.

### **2.2.7.2 Structure of the Environment Protection Department**

The Environment Protection Department has three “technical” units, viz. the Pollution Control Section, the Waste Management Section and the Biodiversity Protection Section. In addition, the department has a number of “horizontal” sections, dealing with Legal and Multilateral issues, Environment Impact Assessment, Communications and Administration.

Moreover, the Environment Protection Department in conjunction with the Department of Industry and the University of Malta set up the Cleaner Technology Centre (CTC), which is concerned with the promotion of cleaner technologies in local industry.

### **2.2.7.3 Responsibilities of the Environment Protection Department**

In the past, the issue of bird hunting and trapping had been given considerable priority, taking up most of the Department’s energies. While the protection of biodiversity remains a key activity of the Environment Protection Department (it is indeed an obligation that results from a number of international Conventions to which Malta is a party), the activities of the Department evolved much further over the past years. This development ensued both from local needs, as well as from additional international obligations that in the meantime continued to be taken on board. Unfortunately, human and other resources were not kept in line with these new responsibilities.

In fact, the Environment Protection Department has unfortunately remained pretty much a “cinderella” department within the public service, being under staffed and under-resourced. The better work conditions in complementary parastatal organisations and in the private sector have often resulted in loss of staff from the Department. Overlap of responsibilities with other Government agencies is also

of concern. The decision taken by Government to merge the Environment Protection Department with the Planning Authority to form a new composite organisation responsible for both environmental and spatial planning issues is therefore seen as a very important move for environmental management in Malta, which should result in a more efficient use of scarce human resources and a more integrative approach to planning and environmental issues.

In line with this decision, current thought is that the Environment Protection Department should not be an operational agency, but rather a policy formulating, regulating and monitoring body that, in collaboration with other agencies, endeavours to achieve sustainable development in Malta. Accordingly during the last years, the EPD shed off most of its operational roles related to countryside embellishment and oil-spill cleanups, to concentrate on regulatory and enforcement activities.

#### **2.2.7.4 Activities and Achievements of the Department**

Over the review period, the EPD has been involved in several projects and has been active in a number of spheres. These have included participation in the development control process for projects having an environmental impact, including the organisation of public hearings for EIAs of major applications, collaboration with the University of Malta and other entities on research projects and preparation of national reports on a number of environmental topics.

Detailed information on the activities of the Department organised by the various functional responsibilities are given in the following sections:

##### **2.2.7.4.1 Biodiversity Protection**

The objective of this Section is the protection of the natural environment, in particular species and their habitats. Work included the processing of applications for the handling and importation of protected species, including inspections at points of entry into Malta, work related to the Tree Protection Regulations, which were published in January 2001, administration of the Carnet de Chasse, participation in a number of projects, including the Strategic Action Plan for the Conservation of Biological Diversity (SAP-BIO) and the Species Action Plans Programme (SAP) and the Coastal Area Management Programme (CAMP) for Malta.

##### **2.2.7.4.2 Pollution Control**

The objective of this Section is to take preventive and corrective measures with respect to pollution of air, land and water. The Section is organised into four main units dealing with Air Quality, Water Quality, Control of Chemicals and Industrial Risk, and Oil Pollution.

Work over the review period included ambient air quality monitoring (CO, NO<sub>x</sub>, SO<sub>2</sub>, O<sub>3</sub> and PM<sub>10</sub>) through automatic equipment mounted on a mobile trailer as well as through a diffusion tube network. Considerable work also went into the control of importation of substances that deplete the Ozone layer.

Under Chemicals and Industrial Risk, work included the processing of Trading licenses and operating conditions for a number of establishments as well as the setting up of an Integrated Pollution Prevention and Control Committee which is responsible to license installations that fall under the scope of the IPPC Directive.

A national water quality monitoring programme was also implemented and 36 marine sites around the Maltese Islands monitored. Additional monitoring was carried out as part of the MEDPOL programme.

The EPD also took action with respect to more than 32 cases of oil spills at sea. In each case, an effort was made to trace the source of the spill and when this was proven, the polluter was charged for the expenses incurred in the clean up operation.

Clean up activities at sea were also organised during the summer months of each year in popular resorts such as Sliema, Birzebbuga and Xlendi. These activities were carried out as part of an awareness-raising campaign and complemented the annual clean-up the world campaigns.

#### **2.2.7.4.3 Waste Management**

The Waste Management Section's objective is to see that waste is managed sustainably and in a way that does not endanger human health and the environment.

Over the review period, the Section collaborated with foreign consultants in the formulation of a National Integrated Waste Management Strategy. This strategy was completed in the first quarter of 2001 and adopted in October 2001.

The Section also undertook various inspections related to reports of illegal dumping, and the deposition of construction and demolition waste in disused quarries. In some of the case, court action was also taken. Despite the lack of appropriate waste management infrastructure, the EPD also acted to control movement of wastes and guiding developers to preferred waste management options.

Other work related to waste management included the preparation of codes of practice for the operation of treatment and disposal sites, the processing of waste management permits, general regulation, implementation of international Conventions and participation in seminars and talks targeting audiences with special interest in waste management.

The Environment Protection Department was also very active on the legal front, with the drafting of several pieces of legislation – both the principle Environment Protection Act, which was approved and published in September 2001, as well as several subsidiary legislation issued under the provisions of this Act. Between 1991 and 2001, 74 legal notices were issued under the new Environment Protection Act, with 45% of these being published in 2001 (for full list, see EPD website: <http://www.environment.gov.mt>). Not all of these are yet in force, however they are an important first step towards greater environmental protection and a more coherent national environmental programme. Other legal work included critical analysis of existing local environment protection legislation and international conventions proposed for ratification, as well as considerable work relate dot the EU environment *acquis*.

In terms of communications, the Department continued with its efforts at raising awareness on environmental issues. Activities included the launch of the Department's website in 1997 and its subsequent development, activities with school children, including the launch of a Klabb Xummiemu magazine, school visits, participation in specialised fairs and on radio and TV programmes and organisation of the World Environment Day and Earth Day activities and Clean-up the World Campaigns.

## **2.3 Economic Development and the Environment**

The environmental performance of a nation is intimately connected with its economic performance. In the present section, the current economic background of the country will be first reviewed. This will be followed by a brief outline of the use of economic instruments for environmental management in Malta.

### **2.3.1 Overview**

With the exception of limestone, the Maltese economy enjoys very few natural physical resources. It is also one of the smallest economies in the world, with a total output in the region of Lm 1500 million. Malta's small size limits its ability to reap the benefits of economies of scale. Furthermore, the high degree of economic openness also renders Malta very susceptible to economic conditions in the rest of the world. The dependence on a very narrow range of exports and on imports, high transport costs and marginalisation from the main commercial centres of the world pose further constraints on the Maltese

economy.

Yet, despite these limitations, per capita GDP amounts to some Lm 4,000 per year, placing Malta among the higher ranks of developing countries. During the past few years, consumption in Malta rose rapidly. Malta is currently going through significant regulatory and operational changes in the process of EU accession. The changes taking place include economic restructuring, mainly resulting in increased liberalization of markets and a need to improve competitiveness.

### **2.3.2 Employment**

Malta enjoys a relatively low rate of unemployment (averaging around 5 percent of the labour force). The Maltese workforce totaled some 148,500 in 2000. The male participation rate stands at around 96 percent of the working age male population, while female participation rates remain low at 37 percent of the working age female population.

### **2.3.3 Foreign Trade**

Malta's economy depends heavily on foreign trade. Imports total half of the final sales and exports about 45 per cent. The main exports are electronic and electrical equipment, followed by wearing apparel, chemicals, printing and medical equipment. Tourism and transportation are the main services which Malta exports. Germany, Italy and the U.K. are the main recipients of Maltese exports. Likewise Malta imports most of its products from the European Union.

### **2.3.4 Manufacturing**

About 24 percent of the Maltese GDP at factor cost is generated by Manufacturing. The most important Maltese manufacturing industry is electronics, followed by food and beverages and wearing apparel. Other important industries are chemicals and paper and printing. The shipbuilding and ship repairing industries in Malta provide significant employment however the trend of negative performance over the past decades, has necessitated heavy subsidies by government.

### **2.3.5 Market Services**

Market Services, namely distributive trades, transport and communications, banking and finance and private services generate about 39 percent of the Maltese GDP. One of the major growth sectors in recent years has been tourism, with the average number of tourists visiting Malta exceeding 1 million persons per year during the nineties and reaching 1.2 million in 2000. Tourist expenditures in the same year contributed about 25% of proceeds from exports of goods and services. Direct employment in tourism in 2000 was about 13,000 persons or 10% of total employment.

### **2.3.6 The Public Sector**

The Maltese economy relies heavily on the public sector, whose share of GDP share was about 22% in 2000 (excluding companies with government majority shareholding). Relatively large budget deficits were recorded during the second half of the nineties. Total government expenditure amounts to about 48% of GDP in 2000, a large proportion of which is dedicated to social security and welfare schemes, as well as development of the infrastructure. Government revenue comes mainly from personal and corporate income tax, VAT receipts and profits of public enterprises such as EneMalta, Air Malta and the Central Bank. A large proportion of the gainfully occupied persons is engaged in the public sector, (38% in 2000, including employment in limited liability companies with government majority shareholding).

### **2.3.7 Construction, Agriculture and Fishing**

Construction, agriculture and fishing only contribute about 5 per cent together to the national economy. Agriculture is characterised by small holdings and constraints related to lack of adequate water supply, an aging workforce, and land fragmentation. The sector has declined over recent years, contributing ever smaller proportions to GDP and employment. Malta is self-sufficient in fresh vegetables, eggs, poultry, rabbit meat, pork and fresh milk, while a relatively large proportion of beef and fruit is imported. The most important crops are potatoes, tomatoes, onions, and fruit, of which the most important export is potatoes. Likewise, fishing in Malta does not generate much income and employment, and fishing vessels tend to be small. Recent years have however witnessed a rapid development of aquaculture as an industry.

### **2.3.8 Price Signals (policy integration)**

Economic and fiscal measures are one way of regulating free markets, which permit both environmental improvement as well as economically efficient solutions. Market mechanisms encourage polluters to respond to financial incentives rather than to force them to abide by standards and conditions. Economic instruments promise a range of other benefits, including the fact that they encourage innovation, that they may generate revenue and that implement the “Polluter Pays Principle”. There are of course a number of difficulties not to mention objections associated with economic instruments. One argument is that giving incentives may not be a strong enough stance for certain types of pollution. They may be regressive and more difficult to administer than straight forward “command and control” type measures. The latter type of measures including standards and regulations are more commonly applied in Malta.

Notwithstanding this, some measures have been put in place over the years that may be considered as economic instruments. These include rising water tariffs to discourage waste of potable water, leaded petrol surcharges to encourage the use of “clean” fuel, and license surcharges to discourage congestion in the capital City. Subsidies tend to be more popular and include housing subsidies or soft loans to encourage conversions and re-use of old properties, the historic buildings grant scheme operated by the Malta Environment and Planning Authority, interest rebates for the installation of solar water heaters, grants to fishermen to encourage traditional fishing methods, among others. Deposit refund schemes operate on glass bottles and crates. There are also performance bonds imposed as development permit conditions. In several other instances, fees or tariffs paid do not even cover administrative or production costs for environmental services. This is the case in household waste and sewage collection and disposal.

The Organisation for Economic Co-operation and Development (OECD), the European Union, and the Commonwealth Secretariat have urged member countries to make a greater and more constant use of economic instruments for environmental management, and indeed several developed countries have introduced such measures. Clearly, potential exists for their introduction in various spheres of environmental management in Malta.

## **2.4 Environmental Impact Assessments (Management Integration)**

### **2.4.1 Introduction**

Environmental Impact Assessment (EIA) is an environmental management tool that provides information (to those who take the decision as to whether the project should be authorised or not), on the impacts of development projects on the natural, cultural and social environment.



The purpose of EIA is to determine the potential environmental, social and health effects of a proposed development, to facilitate rational and open decision-making and to attempt to reduce potential adverse impacts through the identification of alternative sites and processes.

EIA is not a means of forcing decision makers to take the least environmentally damaging alternative to a project or action, but to make the environmental impacts of such projects and actions explicit, while seeking to balance competing demands and resolve conflicts. Hence, EIA is not a substitute to decision-making but it helps to clarify some of the trade-offs associated with a development action and that may be necessary to achieve a more rational and structured decision.

#### **2.4.2 EIA in Malta**

Environmental Impact Assessment was introduced informally in Malta in the late 1980s. The initial few years were a period of assessment and trial, with the process largely developed in unison between the planning and environment sections of Government and the only environmental consultancy in existence at the time. A formal procedure was subsequently established in 1993 through the help of a UN consultant engaged for the purpose by the Government of Malta.

The legal requirement for EIAs in Malta was established through the Structure Plan for the Maltese Islands, 1990, which identified specific project types as well as plans to be subject to environmental assessment. The need for EIA was also established for projects that may affect protected areas.

Act V of 1991 (Environment Protection Act) also included a provision for EIA but this was never brought into force in view of the procedures operative at the time and potential conflicts with the provisions of the Structure Plan. Provisions for EIA in other legislation includes the Development Planning Act (Act I of 1992), as amended in 1997 and 2001.

A draft set of procedures was published for public consultation in 1993 and adopted that same year. The following year, the Planning Authority issued a Policy and Design Guidance on EIA in Malta, which explains in simpler terminology the procedures applicable to the process in Malta and outlines the roles and responsibilities of the various stakeholders. This guidance remained in active use up to September 2001 when the new EIA Regulations (LN 204 of 2001) were published and hence superseded the former guidance. The EIA procedures of 1993 and the Policy and Design Guidance of 1994 were, at the time, already largely compliant with EU directive 85/337/EEC.

The Regulations were prepared over a six-year period and have taken into account the experience gained in Malta since the late 1980s, as well as EIA best practice in other countries, including the EU, the USA, the Netherlands and New Zealand. The draft Regulations were also assessed by Prof. Brian Clark of the University of Aberdeen to ensure compliance with EU directives and also best international EIA practice. The Regulations were also subjected to consultation with stakeholders at different points in their preparation<sup>3</sup>.

The new EIA Regulations fully transpose the EU directive (85/337/EEC as amended by directive 97/11/EC). They are also in conformance with the requirements of the ESPOO Convention on Environmental Impact Assessment in a Transboundary Context and the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters. The Regulations also provide a robust process for the assessment of effects on the environment as required by other EU directives, such as the Wild Birds Directive (79/409/EC), the Habitats Directive (92/43/EEC) and the IPPC and Seveso II Directives (96/61/EC and 96/82/EEC).

In some regards the Regulations also exceed the requirements of the EU directive. This includes the Schedule of projects requiring EIA in which, due to the small size of the Maltese Islands, thresholds establishing the requirement for EIA are more stringent than those established by the directive (e.g. animal husbandry farms, quarries, thermal power stations, etc.). The requirements for public

<sup>3</sup> In February 2002, the Planning Authority, which is the competent authority for EIAs in Malta, also ran two training courses, with the help of the Institute of Environmental Management and Assessment of the UK. These included a 2-day training course for EIA reviewers in the various Government entities involved in EIAs and a 3-day training course for practising and prospective EIA consultants.

participation in the Regulations are also more advanced than those required by the directive. In fact, this has been one of the most interesting aspects of the new Regulations, since for the first time, the public are being given the opportunity to truly participate in the process, rather than simply being consulted at the last moment. The new Regulations provide for consultation with the public before the terms of reference are set, including also the possibility of holding public scoping meetings. The public can also be consulted throughout the formulation of the statement and formal public consultation phases take place once the draft environmental statement is submitted. The Regulations also provide for a greater role for Local Councils, who now are consulted before the terms of reference are established and also receive all drafts of the plan. The Local Councils can, in turn, run their public consultation processes.

A further innovation included in the Regulations is that related to the Registration of EIA Consultants. This entire section, which has not yet been brought into force, provides for the establishment of a Registration Board answerable to the Minister, that will establish and run a Registration Scheme for consultants, the framework for which is already spelt out in the Regulations. Details on the Registration Scheme are not yet available though the establishment of the scheme is targeted for the end of 2002.

The major changes from the 1994 procedures that have been brought about by the new Regulations include:

- o Clarification of the roles and responsibilities of the various stakeholders
- o Establishment of competent authorities
- o Establishment of the roles of local councils
- o Clarification of the roles of the applicants and consultants
- o Emphasis on public participation rather than simply consultation
- o Extension of public participation starting from the scoping stage rather than just after the review stage
- o Establishment of a registration process and register of consultants
- o Greater accountability and transparency
- o Greater accessibility of the public to the entire process
- o Clearer time frames for the various steps of the process
- o Emphasis on monitoring and follow-up
- o Requirement for justification for decisions taken including the publication of reasons for approvals or refusals
- o Increased public notification of the various stages of the EIA process (through formal notices in the official Gazette, adverts in newspapers and site notices)

**Figure 2.1** outlines the local EIA process.

The very first development project that was subjected to a form of environmental assessment (though not a formal EIA) was the construction of the thermal power station at Delimara, back in 1989. The application for development consent for the power station was accompanied by a three-volume set of environmental reports, which dealt with various environmental topics.

Since then, a total of 121 applications requiring environmental impact assessment were submitted for consideration by the Planning Authority. Not all of these EIAs were eventually commissioned or concluded. Currently, 50 applications requiring EIA are still pending.

The EIA process in Malta has always been open and transparent, with public consultation an integral part of it. Nonetheless, improvements were felt to be necessary following years of experience. These have been effectively introduced in the new Regulations, however a period of time has to be allowed until the various new ideas are implemented and improved upon through practice.

One of the latest developments has been a website wholly dedicated to EIA in Malta. The website, which was originally launched in 2000 but revamped in 2002, provides information on the local EIA process, and details on all applications undergoing EIA. Other information includes details of public hearings, terms of reference, an electronic newsletter, as well as links to other sites. The website can be accessed at <http://www.eia-malta.org>.

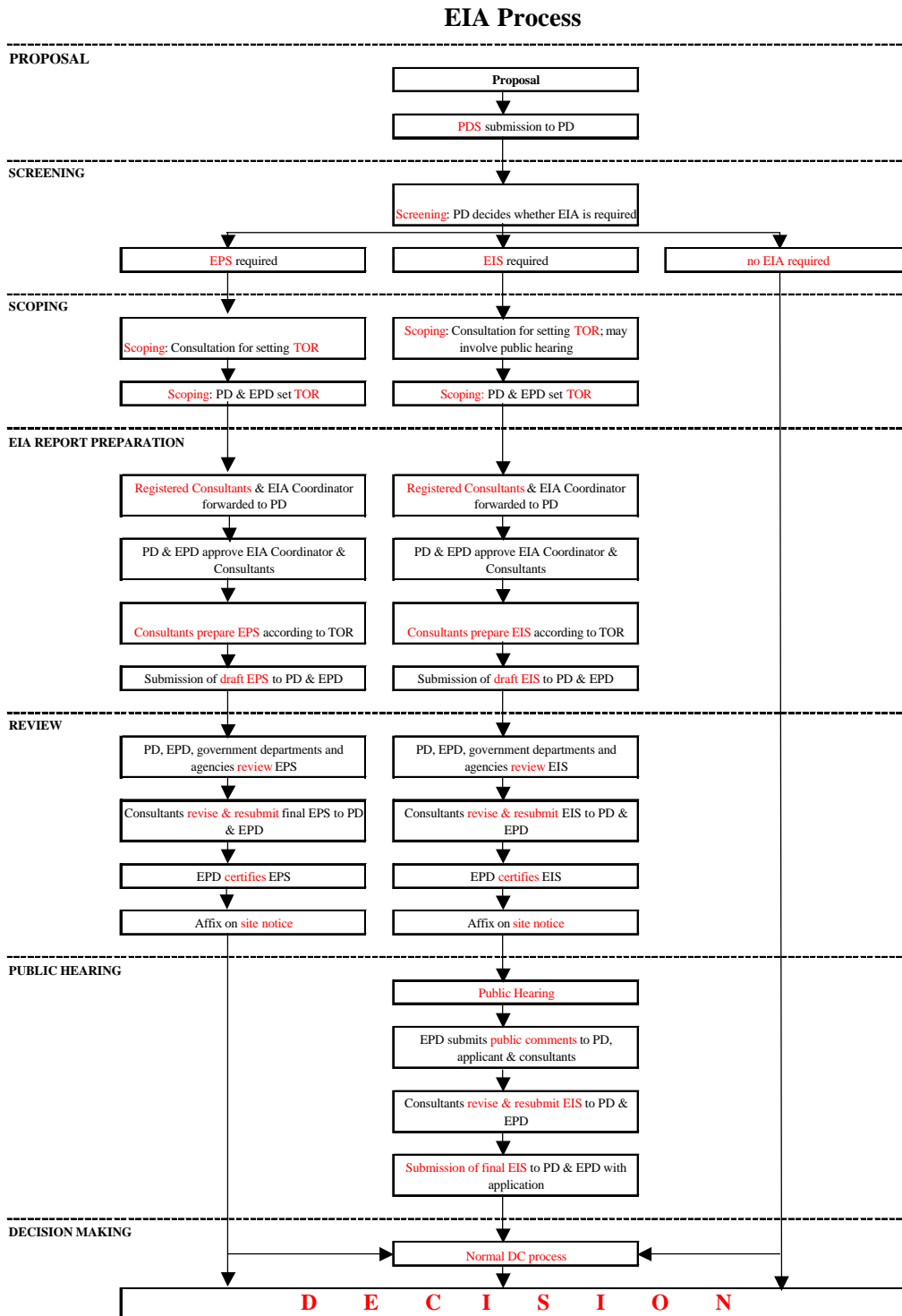


Figure 2.1 – EIA process in Malta

## 2.5 Urban Planning (Institutional Integration / Management Integration)

### 2.5.1 Introduction

Urban planning is essentially a twentieth century phenomenon that has grown spectacularly in influence, scope and sophistication.

From its beginnings in Ebenezer Howard's seminal work "To-Morrow!" in 1898, through the initial focus on housing development, urban planning has passed through various phases, which have included the *tabula rasa* approaches in certain European cities, urban renewal projects and post-war reconstruction activities, garden cities and private enterprise new towns. Increase in population numbers, especially with the post-war baby boom, saw the adoption of new approaches, which, in keeping with the development of the environmental and sustainability themes as first expounded by Rachel Carson's celebrated work and the subsequent reports such as "Limits to Growth" by the Club of Rome in 1972, started advocating the "small is beautiful" concept. These were followed by a greater level of public participation in planning issues as well as an out-migration of residents from the urban areas to the suburbs, leaving whole urban areas crying out for regeneration.

Urban planning is one of the cornerstones of the local land-use planning system. The Maltese Islands embrace a variety of building forms from the vernacular and rural building forms to the gridiron patterns of major cities and towns. Each has its own character and distinctiveness, which, has unfortunately often been negatively affected by modern-type developments or inappropriate interventions on the existing, older fabric.

The planning of urban areas is therefore an important aspect of national policy, which serves to preserve and foster local culture and identity, while providing modern amenities and infrastructure.

### 2.5.2 Urban Planning Problems in Malta

As explained in other sections of this State of the Environment Report, the rapid urban sprawl of the past decades has threatened, and in some case obliterated, the former quaint and local feel of a number of villages, some of which also coalesced with their neighbouring settlements.

This movement of people from the older cities and towns to the suburbs has created a number of problems in Malta. Firstly, the abandonment of the older areas has resulted in a social problem whereby the more affluent and younger cohorts have left to live in the suburbs leaving the older and poorer part of the population (Hall, 2002, Mallia *et al.*, 2002). A related problem is the fact that the out-movement of people from the cities has also resulted in the decay of the urban fabric, most of which is of considerable architectural or historic importance. This abandonment of older buildings (compounded by the construction of new buildings in numbers greater than actually required) has resulted in one of the biggest planning problems in Malta – that dealing with vacant housing stock (see Mallia *et al.*, 2002 in this State of the Environment Report). Since a large number of people have moved out of the inner city cores, this has brought about another planning and environmental problem – the loss of significant areas of rural land to housing and other urban-type development (see Mallia *et al.*, 2002 in this State of the Environment Report).

Human settlements are where people live and work. Their design, planning, construction and operation are fundamental to the productivity and competitiveness of the economy, the quality of life of all citizens and the ecological sustainability of the islands. Unfortunately, a number of negative trends are evident, such as deterioration of air quality in the inner city areas (EPD, 2002), lack of recycling of materials, poor energy efficiency in new buildings, increased energy consumption, drab streetscapes, indistinctive "modern" buildings and lack of open spaces in the newer residential areas.

The character and distinctiveness of the older settlement areas, which was brought by the form and layout as much as by the use of local limestone in the construction of the various buildings and houses, has also been lost in the "modern" areas (and sometimes also in the older ones) through the use of the

ubiquitous concrete and imported materials. Decades of construction outside of any form of planning system has also resulted in an incoherent mass of buildings, often with villa-type suburbs overlooking all manner of incongruous development such as petrol stations, scrap yards, showrooms, and the like.

Transport use has also engaged on a spiralling increase which does not seem to be getting any better, with the number of cars present on the islands exceeding a quarter of a million in 2001, and the patronage of public transport steadily decreasing each year, with a concomitant increase in journey time (Planning Authority, 2001).

Other problems include the impacts that have been inflicted in urban fringe areas, with significant stretches being impacted directly through dumping and other littering, often by the very housing developments constructed across the road. This has resulted in the characteristic swathes of dumped rubble underlining the newer developments on the outskirts of older villages, such as at Ta' Pennellu in Mellieha, Swatar in Birkirkara, Santa Margerita in Mosta, Wied Ghomor in Swieqi and Ta' Giorni in St Julians. The provision of infrastructure to these areas and the management of waste outputs, together with the loss of biodiversity are further major challenges in these urban fringe areas.

Unfortunately little is being done by way of improvement in urban planning and design. Though there has been sporadic research and talk on the issue (and the occasional inspirational intervention from certain architects), not much has been undertaken by way of reaching some form of decision on a new urban form for the Islands. Little attempts have also been made to rectify the mistakes of the past. Whatever measures are eventually taken it is important that the planning system does not only adopt the traditional approaches related to aesthetics but also takes into account environmental considerations, including more compact development, lower energy consumption, greater efficiency, reduced carbon dioxide emissions, reuse of resources, improved streetscapes using traditional or improved materials, provision of open spaces, protection of biodiversity, as well as regard to noise, access and security in urban planning.

### **2.5.3 Protecting our Built Heritage**

The Maltese Islands have a very rich built and cultural heritage spanning several millennia. These range from the oldest free-standing structure in the world (the megalithic temples), through various archaeological remains, rural structures, townhouses, palaces, auberges and fortifications.

Since 1989, the Planning Authority (previously the Planning Services Division of the Ministry for the Development of Infrastructure) has been systematically surveying urban areas in an effort to produce a National Protective Inventory of the cultural resources present on the island and thereby identifying buildings of special architectural and historic interest. By 2001, 40 localities had been surveyed and a total of 9,631 data cards compiled.

A similar inventory focusing on the archaeological heritage of the Islands contains over 1000 data cards on archaeological features and remains.

In 2000, the Planning Authority also launched a digital Integrated Heritage Management Information System (IHMS) on its website and also produced CD-ROMs as a form of pilot project. The IHMS has been produced for Mdina and Pieta and provides information on scheduled property, urban conservation areas, listed assets, public and private spaces, vertical elements and landmarks within the framework of the National Protective Inventory for cultural assets.

In November 2001, the Planning Authority also proposed and launched a partnership agreement with a number of Government entities and NGOs that aims to establish a national digital heritage inventory for use by the various government entities and NGOs involved in restoration and management of heritage.

#### 2.5.4 Urban Conservation Areas

One important aspect of urban planning is that relating to the establishment of urban conservation areas. These are areas whose character and appearance is of considerable importance such that they should be preserved, maintained and upgraded. Their designation is governed by the Development Planning Act and UCO policies in the Structure Plan.

The Maltese Islands boast of considerable heritage within the various villages and towns, the older parts of which contain a concentration of buildings of particular architectural or historic interest. The designation of Urban Conservation Area status for such areas is therefore an important first step. However, designation should only be the beginning of a long process, which should aim at the regeneration and management of these areas. Designation alone, while important to preserve the character of the areas, could become counter productive if subsequent stages are not embarked upon. It is therefore crucial that following establishment of the Urban Conservation Area, a management plan is devised for the locality, ideally in consultation with the Local Council and local residents and the UCAs treated as “privileged” areas, including through the provision of specific funding for the implementation of projects such as embellishment schemes, pedestrianisation programmes, provision of street furniture, signage and other amenities.

These older parts of the settlements were originally designated as “village cores” in the Temporary Provisions Schemes of 1988. These were subsequently termed UCAs in the Structure Plan for the Maltese Islands, published in 1990. In 1995, the Planning Authority designated the first official UCAs – Valletta, Floriana, Cittadella, Mdina Birzebbuga and Marsaxlokk. Since then, all potential UCA areas have been surveyed and a tentative boundary established. By 2001, 44 UCAs had been formally adopted as shown in **Table 2.3**. Apart from these, 23 other localities have had their UCA boundaries delineated but these are still awaiting approval.

Through these various designation exercises, the total urban area designated for special protection as an UCA, increased by 163% over the original areas identified temporarily as village cores in the Temporary Provision Schemes. Table 2.4 gives a detailed breakdown of these changes on a locality basis

**Table 2.3 UCA designations (1995 – 2001)**

Year	UCA designated
1995	Valletta, Floriana, Cittadella, Mdina, Birzebbuga, Marsaxlokk
1996	Dingli, Mellieha, Mgarr, Rabat, Bormla, Isla, Birgu, Kalkara, Attard, Balzan, Lija
1997	St. Paul's Bay, Sliema, Kercem*, Qala*, Rabat & Fontana*, Xewkija*, Ghajnsielem* Santa Lucia*, Mgarr (Gozo), Munxar* Nadur*, San Pietru*, Sannat*, Sannat – Triq Ta' Cenc*, Xaghra - Triq Srug*, Xaghra Village*, Xaghra - Triq Marsalforn*, Xaghra - Triq Mannar , Paola & Tarxien, St. Julian's & Spinola Bay, Zebbug (Gozo)* Ghammar*, Ghasri *, Gharb*, San Lawrenz *
2000	Ta' Xbiex, Pieta', Msida, Gzira,

Source: Environmental Management Unit, Planning Authority

**Table 2.4 – % increase in areas designated as U.C.A compared to the village core areas (TPS, 1988).**

Locality	Village Core Area	UCA Area	Percentage Increase
Balzan, Attard, Lija	0	692,300	NA
Birgu	0	217,294	NA
B'kara & Iklin	410,800	1,110,000	170.2
Birzebbuga	0	119,489	NA
Bormla	0	1,344,871	NA
Cittadella	0	94,225	NA
Dingli	0	110,152	NA
Fgura	0	104,200	NA
Floriana	0	955,017	NA
Ghajnsielem	178,161	178,161	0.0
Ghammar	79,430	128,509	61.8
Gharb	174,100	188,128	8.1
Gharghur	0	102,700	NA
Ghasri	37,980	74,383	95.9
Ghaxaq	104,900	150,785	43.7
Gudja	94,970	108,600	14.4
Gzira	0	274,218	NA
Hamrun, St. Venera, Marsa	499,200	874,800	75.2
Isla	0	177,482	NA
Kalkara	0	213,284	NA
Kercem	131,078	131,078	0.0
Kirkop	54,320	72,092	32.7
Kuncizzjoni	3,029	36,255	1,096.9
Luqa	122,600	269,330	119.7
Marsascalea	31,660	138,200	336.5
Marsaxlokk	0	89,267	NA
Mdina	0	338,877	NA
Mellieha	0	141,088	NA
Mgarr (Gozo)	133,900	147,193	9.9
Mgarr (Malta)	0	133,921	NA
Mosta	238,600	482,700	102.3
Mqabba	106,000	129,268	21.9
Munxar	69,250	69,250	0.0
Nadur	569,547	569,547	0.0
Naxxar	146,560	220,237	50.3
Paola & Tarxien	0	617,200	NA

Pieta` & Msida	239,740	288,800	20.5
Qala	129,300	144,063	11.4
Qormi	380,700	508,700	33.6
Qrendi	115,000	160,898	39.9
Rabat (Malta)	0	517,459	NA
Rabat & Fontana (Gozo)	451,234	451,234	0.0
Safi	30,410	85,108	179.9
San Giljan	137,136	137,136	0.0
San Lawrenz	79,260	82,293	3.8
Sannat	82,207	82,207	0.0
Triq Ta' Cenc, Sannat	36,505	36,505	0.0
San Pawl il-Bahar	0	126,147	NA
Santa Lucia (Gozo)	20,478	20,478	0.0
Santa Lucija (Malta)	0	187,200	NA
Santu Pietru	60,600	60,600	0.0
Siggiewi	218,000	278,400	27.7
Sliema	0	739,960	NA
Ta' Xbiex	0	112,873	NA
Valetta	0	766,310	NA
Xaghra	156,255	156,255	0.0
Triq Mannar, Xaghra	22,749	22,749	0.0
Triq Marsalforn, Xaghra	57,783	57,783	0.0
Triq Srug, Xaghra	26,236	26,236	0.0
Xewkija	326,000	326,000	0.0
Xghajra	0	14,550	NA
Zabbar	236,500	591,200	150
Zebbug (Malta)	491,600	607,400	23.6
Zebbug (Gozo)	193,600	261,252	34.9
Zejtun	413,800	710,106	71.6
Zurrieq	225,900	345,641	53

*Source: Environmental Management Unit, Planning Authority*

### 2.5.5 Implementation and Management

As mentioned earlier, designation, though important, is only a first step. The maintenance and management of these areas is equally, if not more, important. Although none of the UCAs (partly with the exception of Cittadella and, to a certain extent, Mdina) are actually being managed in a holistic manner, a number of initiatives have been undertaken over the past few years, either by central Government or, more often, by the Local Councils, through which small but effective interventions have been carried out, which are slowly bringing about change in these highly valued areas.

An appreciable amount of time, dedication and financial resources have been channelled towards the upgrading of a number of these areas and most of the projects have had a positive outcome.



Nonetheless, some of the projects need to be reassessed and guided in a way that the actual interventions undertaken in these areas are in keeping with the character of the locality. Of particular note is the not uncommon tendency for the use of materials that actually compete with rather than complement the character of the urban fabric of these historic areas. It is therefore important that specific and detailed guidance is made available for such things as choice of paving materials, signage, lighting, street furniture, information areas, interpretation panels, bus shelters, planters, and so on. The provision of such amenities is more than encouraged, however all of these structures should serve the locality and be submissive to the character of the area, rather than, as is often the case, they themselves becoming the centre of attraction!

### 2.5.6 Involvement of Non-Governmental Organisations

Maintenance/upgrading projects are not undertaken solely by the Local Councils, a number of non-governmental organisations (NGOs) have also got involved in such work, especially that related to the restoration of historic sites and monuments.

The work of NGOs is greatly valued for their dedication and expertise. Nonetheless, up to the time of writing, NGOs were allowed to carry out such projects but were not yet given any form of title on the buildings they painstakingly restored. Although it is important that such buildings, most of which are public property, remain in public ownership, some form of guardianship title could be contemplated<sup>4</sup>, through which the NGOs could also generate funding for the buildings' maintenance and for the execution of other projects. Nonetheless, it is important that appropriate use is made of any such building and any title granted to NGOs is conditioned in a manner that the building is really maintained and kept in good condition and that the buildings will always remain public property.

**Table 2.5** lists the costs incurred by one such NGO (Din l-Art Helwa) in restoration and conservation projects between 1997 and 2001. At the time of writing, no information was provided by other cultural heritage NGOs on projects undertaken and costs incurred, although it is known that a number of other projects have been undertaken by these NGOs over the past years.

### 2.5.7 Other Restoration/Management Projects

Though not urban planning, other environmental management projects have been undertaken by NGOs, including in areas of ecological and scientific importance. The most notable of these projects are those undertaken by Nature Trust at Wied Ghollieqa and il-Ballut at Marsaxlokk and the two projects run by the Gaia Foundation – at Ghajn Tuffieha in Malta and ir-Ramla l-Hamra in Gozo.

The project at Wied Ghollieqa includes the rehabilitation, clean up and re-forestation of the valley utilising ecologically appropriate species. Work to date has included the rebuilding of collapsed rubble walls, the planting of several thousand trees and shrubs, the cleaning of the valley and establishment of a nursery, among other work. At il-Ballut, work is still at a preliminary phase, which is seeking to re-secure the site following the vandalism to its protective fencing. Management plans have been formulated for both sites.

The Gaia Foundation manages Ghajn Tuffieha and ir-Ramla l-Hamra through management agreements with the Environment Protection Department. In 1998, the Foundation signed a second 5-year management contract for the integrated management of Ghajn Tuffieha (which superseded an earlier agreement signed in 1996), whereas in 2001 the foundation signed a management contract for the management of Ir-Ramla l-Hamra.

Gaia's implementation of projects is two pronged. They are site oriented, as well as pilot project and subject oriented. In other words the integrated management projects of each site can be in turn broken down into specific subject related projects. Details on these projects, which carry separate names, can be obtained from the Foundation's website at <http://www.projectgaia.org>.

<sup>4</sup> This possibility is being recommended in the draft Heritage Bill currently before Parliament.

These projects centre on a number of themes, including coastal conservation, afforestation, regulation of activities, beach management, waste management, safety, sustainable agriculture, organic farming, biodiversity protection and restoration.

Funding for these latter two projects has been provided through annual grants from the Environment Protection Department (Lm 10,000 per year for each of the two projects) and a EU grant under the LIFE-Third Countries programme (Lm 80,000) (Dr R. Ragonesi, *pers. comm.*)

**Table 2.5 – Din l-Art Helwa Budget for Restoration and Conservation (1997-2001)**

Project	1997	1998	1999	2000	2001
Kapella Ta' Hal Millieri	514	85	471	1018	223
Kapella Ta' Bir Miftuh	565	376	482	968	1374
Torri tad-Dwejra	7,969	3,076	460	139	550
Torri Wignacourt	2,598	3,091	511	2449	958
Torri Mamu	581	233	3870	741	1502
Fort St Mary Comino				445	31733
Torri Ta' Ghallis	24	62	13		184
Torri Ta' Nadur					30
Torri Ta' Qalet Marku		1,593	104		130
Tree Nursery 2002 Project					
Batterija Santa Marija (Gun Carriages in 2001)	158	1,339	183	307	643
Kappella ta' Santu Rokku	23	6	30	254	264
Ta' Braxia	8			2717	2475
Msida Bastion garden of repose	195	1,527	1397	1445	424
Torri Ghajn Tuffieha /1997-Mistra Gate	5,000	31			
133 Melita Street	172	155	611	959	1681
Fort St Agata		400	1245	12802	8982
Victory Church (Survey - Phase I)					1704
Other	941	221	559	-283	93
<b>TOTALS</b>	<b>17,807</b>	<b>12,195</b>	<b>9,936</b>	<b>23,961</b>	<b>52,950</b>

Source: Din l-Art Helwa

## 2.6. Enforcement

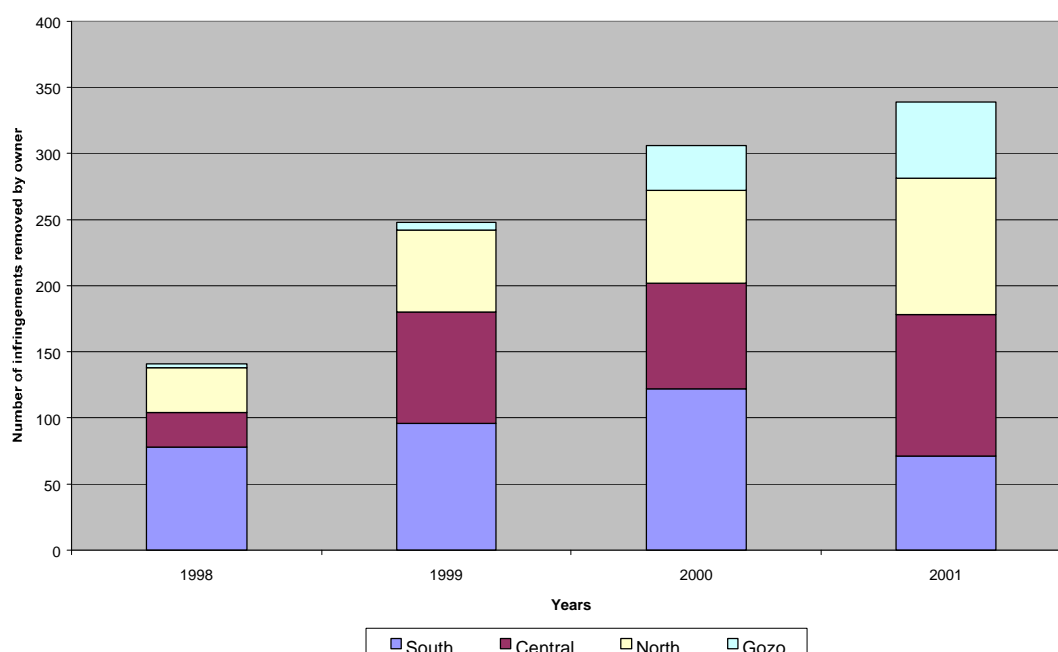
### 2.6.1 Planning Control

The enforcement of planning control is directly complementary to the development control function. The Structure Plan and the entire planning system sought to over-turn the deeply entrenched culture of permissive development prevalent prior to the early 1990s and to replace it with a regulated strategic and local planning approach to development guided by detailed planning documents and other guidance notes (Mallia et al., 1999). Given the high level of non-compliance with the prevalent building control provisions prior to the establishment of the Planning Authority, considerable resources have also been devoted by the Authority to its enforcement function. Success has been reflected in growing public acceptance and increasing consequent compliance with planning legislation, as shown in **Table 2.6** and **Figure 2.2**.

**Table 2.6 – Number of infringements removed by owner distributed by enforcement district over the review period (1998 – 2001)**

Year	South	Central	North	Gozo	Totals
1998	78	26	34	3	<b>141</b>
1999	96	84	62	6	<b>248</b>
2000	122	80	70	34	<b>306</b>
2001	71	107	103	58	<b>339</b>
<b>Totals</b>	<b>367</b>	<b>297</b>	<b>269</b>	<b>101</b>	<b>1034</b>

Source: Enforcement Unit, Planning Authority

**Figure 2.2 – Comparison of compliance with enforcement notices (1998 – 2001)**

Notwithstanding this, an average of 1,294 stop/enforcement notices have been issued each year over the review period. Apart from the issue of these notices, a huge amount of other work takes place each day, related to monitoring activities, inspections, following up cases, responding to complaints and reports about potential illegal development and negotiations/mediation with infringers/developers to ensure compliance with the notices and/or adherence to permit conditions. **Table 2.7** gives an overview of the stop and enforcement notices issued by each enforcement team between 1998 and 2001. The highest number of notices has been issued in the South, followed by the North team. The least number of notices have been issued in Gozo. Obviously these figures are not necessarily an indicator of enforcement performance since they are also related to the size of the population and the density of development in these respective areas, among others.

In addition to action by ‘developers’ to remove illegal development (see above), the Planning Authority has itself undertaken direct action to remove illegal constructions (see **Table 2.8**). This work has been sustained, despite the problems the Authority encountered over the past years, first with a lack of necessary logistical support and equipment to be able to execute its orders and actions and secondly through legal action instituted against it in a vain attempt by the owners of illegal constructions to stop the Authority from demolishing them.

**Table 2.7 - Number of Stop/Enforcement Notices Issued by each enforcement team between 1998 - 2001**

Year	North	Central	South	Gozo	Totals
1998	428	356	392	244	<b>1420</b>
1999	305	282	336	193	<b>1116</b>
2000	316	289	454	284	<b>1343</b>
2001	336	327	357	277	<b>1297</b>
<b>Totals</b>	<b>1385</b>	<b>1254</b>	<b>1539</b>	<b>998</b>	<b>5176</b>

Source: Enforcement Unit, Planning Authority

Unfortunately enforcement action is still hampered by excessive bureaucratic and legal impediments (see **Table 2.9** and **2.10**) although the recent changes to the Development Planning Act (Act XXI of 2001) have addressed many of the concerns and lacunae prevalent in the previous versions of the Act. In fact, with the latest amendments, the Authority can now impose a maximum fine of Lm 10,000 for illegal development (up from the previous Lm 1,000 maximum level) as well as a daily penalty for as long as the infringement is not rectified (following expiry of the period given in the enforcement order for the removal of the illegality). Other provisions include the possibility to confiscate, clamp, tow, remove or store any object used in illegal development and including their disposal or sale by auction.

**Table 2.8 – Number of Enforcement actions (Direct Actions) carried out by year**

Year	Operations*	Cases
1998	14	16
1999	15	35
2000	45	66
2001	39	169
<b>Totals</b>	<b>113</b>	<b>286</b>

\*A direct action operation can include more than one enforcement case

Source: Enforcement Unit, Planning Authority

**Table 2.9 - Number of Court Cases against Enforcement Notices by year**

Year	Court cases
1998	2
1999	3
2000	10
2001	8
<b>Totals</b>	<b>23</b>

Source: Enforcement Unit, Planning Authority

**Table 2.10 - Number of Appeal Cases against Enforcement notices by year**

<b>Year</b>	<b>Appeal cases</b>
1998	148
1999	135
2000	104
2001	90
<b>Totals</b>	<b>486</b>

*Source: Enforcement Unit, Planning Authority*

In its efforts to always inform the public of its actions and activities, the Planning Authority has also published full details of all pending enforcement notices on its corporate web site apart from undertaking a newspaper-based publicity campaign to encourage prospective property buyers to check that the buildings they are about to purchase are built according to law.

Like all enforcement activities, that related to the regulation of building activity has heavy overtones of a “cat-and-mouse” chase, with illegal activity happening at times that the Authority’s officers are not very active. In order to counter this trend, in 2001, the Authority instituted a Saturday inspection and monitoring service, which was later extended to cover the entire weekend. This too has increased public confidence in the effectiveness of the Authority’s enforcement service.

### **2.6.2 Environmental Control**

Apart from the enforcement measures instituted by the Planning Authority, which are arguably more visible, other enforcement action takes place on the island through the dedicated work of the environment inspectors employed with the Environment Protection Department.

The Environment Inspectors carry out similar functions to those of the enforcement officers at the Planning Authority but their actions are governed by the provisions of the Environment Protection Act. Unfortunately, the 1991 Environment Protection Act was not as robust as the Development Planning Act in its enforcement provisions. Despite this, the environment inspectors have been particularly effective in the enforcement of the CITES convention and hunting regulations.

Officials of the department investigate complaints from the public and take the necessary appropriate action. Moreover, inspectors also give evidence in court actions related to transgression of the Environment Protection Act.

Action has included monitoring and direct action against hunting offences, regulation of trade in endangered species and the confiscation of illegally imported flora and fauna.

With the setting up of the new Malta Environment and Planning Authority, it is expected that the enforcement functions of the formerly separate organisations will be strengthened. This, however, can only happen if the required resources are made available and the various staff are trained in their respective disciplines and supported by adequate professional resources. A new approach in terms of professional environment inspectors, especially with regards to pollution prevention and control responsibilities needs to be adopted.

## **2.7. Coastal Zone Management (Spatial Planning / Institutional Integration)**

### **2.7.1 Introduction**

Coastal zone management is a multi-disciplinary subject that aims to manage and coordinate the various conflicting uses making use of and affecting the coastal environment. In a country like Malta the number of stakeholders concerned with coastal/marine issues is especially high and the problems associated with the co-ordination of this work are obviously high as well, with several agencies and institutions having jurisdiction over particular geographical areas or uses of the coast. There is therefore a very real need to promote integrated coastal zone management between all the relevant parties.

Very broadly, the coastal zone can be defined as a “geographical space incorporating land and sea areas within which the natural processes interact to create a unique dynamic system”. It also “incorporates those activities on land and at sea where human activities are directly influenced by or can influence the quality of the natural resources” (Planning Authority, 2002a).

### **2.7.2 The Coastal Zone**

The extent of the coastal zone in the Maltese islands has been a bone of contention for several years, especially following the approval of the Structure Plan and therefore its policy CZM 3. The problems related to a lack of a clear definition of what constitutes the coastal zone. In order to try to clarify the situation, at least in planning terms, the Planning Authority has established a coastal zone boundary in its recently published Coastal Strategy Topic Paper (Planning Authority, 2002a; Mallia *et al.*, 2002 in this report). This boundary has been identified on the basis of ecological, physical and administrative criteria so that the extent of this zone is not uniform and different areas exhibit different widths, with a narrow coastal zone in built up areas and extended coastal zones in rural areas.

The coastal zone in the Maltese Islands, as designated by the Planning Authority amounts to 61.8 km<sup>2</sup> or 19.6% of the total land area (Planning Authority, 2002a).

### **2.7.3 Coastal Zone Management in the Maltese Islands**

In view of its multidisciplinary approach, spatial planning is one tool that can assist in identifying a strategic approach to sustainable development of the coastal (and marine) environment. The integration and coordination of the various stakeholders couldn't be better exemplified than with respect to the coastal zone of a country such as Malta. The small size, independent status and high population density of the Islands means that significant pressures are exerted on the various land areas, not least the coastal zone with its myriad of uses that either require a coastal location (such as power stations, desalination plants, ports, harbours) or else capitalise on the fact that they are located on or near the coastal zone (e.g. tourist and recreation facilities).

Unfortunately, a significant amount of degradation of the coastline has occurred due to this high development pressure - a trend that requires arresting to ensure that this important resource is protected for recreational and environmental reasons.

The implementation of coastal zone management is the subject of a number of international agreements. Some of these target general issues whereas others are more sector-specific. Malta is party to a number of these international agreements, the two most important being the UN Convention on Biological Diversity (Rio Convention) and the UN Law of the Sea (UNCLOS). On a regional level, the most important coastal management plan established for the Mediterranean is the Mediterranean Action Plan (MAP) of the United Nations Environment Programme (UNEP), with its various topical protocols.

In 2000, Malta initiated an integrated Coastal Area Management Programme (CAMP) under the auspices of the MAP. The programme, which will be concluded in 2002, includes a number of thematic activities and projects dealing with coastal issues (e.g. soil erosion, marine conservation, sustainable coastal management, health, tourism and water resources management). The project will result in the formulation of an integrated resource plan for the coastal area of the northwest of Malta.

Undoubtedly, the most pressing and urgent issue that requires tackling with regards to coastal management is the integration of the various institutional remits and responsibilities that in one way or another affect the coastal zone. This requires addressing a long-standing tradition of sectoral management and administration and its substitution with a more organic and inclusive approach that would seek to reach consensus as much as possible, including through innovative approaches such as mediation and conflict resolution.

## 2.8. Statutory Designations

### 2.8.1 Introduction

Much land-use is determined by designations formulated under different sets of legislation, both national (such as the Development Planning Act and the Environment Protection Act) and international (such as EU Directives, Conventions, etc.). Three specific types of designations exist:

- a) designations affording protection to sites and features of heritage importance as well as their management, e.g. Areas of Ecological Importance, Sites of Scientific Importance, Scheduled Property, Nature Reserves, Ramsar sites, etc.;
- b) planning designations included in the Temporary Provisions Scheme, 1988, as well as the Structure Plan for the Maltese Islands, 1990, and the various Local plans and other Planning documents and subsidiary legislation, largely determining where development is acceptable and where it isn't (e.g. Urban Fringes, Green Areas, Coastal Zone, Rural Conservation Areas, Outside Development Zone, Urban Conservation Areas, etc.);
- c) area designations under international legislation that make land eligible for specific grant aid, mainly related to agricultural activity and environmental protection (e.g. Nitrate Vulnerable Zones and Environmentally Sensitive Areas). These are not yet applicable in the local context but are expected to become relevant should Malta accede to the European Union.

### 2.8.2 Local Designations

Local and international legislation provides for the protection of specific areas of land for their intrinsic heritage value. Designations such as National Parks, National Monuments, SSSIs, and the like are common in various countries. Locally, natural heritage designations are embodied in the rural conservation policies of the Structure Plan for the Maltese Islands, the scheduling provisions of the Development Planning Act, the Environment Protection Act and the Antiquities Protection Act. New designations have also been proposed in emerging Local Plans for different heritage aspects.

These designations are used to safeguard and enhance the environment or heritage. **Table 2.11** provides an overview of the various statutory and proposed designations in use in the Maltese Islands.

**Table 2.11 – List of designation types in use in the Maltese Islands or proposed in official documents**

<b>Designation</b>	<b>Definition</b>	<b>Enabling Legislation / Policy Document</b>
National Park	Relatively large areas of national significance not materially altered by human use, with managed visitor access and amenities	Structure Plan for the Maltese Islands
Area of Ecological Importance	Relatively large areas designated to protect typical and rare habitats	Structure Plan for the Maltese Islands
Site of Scientific Importance	Sites containing individual species, groups of species and geological features	Structure Plan for the Maltese Islands
Area of Archaeological Importance	Concentrations of valuable archaeological sites	Structure Plan for the Maltese Islands
Site of Archaeological Importance	Individual and/or isolated archaeological sites	Structure Plan for the Maltese Islands
Area of Agricultural Value	Areas comprised of high grade agricultural land including irrigated and partially irrigated land	Structure Plan for the Maltese Islands
Area of High Landscape Value	Areas having a high scenic, panoramic or other aesthetic value	Structure Plan for the Maltese Islands
Nature Reserve	Areas declared under the Environment Protection Act to protect areas of local nature conservation interest and importance for the enjoyment of and learning about nature	Environment Protection Act, 1991
“Bird Sanctuary” <sup>5</sup>	Areas declared under the Environment Protection Act as “Nature Reserves” but afford protection only to birds	Environment Protection Act, 1991
Scheduled Property	Areas, buildings, structures and remains of geological, palaeontological, cultural, archaeological, architectural, historical, antiquarian, artistic or landscape importance, as well as areas of natural beauty, ecological or scientific value, which are to be scheduled for conservation	Development Planning Act
Scheduled Trees	Individual trees, groups of trees or woodlands, which are to be scheduled for protection	Development Planning Act
Urban Conservation Area		Structure Plan for the Maltese Islands
Marine Conservation Area		Structure Plan for the Maltese Islands
Rural Conservation Area		Structure Plan for the Maltese Islands
Woodland Conservation	Areas containing ancient forest remnants	Draft North West Local

<sup>5</sup> This is not a statutory designation but several of the Nature Reserves established under the Environment Protection Act, are really bird sanctuaries since they only afford protection to birds.



Area	and other semi-natural woodland (including the main copses and other indigenous trees surrounding the area)	Plan
Areas of Cultural Importance	Areas of landscape, often limited in size, which display a specific landscape character of high cultural value of national or international significance but which depend or has depended upon a specific interaction of people and nature over time	Draft North West Local Plan
Site of Hydrological Importance		Draft Central Malta Local Plan
Integrity Site (Geology)	Sites whose scientific or educational importance lies in the fact that they contain finite and limited deposits or landform that are irreplaceable if destroyed	
Exposure Site (Geology)	Sites whose scientific or educational importance lies in providing exposures of a deposit that is extensive or plentiful underground but which is otherwise accessible only by remote sampling	
Site of Special Religious Significance	A site that is widely acknowledged for its religious significance on a national or international scale. The religious importance of the area is usually reinforced through the presence of a shrine	Draft Gozo and Comino Local Plan
Rubble Wall Conservation Area		Environment Protection Act (LN 160 of 1997)
Valley Protection Zone		Draft North Harbours Local Plan
Coastal Viewshed Protection Zone	A strip of coast which is designated to safeguard against unsympathetic development which either obstructs or is unsympathetic with coastal scenery	Draft Gozo and Comino Local Plan
Visual Integrity Buffer Zones	Areas Outside Development Zones and which are sometimes designated as UCA (buffer zones) to safeguard the visual integrity of UCAs	Draft Gozo and Comino Local Plan
Well Head Protection Zone	A 10 metre zone around a borehole room of discharge point of springs	Draft North West Local Plan
Inner Protection Zone	A 500 metre zone around a borehole, underground gallery system of springs and pumping stations, dry valleys or dolines which contribute to the recharge of the aquifer, within which development is restricted	Draft North West Local Plan
Aquifer Protection Zone		Draft North West Local Plan

Source: Planning Authority

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Planning Authority, Environment Protection Department, Gaia Foundation, Din l-Art Helwa.

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