INTRODUCTION

In 1996, the Irish Government published *Growing for the Future: A Strategic Plan for the Development of the Forestry Sector in Ireland*. The aim of this strategy is to develop forestry to a scale and in a manner which maximises its contribution to national economic and social well-being on a sustainable basis and which is compatible with the protection of the environment. In *Growing for the Future*, a commitment was made to promote quality in all aspects of Irish forestry and to provide the instruments to achieve this.

At the Third Ministerial Conference on the Protection of Forests in Europe, held in Lisbon in 1998, six criteria and accompanying indicators for sustainable forest management were adopted. Their adoption formally recognised the need to enhance the ecological, productive and social functions of forests and to rectify trends away from the maximisation of these values.

Irish forestry has not developed in isolation. There are numerous checks and balances regulating the sector, including a legislative framework, a new *Code of Best Forest Practice*, various environmental guidelines and conditions for grant-aided afforestation. The responsibility for implementing these regulations rests with the Forest Service of the Department of the Marine and Natural Resources.

The *Irish National Forest Standard* is the result of a consultative process initiated in 1999 and involving the key interest groups in Irish forestry (see Appendices One and Two). The process involved the establishment of a steering committee chaired by the Forest Service and including representatives from timber groups, timber users, government departments and statutory bodies, farming organisations and non-governmental organisations (NGOs). Working parties were set up to consider environmental, economic, social and legal aspects of forestry and sustainable forest management. The groups were charged with developing indicators relating to the six criteria for sustainable forest management announced at Lisbon.
BACKGROUND

FORESTRY IN IRELAND

Forestry in Ireland has a number of unique features. Despite planting by owners of large estates during the 18th century, centuries of native woodland clearance reduced forest cover in Ireland to just 1% of the land area by the early 1900s. A major national commitment to restore forest cover resulted in the planting of much marginal and sub-marginal agricultural land, and this has continued up to the present.

Due to site constraints and the limited number of suitable indigenous species, most of the afforestation was accomplished with conifers of coastal North West American provenance. Some species of European origin were also used. Most of this afforestation was carried out by the State. Some wooded estates and pockets of native woodland survived, and most of these are now managed by Dúchas The Heritage Service. In recent years, with European Union (EU) support, afforestation programmes have become part of rural development and agricultural reform. Farmers and others have been encouraged to transfer land into forestry. Today, most afforestation is undertaken in the private sector. Since the early 1990s, higher percentages of broadleaves and conifers, other than spruce, have been planted.

The current area under forest is over 600,000 hectares (ha) or some 9% of the land area of the country. Some 80% of the forest estate is planted with conifers and 10% of this comprises mixed species stands. The broadleaf forest estate comprises about 100,000 ha, of which 6,000 ha are managed by Dúchas The Heritage Service. The area of new grant-aided broadleaf plantations is growing rapidly.

OWNERSHIP CONSIDERATIONS

The ownership and management of most State forests is vested in Coillte, The Irish Forestry Board, a State company set up with a commercial mandate under the 1988 Forestry Act. Coillte forests vary in size, but generally comprise large blocks along with conglomerations of smaller areas and scattered small plantations.

Dúchas woodlands include surviving native and semi-natural woodlands, which occur primarily in the Counties of Wicklow, Kerry, Clare and Donegal. Some of these are interspersed with non-forest ecosystems. Significant areas of native and semi-natural woodland, as well as broadleaf woodland and scrub, are located on private estates and farms. Private forests include old estate woodlands, some of which have survived in family ownership since the 18th century, as well as other small areas of broadleaf woodland. In recent years, with EU assistance, approximately 11,000 owners, primarily farmers, have planted forests, and these average 8 ha in area.

DEFINING THE STANDARD

The Irish National Forest Standard applies to all forests in Ireland. It is the framework within which the development and evaluation of sustainable forest management will take place and its underlying principles and key processes are outlined.

The Irish National Forest Standard identifies: criteria, which define the essential elements of sustainable forest management; indicators, which provide a basis for assessing forest or forest industry conditions for each criterion; and measures, which describe the type of information needed to evaluate how indicators change over time.

The Irish National Forest Standard is not a ‘stand-alone’ document nor is it a set of operational prescriptions. It must be understood in the context of its supporting instruments, which are: the Code of Best Forest Practice; the suite of five...
environmental guidelines (FORESTRY AND WATER QUALITY GUIDELINES, FORESTRY AND ARCHAEOLOGY GUIDELINES, FORESTRY AND THE LANDSCAPE GUIDELINES, FOREST HARVESTING AND THE ENVIRONMENT GUIDELINES and FOREST BIODIVERSITY GUIDELINES); the legal framework; and the Forest Service inspection and monitoring systems. These relationships are outlined in Appendix Four.

The dynamic character of sustainable forest management is reflected in the IRISH NATIONAL FOREST STANDARD. Society’s understanding of the concept of sustainable forest management is as yet incomplete. As it develops, the most appropriate measures by which it may be evaluated will also become clearer. Research will be required to refine these measures. Research results will then be transferred into practical and cost-effective protocols, which in turn will be incorporated into future codes of practice, environmental guidelines and certification schemes.

A review process will play an essential role in evaluating the implementation of the measures set out in the IRISH NATIONAL FOREST STANDARD. An expert group set up by the Forest Service will continuously monitor the development of the measures in light of the best available information.

The IRISH NATIONAL FOREST STANDARD recognises the dispersed nature of Irish forests, the range in property sizes and the arrival of many new owners to the sector. Its application will vary according to the size and complexities of the property, and the CODE OF BEST FOREST PRACTICE is designed to accommodate this variability. However, the principles of sustainable forest management remain, regardless of forest size.

The adoption of the IRISH NATIONAL FOREST STANDARD by the forestry sector demonstrates its commitment to developing the conditions which will encourage and facilitate sustainable forest management. This will be achieved by ensuring that the conditions laid down in the CODE OF BEST FOREST PRACTICE, the various environmental guidelines and the legal framework are observed. In return, society will fully benefit from the economic, environmental and social values which well-managed forests bestow.

THE IRISH NATIONAL FOREST STANDARD AND CERTIFICATION

The IRISH NATIONAL FOREST STANDARD is not a forest certification scheme, nor does it favour any particular scheme. However, it is designed to encourage an
THE REGULATORY FRAMEWORK

POLICY

On the basis of various commissioned reports, it has been the policy since the inception of the State to increase the national forest area and to protect existing forests. Initially, the State purchased and planted land directly, setting itself annual planting targets which reached 10,000 ha in the 1950s. In the early 1980s, certain native and semi-natural forests were transferred to the Wildlife Service (now Dúchas The Heritage Service), to be managed for conservation purposes. In 1988, the executive responsibility for the establishment and management of State forests was transferred to Coillte. The Forest Service, Department of the Marine and Natural Resources, was confirmed as the regulatory authority.

Since 1989, State policy has been directed towards achieving the planting programmes supported by the EU. Two programmes have been completed and a third has been initiated. The most important policy statement has been the forest strategy document *Growing for the Future*, which was published in 1996. This sets the target for a national forest cover of 17% of the country’s land area. All the issues relating to forest establishment, management and the forest products sector were addressed and strategic actions set. Sustainable forest management, on the basis of the principles set out at the United National Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 and the Ministerial Conferences on the Protection of Forests in Europe in Helsinki and Lisbon, is an integral component of current policy.

LEGAL INSTRUMENTS

The main legislative instruments governing forestry are:

- Forestry Act 1946, governing, *inter alia*, the felling of trees;
- Forestry Act 1956, facilitating compulsory purchase of commonages;
- Forestry Act 1988, establishing Coillte.

Ancillary legislation (existing and at Bill stage) not directly concerned with forests but having an impact through its provisions, includes the following:

- Environmental Impact Assessment - Statutory Instrument No. 100 of 1996
- Environmental Protection Agency Act 1992
- European Communities (EIA) (Amendment) Regulations - Statutory Instrument No. 101, 1996
- EU (Conservation of Wild Birds) (Amendment) Regulations 1999
- European Communities (Natural Habitats) Regulations 1997
- EC (Natural Habitats) (Amendment) Regulations 1998
- Litter Pollution Act 1997
- Local Government (Special Amenity and Conservation Orders) Act 1976
- Local Government (Planning Development) Regulations
- Occupiers Liability Act 1995
- Planning and Development Bill 1999
- Road Traffic Acts 1933-1993
- Roads Act 1993
- Safety, Health and Welfare at Work Act 1989
- Safety, Health and Welfare at Work Bill 1998
- Wildlife Act 1976
- Wildlife Bill 1999

Many EU Directives and regulations, such as those relating to the marketing of seeds and plants, plant health, forest protection, habitats and birds, have also been incorporated into national legislation. The Forestry Act 1946 is currently under review to encompass the principles of sustainable forest management, to
bring felling provisions up to date, and to accommodate developments in forest practice. The Irish National Forest Standard, the Code of Best Forest Practice and the various environmental guidelines will all be given a statutory basis within the Act.

**ECONOMIC MECHANISMS**

The forestry sector in Ireland can be broadly categorised as comprising:

- commercial forests in which market conditions govern the management of forests and the processing of forest produce;
- commercial forests in which management for timber production is constrained by statutory environmental requirements; and
- conservation forests which are State managed or regulated.

Most forest establishment is grant aided. National support for planting has been largely replaced by EU-assisted grants to encourage the transfer of land from agriculture to sustainable forestry. To qualify for these grants, strict adherence to environmental guidelines and operational standards set by the Forest Service is required. EU-assisted grant schemes also support the development of downstream activities, such as nurseries, training and marketing.

Environmentally compatible farming is supported through the Rural Environment Protection Scheme (REPS), and a forestry component is being developed. Grant schemes also provide assistance for woodland improvement and the provision of recreation and amenity facilities.

A favourable tax regime operates for forestry owners.

**INFORMATION MECHANISMS**

The Forest Service is responsible for collating and providing information on the national forest estate. It reports on forest condition and health and is currently completing a national Forest Inventory and Planning System (FIPS). This is based on a geographical information system (GIS) and provides forest species category and ownership data for all forests over 0.2 ha in area. This is in turn operated within a Grant Payment and Administration System (GPAS), which tracks all grant-aided forest payments and monitors adherence to the conditions required. Other information is being assembled on forest soils, topography and landscape types. Annual records of carbon sequestration by forest systems are maintained. Educational training and advisory courses for farmers and other private forest owners are provided. Books, brochures, films, videos and exhibitions have been developed to inform the public on aspects of forestry. Symposia, study tours and seminars relating to forestry are also supported.

**FORESTRY INSTITUTIONS**

Most forestry organisations, including the Forest Service, private companies and educational establishments, have been adapting to the challenge of sustainable forest management by diversifying staff skills. Co-operation and consultative processes have been reinforced with NGOs. Priority research areas have been identified and the National Council for Forest Research and Development (COFORD) has initiated, developed and funded research to address relevant issues. COFORD also guides EU research based projects and co-ordinates the forest research undertaken by institutions. Coillte, Enterprise Ireland, the National Universities and the Institutes of Technology also undertake forest research.

**ENVIRONMENTAL CONTROL**

Approved forestry projects are subject to the Directives and environmental legislation of the EU. Planning permission is needed for planting projects requiring environmental impact assessment. Grant-aided forestry is subject to constraints in areas of high amenity, in proposed Natural Heritage Areas (pNHAs) and in relation
to the proximity of planting to aquatic zones, roads and houses. The National Monuments Acts provide legal protection for identified and newly discovered heritage sites. The Code of Best Forest Practice and the various environmental guidelines which accompany the Irish National Forest Standard specify environmental control in relation to aquatic zones, landscape, archaeology and biodiversity. The Planning and Development Bill 1999 may have implications for broadleaf forestry.

**SUSTAINABLE FOREST MANAGEMENT**

**BACKGROUND**

At the Ministerial Conferences on the Protection of Forests in Europe in Strasbour (1990) and Helsinki (1993), the need to strengthen and develop the management of forests according to ecological principles was acknowledged. At the same time, it was emphasised that the production of wood from these forests is, and will remain, an essential function. Despite varied traditions and diverse ownership patterns, the Ministerial Conference in Helsinki gave a common political commitment that the increasing demands on European forests should be met in a manner which is consistent with their sustainable management and conservation.

In approaching this latter concept, sustainable forest management was defined as:

- the stewardship and use of forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfil, now and in the future, relevant ecological, economic and social functions, at local, national and global levels, and that does not cause damage to other ecosystems.

After the Helsinki Ministerial Conference, the need to define and develop common tools with which to monitor forest management became a priority for the signatory nations. European criteria and indicators were developed to gather and assess information on sustainable forest management. The six criteria subsequently developed at the third Ministerial Conference in Lisbon in 1998 were:

1. Maintenance and appropriate enhancement of forest resources and their contribution to global carbon cycles.
2. Maintenance of forest ecosystem health and vitality.
3. Maintenance and encouragement of productive functions of forests (wood and non-wood).
4. Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems.
5. Maintenance and appropriate enhancement of protective functions in forest management (notably soil and water).
6. Maintenance of other socio-economic and cultural functions and conditions.

These criteria describe different aspects of sustainability at a conceptual level. They represent sets of conditions or processes by which forest characteristics or the ability of a forest to give a regular yield of all goods and services, may be judged. Associated indicators serve to define the nature of the criteria and show how they are measured. Two types of indicators have been defined and accepted:

- qualitative indicators, which illustrate the implementation of national policy instruments, leading to sustainable forest management; and
- quantitative indicators, which show changes over time for a criterion and measure progress towards a specified objective.

When measured over time, indicators can demonstrate trends toward or away from sustainable forest management, giving policy makers the necessary information to take action.
MEASURES TO PROMOTE SUSTAINABLE FOREST MANAGEMENT

Planning, education and professional standards

Some level of planning is necessary for all forests. Its extent is related to the size and type of the forest property. At the very least, effective maps and records are needed. Planning is necessary for the establishment, management and harvesting phases and may be on a strategic, tactical or operational basis, depending on the extent of the enterprise. Forest practice must be supported by effective educational and training programmes, as well as a professional code of ethics which embraces foresters and other professionals.

Criteria and indicators

In the Irish National Forest Standard, measures are described for each indicator. These relate to the information support needed to show that, within any criterion, the indicators are moving in a positive or negative way.

Qualitative indicators record the legislative, economic and policy instruments which, by their existence, encourage and support sustainable forest management. These can be reviewed as to whether they continue to exist or are performing their

Quantitative measures are identified at national and local level. Local measures describe how sustainable forest management is put into practice at the forest unit, individual industry and local community level.