

Please provide the following details on the origin of this report.

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<i>Submission</i>	
Signature of officer responsible for submitting national report:	
Date of submission:	29 September 2003

Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report.

This report was circulated to the bodies on the attached spreadsheet and their observations invited, four replies were received. These bodies represent a variety of forestry stakeholders. Comments were also received from within the Forest Service.

The Forest Service (Dept. of Communications, Marine and Natural Resources) is the forest authority in Ireland and its responsibilities include overall forest policy, legislation, administering grant aid, controlling timber harvesting through Felling Licenses, forest research and the production of forest statistics. At present the Republic of Ireland has 9.8% forest cover – this increased from 1.9% forest cover in 1900. 78% of the current forest cover is predominantly non indigenous conifer plantation, 12% is predominantly broadleaf, 6% other wooded land and 4% mixed conifer and broadleaf. Practically all of the conifer plantations and the conifer broadleaf mixtures were planted in the past 70 years, initially planting rates were low but there was a gradual increase up to 24,000 hectares per annum in the late 1990's.

The broadleaf component includes plantations ranging in age from newly established plantations to those more than 200 years old, scrub-like secondary woodland on abandoned farmland and remnants of ancient woodland (i.e. pre-1600 woodland sensu Peterken 1993) that have been greatly modified and abandoned silviculturally 100 to 180 years ago.

The percentage of semi-natural forest is low and the most valuable semi-natural forests are protected through being designated Special Areas of Conservation (SACs). Some areas are also National Parks and/or Nature Reserves.

Peterken, G. (1993) Woodland Conservation and Management. Chapman and Hall. London.

**VOLUNTARY REPORT ON IMPLEMENTATION OF EXPANDED PROGRAMME OF WORK
ON FOREST BIODIVERSITY**

Expanded Programme of Work on Forest Biological Diversity

Annex to Decision VI/22

1. Has your country identified priority goals, objectives and activities included in the expanded programme of work for implementation at the national level?	
a) no (please specify the reasons)	
b) yes (please provide a list of priorities identified)	X
Further comments on identification of priority goals, objectives and activities	
<ul style="list-style-type: none"> • Implement the Forestry Acts 1946 and 1988; the Wildlife Act 1976 and 2000 and relevant EU Directives. • Identify and give statutory protection to the most valuable semi natural woodlands. • Promote and implement the Native Woodland Scheme to conserve and expand Ireland's native woodland. • Ensure that Sustainable Forest Management is the core of forest planning and operations. (Ireland has produced the Irish National Forest Standard.) • Implement Forest Biodiversity Guidelines (2000) and the Code of Best Forest Practice (2000) for all forest types and all forest operations. • Adapt the forest inventory to include biodiversity. • Develop an inventory and classification of broadleaf woodlands. • Afforestation to consist of 30% broadleaf by 2006. • Encourage local provenances of native species. • Review and upgrade forest legislation as appropriate to, inter alia, provide for the conservation and sustainable use of biological diversity. • Expand research to obtain information on the biodiversity of plantation forests and semi-natural woodlands. 	

2. From the list of priorities, did some or all of them produce the expected impacts after their implementation (i.e. a success)?	
a) no (please specify the reasons)	
b) yes (please specify success stories)	X
Further comments on impacts of implementation of priority activities	
<ul style="list-style-type: none"> • Field officers, inspectors and staff of both the Forest Service and the National Parks and Wildlife Service ensure compliance with legislation. • The Native Woodland Scheme was developed in conjunction with a wide range of interested parties and it includes a successful training and publicity programme. It was preceded by the Peoples Millennium Forests (2000) which included an outreach programme and a very effective publicity programme. • Forest Biodiversity Guidelines are implemented for all operations, particularly in plantation forests. • A National Forest Inventory with a biodiversity component is being developed. • Goal of 30% broadleaf afforestation by 2006 is being pursued and is to be realised. • Local provenances and seed stands are being registered and documented and use of local provenances is encouraged in the Native Woodland Scheme. • Revised forest legislation is being drafted. • Research is ongoing. Ireland is in the course of expanding a biological records centre. 	
3. Were there any challenges/impediments to the implementation of priority activities that could have negatively affected their chance of success?	
a) yes (please specify the activities and the main challenges/impediments)	X
b) no	
Further comments on challenges/impediments to implementation of priority activities	
National budgets have a facilitating and constraining influence on all of the above. The Native Woodland Scheme for 2003 has been reduced from that planned due to national budgetary considerations. The inventory of broadleaf woodlands has also been reduced.	
4. Is your country collaborating with other Governments and regional and international organizations and processes to implement regional or international activities in the expanded programme of work?	
a) no	
b) yes, limited collaboration (please provide details)	
c) yes, significant collaboration (please provide details)	X
Further comments on collaboration with other Governments and regional and international organizations and processes to implement regional or international activities in the expanded programme of work	

Ireland has signed the pan-European Lisbon Agreement (1998) at the Third Ministerial Conference on the Protection of Forests in Europe and has participated in the Fourth Ministerial Conference on the Protection of Forests in Europe. It has improved and developed the indicators relating to the criteria pertaining to Sustainable Forest Management (SFM) (including Criterion 4 – the biodiversity criterion).

Ireland is an active participant in the United Nations Forum on Forests

COST Actions –Ireland continues to play an active role in the Cost Action programmes. In the past, Ireland was involved in Cost E4 Forest Reserves Research Network, Databank of Forest Reserves suitable for Research. Currently, Ireland is participating in both Cost Action E25, ENFORS which is in the process of establishing a database of forest ecosystem research sites and Cost Action E27, PROFOR, which is looking at protected forest areas in Europe, analysis and harmonisation. Natura 2000 sites in Ireland are composed of SACs and SPAs and includes semi-natural woodlands.

Ireland is an active member of many other international forestry and conservation processes.

Programme Element 1: Conservation, Sustainable Use and Benefit-sharing

5. Has your country developed practical methods, guidelines and/or indicators to apply the ecosystem approach in relation to sustainable forest management?	
a) no (please specify the reasons)	
b) relevant methods, guidelines and indicators under development	
c) some methods, guidelines and indicators developed (please provide details)	
d) a comprehensive set of methods, guidelines and indicators developed (please provide details)	X
Further comments on the practical methods, guidelines and indicators to apply the ecosystem approach in relation to sustainable forest management	

It is a core value in Ireland's forest policy that forest development and operations must be sustainable and compatible with the protection of the environment.

This entails using the ecosystem approach by:

- (a) Designating areas that have particular sensitivities and planning forestry with these to the fore – this is enshrined in legislation in the case of afforestation,
- (b) Using published guidelines, including the Forest Biodiversity Guidelines, (the Forest Service Guidelines are obligatory and must be complied with) and the Code of Best Forest Practice to describe forest values appropriate to SFM and best planning and operational practice,
- (c) Inspections to ensure compliance with the foregoing,
- (d) Audit the Irish National Forest Standard to gauge changes over time,
- (e) Coillte Teo (the State Forest Company) uses Forest Management Unit (FMU) planning, which is based on the ecosystem approach.

The sensitivities referred to at (a) above that relate to biodiversity include areas protected by legislation (SACs, SPAs, NHAs), areas with high acid sensitivity, waterways of particular sensitivities. There are consultative procedures in place for all of these areas. The Forest Biodiversity Guidelines mentioned at (b) above relate to all forest operations and forest types (and particularly to plantation forests). They describe habitats of particular value and set down requirements for biodiversity protection and enhancement.

The inventory and classification of broadleaf woodlands will provide a framework for the Native Woodland Scheme, selection of protected areas and biodiversity guidelines.

Legislation: Forestry Acts 1946 and 1988 make implicit the need for good forest management, control felling and make forest operations subject to the Wildlife and Planning Acts.

Sustainable Forest Management (SFM): Ireland is a signatory to the Lisbon Agreement 1998. It has developed and published the Irish National Standard, which outlines the criteria and indicators relating to the national implementation of Sustainable Forest Management (SFM). Criterion 4 in this standard is "maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems".

Research: The BIOFOREST project, which is based mainly in University College Cork (UCC) is investigating biodiversity in plantation forestry and will augment existing research. The BIOSCAPE project which is based in UCC and the University of Limerick is examining the biodiversity of different forests and forested landscapes. The BioAssess project (the Biodiversity Assessment Tools Project) is developing a tool-box for assessing the impacts of policies on biodiversity in Europe, in addition it is measuring the impact of land-use change on biodiversity across Europe's biogeographic regions.

Indicative Forest Strategies are being developed for each county to identify the potential that future afforestation and forest management and harvesting can make towards the establishment of high quality forests serving a variety of purposes, including timber production, forest industry development, off-farm incomes, tourism, amenity and enhancement of the environment at a local level. The Native Woodland Scheme (NWS), launched in 2001, applies an ecosystem approach. NWS guidelines are under construction, NWS training course have been held and there has been a large attendance to date. The first woodlands participating in the scheme were approved this year and it is hoped to hold field days for participants in the near future.

6.Has your country taken any measures to prevent the introduction of invasive alien species that threaten ecosystems, and mitigate their negative impacts on forest biodiversity in accordance with international law?	
a) no	
b) relevant measures under development	
c) yes, some measures taken (please outline the measures)	X
d) yes, comprehensive measures taken (please outline the measures)	
Further comments on the measures taken	
<p>Two broad approaches:</p> <ol style="list-style-type: none"> 1. Prevent the entry of invasive alien spp. through the enforcement of the EU Plant Health Directive (2000/29/EC). This entails, among other measures, port inspections, plant passports to accompany the transport of forest trees and forest produce and monitoring of designated forest plots. 2. Control of invasive alien spp. The Forest Service has devised a plant health contingency plan to be put in place in the event of a significant outbreak of insect damage to, or disease of, trees. Grant aid in the form of the Woodland Improvement Grant, the Native Woodland Scheme and the Reconstitution Grant are available for the control of invasive spp. such as <i>Rhododendron ponticum</i> and pests. 3. The National Biodiversity Plan includes a commitment to prepare a national study on alien species. To this end, a joint all-Ireland review of alien species has been initiated with Northern Ireland and is to report in 2004. 	
7. Has your country taken any measures to mitigate the impact of pollution on forest biodiversity?	
a) no	
b) under consideration	
c) relevant measures under development	
d) yes, some measures taken (please provide details)	
e) yes, comprehensive measures taken (please provide details)	X
Further comments on the measures taken to mitigate the impact of pollution on forest biodiversity	
<p>Ireland and the EU have comprehensive legislation on pollution of soil, air and water. Efforts to reduce pollution are ongoing through the Integrated Pollution Control license from the Environmental Protection Agency that is required by companies that have a potential to pollute. Implementation of the EU Water Framework Directive will be a significant development. To date, Ireland has no carbon tax but efforts are on-going to promote and encourage sustainable energy use.</p>	

8. Has your country taken any measures to mitigate the negative impacts of climate change on forest biodiversity?	
a) no	
b) relevant research and monitoring programmes under development	
c) some research and monitoring activities being undertaken but no measures taken	
d) yes, some measures taken (please outline the measures)	X
e) yes, comprehensive measures taken (please outline the measures)	
Further comments on the measures taken to mitigate the negative impacts of climate change on forest biodiversity	
The National Climate Change Strategy is in place and includes a commitment to afforestation as well as decreasing greenhouse gas production through reduced agricultural stocking levels, renewable energy generation, energy conservation, use of renewable materials etc.	
9. Has your country taken any measures to prevent and mitigate the adverse effects of forest fires and fire suppression (where fire is a natural disturbance agent)?	
a) no	
b) relevant measures being considered	
c) relevant measures under development	
d) yes, some measures undertaken (please specify)	
e) yes, many measures being undertaken (please specify)	X
Further comments on the measures to prevent and mitigate the adverse effects of forest fires and fire suppression	
Fire is not a major natural disturbance agent in Ireland compared to other countries and the majority of fires in Ireland are caused by humans, accidental and malicious). Forest owners take precautions to prevent fires in plantations by the construction of fire lines and through the implementation of fire plans. Owners of lands are required by legislation to take particular care when burning vegetation near forests. The allowable season for burning vegetation is set out in legislation.	
10. Is your country mitigating effects of the loss of natural disturbances necessary to maintain biodiversity in regions where these no longer occur?	
a) no	
b) monitoring and assessment of effects ongoing	
c) potential measures identified	
d) yes, some adopted and being implemented (please provide details)	X
e) yes, comprehensive measures adopted and being implemented (please provide further details)	
Further comments on measures adopted to mitigate effects of the loss of natural disturbances necessary to maintain biodiversity in regions where these no longer occur	

The main natural disturbance is windthrow which creates forest gaps and deadwood and thus contributes to biodiversity. The importance of deadwood is recognised by the Forest Biodiversity Guidelines, which require that some deadwood should be left <i>in situ</i> after both thinning and final harvesting.	
11. Is your country preventing and mitigating losses of forest biodiversity due to fragmentation and conversion to other land uses?	
a) no	
b) potential measures identified	
c) yes, some measures undertaken	X
b) yes, comprehensive measures undertaken	
Forestry Acts and the Wildlife Act (1976, 2000) in addition to other legislation such as Planning legislation provides protection to existing woodlands, while agricultural schemes give some protection and provide enhancement measures for hedgerows. (Hedgerows are a valuable component of woodland connectivity in Ireland.) Some areas of broadleaf woodland/scrub continue to be cleared. The Native Woodland Scheme places particular importance on connectivity in the creation of new native woodlands.	
12. Is your country restoring forest biological diversity in degraded secondary forests and in forests established on former forestlands and other landscapes?	
a) no	
b) potential measures identified	
c) yes, some measures implemented in some areas (please provide details)	X
d) yes, comprehensive measures implemented in major areas (please provide details)	
Further comments on the measures to restore forest biological diversity in degraded secondary forests and in forests established on former forestlands and other landscapes	
The Native Woodland Scheme encourages and provides grant aid and a framework for such activity. The opportunity to restore such woodland presents itself most often following clearfelling of exotic conifers from such lands.	
13. Is your country promoting forest management practices that further the conservation of endemic and threatened species?	
a) no	
b) relevant forest management practices under development	
c) yes, some practices adopted and promoted (please provide details)	X
d) yes, some practices being implemented (please provide details)	
Further comments on the forest management practices that further the conservation of endemic and threatened species	
Forest operations must follow the Guidelines published by the Forest Service, including the Forest Biodiversity Guidelines, and as such must be managed on an ecosystem approach. Most measures are habitat oriented rather than species oriented. However, where a rare/threatened species is present, for example Hen Harrier, Freshwater Pearl Mussel, the site must be managed in a way to ensure the protection, survival and where possible enhancement of the species.	

14. Is your country ensuring adequate and effective protected forest area networks?	
a) no	
b) networks of protected areas being planned	
c) some protected areas established but networks not in place	X
d) networks of protected areas taking shape	
e) major networks of protected areas established	
15. Is your country promoting sustainable use of forest resources to enhance the conservation of forest biological diversity?	
a) no	
b) relevant policy and programme under development	
c) yes, some policies and programmes in place (please provide details)	X
d) yes, comprehensive policies and programmes in place (please provide details)	
Further comments on the policies and programmes for promoting sustainable use of forest resources to enhance the conservation of forest biodiversity	
The Native Woodland Scheme and to some extent the Woodland Improvement Scheme and NeighbourWood Scheme perform this function. The National Biodiversity Plan pays particular attention to the need for the integration of the conservation and sustainable use of biological diversity in all sectors.	
16. Is your country preventing losses caused by unsustainable harvesting of timber and non-timber forest resources?	
a) no	
b) potential measures identified	
c) some measures undertaken (please provide details)	
d) comprehensive measures undertaken (please provide details)	X
Further comments on the measures to prevent losses caused by unsustainable harvesting of timber and non-timbering forest resources	
There is very little harvesting of non-timber resources in Ireland – practically all harvesting is timber harvesting. The Forestry Acts control timber harvesting - a Felling Licence is required from the Forest Service before harvesting and there is usually a condition to replant. The Forest Harvesting and the Environment Guidelines ensure that forest harvesting adopts sound planning procedures, operating techniques and control measures to reduce any potentially adverse effects. They address issues relating to soil conservation, protection of water quality, archaeological sites, biodiversity and the visual landscape as well as the maintenance of forest health and productivity.	
17. Is your country taking any measure to enable indigenous and local communities to develop and implement adaptive community-management systems to conserve and sustainably use forest biological diversity?	
a) no	
b) not applicable	X
c) relevant policy and programme under development	

d) yes, some policies and programmes in place (please specify)	
Further comments on the policies and programmes to enable indigenous and local communities to develop and implement adaptive community-management systems to conserve and sustainably use forest biological diversity	
Very limited activities involving the use of traditional forest related knowledge. The National Parks and Wildlife and the Native Woodland Scheme encourage traditional management, e.g. coppicing, where appropriate but very little is undertaken.	
18. Has your country developed effective and equitable information systems and strategies and promoted implementation of those strategies for <i>in situ</i> and <i>ex situ</i> conservation and sustainable use of forest genetic diversity?	
a) no	
b) relevant information system and strategy under development	
c) relevant information system in place	
d) relevant strategies in place (please provide details)	
e) relevant information system and strategies in place (please provide details)	X
Further comments on the strategies for <i>in situ</i> and <i>ex situ</i> conservation and sustainable use of forest genetic diversity	
<p>Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Natural Heritage Areas (NHAs) incorporate the most important sites for genetic diversity. There is an information system on these sites which is held by the NPWS and each site has a management plan.</p> <p>National Forest Inventory records information (both silvicultural and ecological) on the forests in Ireland.</p> <p>The Native Woodland Scheme is promoting and encouraging the planting of native species and is providing grant aid and training to achieve this aim. The Peoples' Millennium Forests project was a promotion and information system that reached every household in the country. It was also responsible for planting over 1.2 million native trees.</p> <p>Forest Reproductive Material (FRM) legislation ensures the traceability and certification of the genetic integrity of FRM.</p> <p>Research – Some Irish colleges are involved in ecological studies at home abroad. For example, Trinity College, Dublin is studying the genetics of Irish oak and the flora of Thailand in collaboration with the Royal Forest Department of Thailand and the Royal Botanic Gardens Kew. Biological records are kept by the NPWS and there are plans to expand such a centre to produce a widely accessible database.</p>	
19. Is your country promoting the fair and equitable sharing of benefits resulting from the utilization of forest genetic resources and associated traditional knowledge?	
a) no	
b) relevant policies and programmes under development	X
c) some policies and programmes in place (please specify)	
d) comprehensive policies and programmes in place (please specify)	
Further comments on the policies and programmes for promoting the fair and equitable sharing of benefits resulting from the utilization of forest genetic resources and associated traditional knowledge	

The utilisation of genetic resources is limited in Ireland. A lot of the traditional knowledge has been lost but there are attempts to promote and encourage use of the remaining forest knowledge available.

If your country wishes to provide additional information on implementation of this programme element, please do this in the following space.

The overall aim of the Strategic Plan for the Development of the Forestry Sector in Ireland 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”. Biodiversity is a key part of Sustainable Forest Management and this is recognised in the Irish National Forest Standard.

Sectoral Action Plans are a pivotal part of the National Biodiversity Plan (2002). Notwithstanding the relatively low forest cover in Ireland forestry plays an important role in its biodiversity.

Forest practice is undergoing significant change from a culture of industrial plantation forestry towards other silvicultural systems, which involve an ecosystem approach. There is also greater emphasis on broadleaf afforestation and on increasing the availability of transplants of native genotypes of native species.

Programme Element 2: Institutional and Socio-economic Enabling Environment

20. Is your country improving the understanding of the various causes of forest biodiversity losses?	
a) no	
b) a limited analysis being undertaken	
c) a thorough analysis being undertaken	
d) yes, some analyses completed and results available (please outline some findings from these analyses)	X
e) yes, comprehensive analysis completed and results available (please provide some findings from these analyses)	
Further comments on the analysis of the various causes of forest biodiversity losses	
Deforestation before 1700 (which continued up to 1900) has been the greatest cause of forest biodiversity loss. Current risk factor in Irish forest biodiversity include (a) deer population increase without any natural predation, (b) spread of invasive alien weeds – e.g. <i>R. ponticum</i> , (c) grazing by farm animals and (d) neglect of woodland management.	
Irish universities are involved in research on deforestation both at home and abroad. See questions 8 and 18.	

21. Has your country integrated biodiversity conservation and sustainable use into forest and other sector policies and programmes?	
a) no	
b) under consideration	
c) yes, integrated into policies and programmes in some sectors (please provide details)	
d) yes, integrated into policies and programmes in major sectors (please provide details)	X
Further comments on the integration of biodiversity conservation and sustainable use into forest and other sector policies and programmes	
<p>These issues are integrated into forestry through research, an ecosystem approach to forest planning and management, conservation measures through national forestry and biodiversity policies and integration of forestry with agriculture and sustainable, rural development. There is close cooperation with the national Parks and Wildlife Service. The Irish National Forest Standard defines criteria and indicators for SFM. The National Biodiversity Plan pays special attention to the need for the integration of the conservation and sustainable use of biological diversity into all relevant sectors.</p>	
22. Has your country developed good governance practices, reviewed and revised and implemented forest and forest-related laws, tenure and planning systems, to provide a sound basis for conservation and sustainable use of forest biodiversity?	
a) no	
b) review under way	
c) review and revision completed	
d) some good governance practices and related laws developed and implemented (please provide details)	
e) a comprehensive set of practices and laws developed and implemented (please provide details)	X
Further comments on the practices and laws developed and implemented to provide a sound basis for conservation and sustainable use of forest biodiversity	
<p>Forestry Acts, Wildlife Acts, Forest Service Guidelines. Code of Best Forest Practice, National Irish Forest Standard, consultation procedures and inspections by Forest Service personnel and personnel from the National Parks and Wildlife Service as well as other stakeholders ensure that the requirements of the above legislation/regulations are implemented.. Forestry legislation is under review at present.</p>	
23. Is your country promoting forest law enforcement and addressing related trade?	
a) no	
b) review under way	
c) potential measures identified	
d) yes, some measures in place to strengthen law enforcement and address related trade	

e) yes, comprehensive measures in place to strengthen law enforcement and address related trade	X
24. Is your country mitigating the economic failures and distortions that lead to decisions that result in loss of forest biodiversity?	
a) no	
b) review under way	
c) potential measures identified	
d) yes, some measures taken (please provide details)	X
e) yes, comprehensive measures taken (please provide details)	
Further comments on the measures taken to mitigate economic failures and distortions that lead to decisions that result in loss of forest biodiversity	
Majority of Irish forests are non-indigenous plantations and many of the larger semi-natural woods are protected either by State ownership or through designation, such as SAC, SPA and NHA. Measures are available through the NWS or agricultural schemes to protect these areas. Forest promotion and training as well as grant aid schemes, publicity and legislation also promote and protect biodiversity.	
25. Is your country increasing public support and understanding of the value of forest biodiversity and its goods and services at all levels?	
a) no	
b) relevant programme under development	
c) yes, some programmes in place	X
d) yes, comprehensive programmes in place	

If your country wishes to provide additional information on implementation of this programme element, please do this in the following space.

Programme Element 3: Knowledge, Assessment and Monitoring

26. Has your country reviewed and adopted a minimum forest classification system, based on harmonized and accepted forest definitions and addressing key forest biodiversity elements?	
a)no	
b) review under way	
c) review completed	
d) a forest classification system adopted	X
27. Has your country developed national forest ecosystem classification systems and maps that use agreed international standards and protocols?	
a) no	
b) early stages of development	
c) advanced stages of development	X
d) yes, classification systems in place	
28. Has your country developed specific forest ecosystems surveys in priority areas for conservation and sustainable use of forest biodiversity?	
a) no	
b) under consideration	
c) relevant surveys being planned	X
d) relevant surveys completed (please provide details)	X
e) results of relevant surveys available (please provide details)	X
Further comments on the surveys of specific forest ecosystems in priority areas for conservation and sustainable use of forest biodiversity	
Some research programmes are implemented, for example the BIOFOREST project, BIOSCAPE project and BIOASSESS project (see question 8), long term research has also been conducted around the country, for example in the Wicklow and Killarney National Parks, Brackloon Wood and the ICP plots.	
29. Is your country advancing the development and implementation of international, regional and national criteria and indicators based on key regional, subregional and national measures within the framework of sustainable forest management?	
a) no	
b) relevant programme under development	
c) some criteria and indicators developed (please provide details)	
d) comprehensive indicators developed (please provide details)	X
Further comments on the development and implementation of criteria and indicators	
Criteria and indicators for Sustainable Forest Management have been adopted and improved through the Pan-European Ministerial Council for the Protection of Forest in Europe and incorporated into the Irish National Forest Standard and progressed through involvement with the Cost Action Programmes.	

30. Has your country conducted key research programmes on the role of forest biodiversity and ecosystem functioning?	
a) no	
b) research programs under development	
c) yes, some research programs conducted	X
d) yes, comprehensive research programs conducted	
31. Is your country enhancing and improving the technical capacity at the national level to monitor forest biodiversity, benefiting from the opportunities offered through the Clearing House Mechanism of CBD?	
a) no	
b) capacity building programme under development	
c) yes, some programmes in place (please provide details)	X
d) yes, comprehensive programmes in place (please provide details)	
Further comments on the programmes to enhance and improve the technical capacity at the national level to monitor forest biodiversity	
<p>The national forest inventory includes biodiversity.</p> <p>ICP forest plots monitors forest biodiversity and its changes through time.</p> <p>An audit of the Irish National Forest Standard is being developed at present , which will include the biodiversity criterion. Research programmes are also in place.</p>	

If your country wishes to provide additional information on implementation of this programme element, please do this in the following space.