



Policy Study No 129

WHAT'S GOOD FOR WOODS

promoting the industry, protecting the environment

Robert Rickman



CENTRE FOR POLICY STUDIES



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Background facts

The Forestry Commission:-

- Has the legal status of a government department.
- Controls 5% of the land area of Great Britain.
- Advises government on forest policy, runs a business with profit as an objective and manages some of the most environmentally sensitive land in Great Britain.
- Produces 7% of the wood consumed in the United Kingdom.
- Provides employment for 7,500 people.
- Has forests with a balance sheet value of £2.27 billion.
- Has remained fundamentally unchanged since 1919.

The British Forestry industry as a whole:-

- Occupies 10% of the land area. In the European Community, only Ireland and Holland have less.
- Contributes £2 billion per year to the national economy.
- Contributes to the intangible benefits of nature conservation, amenity and recreation.
- Generates 55,500 jobs.
- Provides 13% of the wood consumed in Britain, so helping to reduce an import bill which is equivalent to 56% of the annual balance of the trade deficit.
- Will increase output by 50% over the next ten years.

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Introduction

In the past woodlands were a source of wood -- and that, for most people, was that. Yet consider the variety of ideas nowadays entertained about forests: rain forest destruction, environmental despoliation by tax break investors; beautiful broadleaf views; ugly conifer views; cool shady forests; dark frightening, primeval forests; a renewable timber resource; big business. Any organisation expected to respond to such conflicting pressures and prejudices, and evolve from them some workable national forest policy, deserves sympathy.

Can any organisation reasonably claim to satisfy all the divers demands and be the biggest operator in an industry worth £2 billion per year? As the Forestry Commission has grown older and its job more complicated, it becomes harder to reply 'yes' to this question. The most recent doubter has been the House of Commons Select Committee on Agriculture, whose January 1990 report on Land Use and Forestry recommended a division of rôles more fundamental than those now being implemented.

There is also exasperation at the low average rate of return of 3% which the Forestry Commission claim to make, and the failure to produce an operating cash surplus after 70 years in existence. It seems that forestry in general and the Forestry Commission in particular fail both to make money and to meet the demands for environmentally sensitive management.

The underlying fault is a species of egalitarianism, from which too many people unthinkingly suffer. They hope that forests can be all things to all people -- and that if there is a national forest estate, with a national forestry policy, every woodland should aim to satisfy everyone's demands all the time. But, as this paper shows, all forests are not equal and for immutable reasons of location, climate and soil type they never will be.

Adoption of the idea of 'omnipurpose' forests means that priorities and objectives are obscured, and inefficient operations disguised, by invoking universally popular but nebulous benefits. Hard decisions on

allocation of resources and ownership are dodged.

A spectrum of opinion, including an all-party Committee of MPs, believe that reform is due. Any direct State involvement should switch from the commercial sector towards satisfying the public's demand for forests whose benefits are not mainly those of financial return. The assets and experience of the Forestry Commission, built up over the last seven decades, can be put to better use for the nation's benefit.

The Forestry Commission has the legal status of a government department, encompassing both regulatory and commercial functions. It is Britain's largest landowner and manages almost 40% of all woodlands. Besides undertaking afforestation itself it encourages the private sector to plant trees. It also provides most of the raw material for a thriving timber processing sector.

Although the Forestry Commission has achieved the objectives set out in 1919, it is finding it harder to satisfy the needs of the 1990s:-

- * It has yet to demonstrate that it can solve the conflict of interest involved in being both a regulator and a commercial enterprise.
- * Its management of traditional woods¹ is often believed to be unsympathetic; and it has been slow to encourage the creation of new forests, especially in the lowlands, where amenity is more important than timber production.
- * It has been unable to manage satisfactorily the commercial side of its business, continuing to be a drain on the Exchequer when it should show a cash surplus.

The Forestry Commission is overdue to be reformed. This paper details the need for change, how it can be achieved and the national benefits that will accrue from a radical new approach.

1. The author uses this term, for want of anything better, to categorise woods where considerations of conservation and amenity take precedence over commercial ones.

The principal recommendations are that:-

- * The Forestry Commission's 'Authority' rôle should be cleanly split from the commercial 'Enterprise' activities -- in order to constitute a strong, independent regulatory body similar to the National Rivers Authority.
- * Ownership of properties where conservation and amenity are the paramount needs should be transferred to local and regional organisations; they should maximise the non-timber benefits of such woods.
- * The potentially commercial elements of the Forestry Commission's business enterprise should be sold, in their entirety, to the private sector by tender. The money raised from the sale of the commercial enterprise should be used to ensure the preservation of traditional woodlands and the creation of lowland forests.

1.

Public demand and the national interest

The public -- and the national interest -- has three main demands to make of forestry:

- i) Management of existing forests should heed the environment.
- ii) Creation of further traditional woodlands should enhance nature conservation, landscape and public access.
- iii) A commercial forest industry which generates more than 55,500 jobs and affects all parts of the country's life and economy should thrive.

Many forests and woodlands are now regarded as so important from the points of view of conservation, amenity and access that their commercial timber production is very secondary.

In continental Europe many such forests are owned by local bodies able to respond to the demands of the local population. It may be argued that a body whose primary rôle is timber production is not best suited to providing local accountability in the management of traditional woodlands subject to intense pressure for conservation and amenity.

Despite the efforts of the Forestry Commission on the environmental front, the association with the commercial Enterprise saps their ability to satisfy the public that traditional woodlands are being properly managed. Taken together with the desire for greater local involvement the argument is compelling that ownership and management of these woods should be transferred to organisations such as councils and other local bodies. This is already not so uncommon. For instance the City of London Corporation controls Epping Forest, the Burnham Beeches, the recently acquired Ashted Common Woods and the management of Hampstead Heath.

As the authority regulating the activities of the private sector, the Forestry Commission has come under considerable criticism from conservation bodies. Again, any arguments advanced by the Forestry Commission that it is acting independently, in the nation's best interests, are undermined by its association with the Enterprise. The current reorganisation leaves this question only partially answered.

The creation of new lowland forests

The dereliction of some lowland landscapes and the pressure to reduce agricultural surpluses combine to make the public enthusiastic for lowland afforestation. But understandably the private sector is unwilling to pay very great attention to such intangible benefits as nature conservation, landscape, increased access to the countryside, carbon dioxide lockup etc. Nevertheless it is perfectly possible to advance a strong and quantifiable case in favour of new lowland afforestation.

A viable forest industry

The investment of almost £1 billion in factories processing forest products over the last decade, is testament to the growth of a major industry. Recent analysis by the Fraser of Allander Institute shows that, in 1984, employment generated by the forest industry was 55,500 and the value of output was £2 billion per year. Since then, the volume of timber output from British forests has increased by 65% and is forecast to increase by a further 50% early in the next century.

- i) A viable commercial forest industry must have enough faith in the future to maintain (or increase) its productive capacity by replanting and adopting improved techniques. Where the economic arguments of expanding the industry are sound, new commercial forests should be planted, within environmental guidelines.
- ii) A viable processing sector requires a predictable supply of raw material at an acceptable price. By virtue of its size and the advanced age of its forests the Forestry Commission has been able to provide this stability.

However, there is no reason why a privately owned operation,

on the scale of the existing Forestry Commission's Enterprise, should not forecast output and enter into supply contracts. After all, it would need to ensure sufficient customers for its output. So future developments in timber processing capacity in no way depend on the continuation of the Forestry Commission in its present form.

- iii) It is sometimes argued that the Forestry Commission's Enterprise employs a staff better informed of business realities, and so can better advise the private sector. However, much of the advice provided by the Ministry of Agriculture, Fisheries and Food (MAFF) and the Departments on agricultural matters is thoroughly commercial, despite the fact that staff are not running farming businesses.

2.

The structure and objectives of the Forestry Commission

Under legislation consolidated mainly in the Forestry Act 1967, the Forestry Commission is charged with the general duties of promoting the interests of forestry, the establishment and maintenance of adequate reserves of growing trees and the production and supply of timber. Since 1985, the Commission has also had a statutory duty to seek to achieve a reasonable balance, in carrying out its functions, between the needs of forestry and the environment.

The Commission has the legal status of a government department. It reports directly to Forestry Ministers, namely the Minister of Agriculture, Fisheries and Food, the Secretary of State for Scotland and the Secretary of State for Wales, to whom it is responsible for advice on, and implementation of, forestry policy. It is, however, different from most Departments of State in that it has a statutorily appointed Chairman and Board of Commissioners with prescribed duties and powers.

The Commission has identified in broad terms one primary objective and three secondary objectives for its own internal use. The primary objective is to increase the quantity of wood supplied to industry and the profitability of forestry, by enlarging Britain's forest area and by raising the efficiency with which forests are established, managed and harvested.

The three secondary objectives are:-

- * to support and stimulate the economy in rural areas by providing employment and by contributing to the demand for locally provided goods and services.
- * to increase the opportunity for enjoyment by the public of recreation in the forests by provision of suitable facilities.
- * to protect and enhance the quality of the rural environment, by careful attention to forest design, respect for nature conservation and effective integration with agriculture.

The National Audit Office (NAO) 1986 *Review of Forestry Commission Objectives and Achievements* pointed out these objectives conflicted with each other. It concluded, however, that 'The Commission has achieved a reasonable balance in directing its efforts and resources across its different activities'.

In 1990 the House of Commons Agriculture Committee Second Report argued that is not enough just to list duties and policy initiatives, when conflict of interest is irreconcilable within the remit, and the need for consolidation and clarification of forest policy is urgent.

In its structure the Forestry Commission splits itself into a Forest Authority and a Forest Enterprise. Under the new structure announced in March 1991 there is also to be a central Policy and Resources unit, which will presumably service both Authority and Enterprise, as well as advising the Board of Commissioners.

The Forest Enterprise (The Enterprise) operates the 1.14 million hectares of land owned by the Forestry Commission. This is equivalent to 5% of the land area of Great Britain. Most of the forests are large commercial operations in the uplands. But many are woodlands where conservation, amenity and access are of importance, and commercial operation cannot be the primary objective.

The Forest Authority (The Authority) is responsible for advising the Government on forest policy and for regulating the private sector and Enterprise forests. It administers grants paid to the private sector and is responsible for research.

Most studies of the Forestry Commission dwell at length on the various enquiries, acts and activities that have studded its history. Others complain about the expenditure of billions of pounds of public money on assets the value of which have dwindled. Such arguments tend to bog discussion in the morass of the past. What is more important are the achievements and failures of the Forestry Commission in relation to the present and future.

The new structure formally separating the Enterprise and Authority functions at an operational level may well go part of the way to answering criticisms, often unfounded, that the Enterprise operates in an unbridled commercial way with no heed to environmental damage. The Authority is to have the same regulatory control of the Enterprise as it has over the private sector. However, it is hard to see how such a change will correct the fundamental problems.

The 1989/90 Annual Accounts can be used as a starting point for the analysis of the Forestry Commission's current position. The Authority is reviewed in chapter 3 and the Enterprise in chapters 4, 5, 6 and 7.

3.

The Authority and the separation of its rôle

The Forest Authority's main rôle has been to oversee the development of private sector forestry and promote the creation of a modern processing industry in Britain. Until recently it has been largely successful.

The cost of the Forest Authority, including grants to the private sector, was £28.3 million in the year to March 1990, as follows:

Statement of Expenditure for the year ended 31 March 1990

	£ million
Grants to private sector	14.0
Net administrative cost of services to private sector	4.8
Other administration, regulation and publicity	5.1
Research	4.4

	£28.3

There is every reason to encourage the commercial forestry industry to thrive. To this end, policy on land use must be designed to hold the ring between the conflicting demands of agriculture, forestry, conservation and recreation. The Forestry Commission has become increasingly isolated in advising on policy. This has not been helped by their unusual structure as a government department.

The Forest Authority's functions should no longer be encumbered with the burden of the Enterprise's past successes and failures. It is hard, if not impossible, for those working today, with an Authority hat on, to criticise their own actions of yesterday, when they were wearing an Enterprise hat. The recently announced changes, which still leave

Authority and Enterprise within one organisation, are unlikely fundamentally to alter the situation.

Confusion in forestry policy is best demonstrated by the plethora of grant schemes administered by the various bodies with an interest in the countryside. The Forestry Commission, MAFF, DAFFS, CC and English Nature all make payments for planting trees, managing trees and, to complete the absurdity, *not* planting trees. There are numerous overlapping tiers of administration and no single, clear voice. Brochures and designer logos cannot conceal this fundamental problem.

Forestry, even for short rotation coppice crops, is a long term business. To make rational investment decisions a degree of faith in the future is required. Government must therefore provide a coherent framework if investment is to be made in new planting, forest management, replanting and, crucially, processing industries. A policy based on pretending that all forests can and should satisfy all objectives is so clearly unrealistic to the commercial investor (not fully satisfying public demands for forests close to centres of population, either) that all forms of investment are likely to be constricted.

Evidence of this is the lack of new planting. Although the often reiterated government target for new planting is 33,000 hectares per year, present mechanisms make it impossible to achieve the target. New planting in the private sector was only 11,750 hectares in the year to 31 March 1991 and is likely to fall further. This has not only damaged confidence within forestry, but also reduces the credibility of the Forestry Commission.

A clear policy of *any* nature, accompanied by consistent policy instruments would aid the national interest. It would also save public money now being wasted on duplication of effort and conflicting policies. But this will not happen, until the body advising government on forestry is freed from the historical baggage and internal conflicts of interest of the Forestry Commission.

Separation of the Authority rôle

The functions of the Authority need not change greatly from the current remit. They should be as follows:-

- i) providing government with advice on all aspects of forest policy;
- ii) seeing that all woodlands are established and managed with not less than minimum environmental standards;
- iii) coordinating all aspects of forest and woodland policy with other interested central and local government bodies;
- iv) acting as the sole conduit for all government grants and encouragements for tree planting and management;
- v) commissioning, carrying out, coordinating and publishing research into the technical and economic aspects of forestry, including forecasting output; and,
- vi) providing advice and education on all aspects of forestry to all sectors of the public, including the timber processing industry.

The key is the complete separation of the Authority from the Enterprise. The new reforms are only a first step in this direction -- for the Authority remains under the same overall control as the Enterprise. Several other organisational options are open.

- * Removal of the Enterprise function from the Forestry Commission, leaving the Authority with the same departmental status as at present.
- * Amalgamation of the Authority with MAFF and the Welsh and Scottish Agriculture Departments.
- * Creation of a National Forest Authority along the lines of

the independent and proved National Rivers Authority.

- * Incorporation of the Forest Authority within the proposed Environmental Protection Agency.

In this context it is worth considering The Agriculture Committee's 1990 Report:-

'We do not regard the exact location of the Forestry Authority within the machinery of Government as the key issue at this stage: what matters is that Ministers should receive advice about forestry policy in its widest application from a body which is distinct from the Forestry Enterprise.'

The *simplest* way of creating a Forest Authority truly independent of conflicts of interest, is to remove the Enterprise functions of the Forestry Commission and leave the Authority to continue much as it does at present. But this would miss the opportunity to tackle the problems that flow from the Forestry Commission's position as a government department. To coordinate effectively with the other bodies responsible for rural policy and regulation, such as the Countryside Commission, NRA, Scottish National Heritage and non-departmental public bodies, the Authority should have the same status as they have. Also, if it is to command public respect it must be more open than is possible for government departments.

The *cheapest* option is to amalgamate the Authority with MAFF and the Departments. A suitable network of offices exist, duplication would be avoided, savings made. (The combination, incidentally, operates already in Northern Ireland.) The problem, however, would be that, within the agricultural departments, forestry could be submerged by the pressing short term problems of the farming sector. And from the outside the public might believe that forestry was further distanced from desirable environmental controls.

The *best option* is to copy the model of the National Rivers Authority (NRA). Young though it is, this body has already shown that a non-departmental regulatory authority, independent of production

responsibilities, can be highly effective. A National Forest Authority (NFA), separated from the Forestry Commission's Enterprise, might well achieve equivalent success. It would be reorganised on non-departmental lines with MAFF and the Departments as its sponsors, and with strong ties to the DOE.

The scope for cost saving may be reduced by maintaining an Authority outside direct departmental administration. However, this factor might be outweighed by the benefits of maintaining a better balance in rural land use. The status of a non-departmental public body should ensure open and accountable operation.

Recent talk of an Environmental Protection Agency (EPA) might suggest incorporating the NFA into such an umbrella body. But given the importance in maintaining a balance with such organisations as the Countryside Commission and the need for open debate of land use issues, it would be best if the NFA continued as a separate body.

4.

The Enterprise

The Enterprise is in essence Britain's only large forestry business. Judgment on its performance can be derived from published accounts. The following are key figures for 1989/90:-

	£million
Annual cost to Exchequer	34
Balance Sheet value of plantations	2,271
Market value of plantations	1,600

Analysis of the annual accounts for 1989/90 show that the Enterprise cost the Exchequer £33.5 million, before income from property sales and plantation growth.

	£million
Operating deficit	11.2
Government subsidies	13.6
Provision for superannuation	8.7

	33.5

(The Enterprise's most recent operating account for 1989/90 and balance sheet as at 31 March 1990 are included in Appendix 2.)

The Forestry Commission itself believes that the Enterprise will not break even for another 10-15 years. The fact that there is no publicly announced target date, even hedged with caveats as it must be, speaks for itself.

The Forestry Commission generates an unrealised operating surplus of £66.0 million by including an item for the growth of the plantations (see below). But their approach in effect uses 'jam tomorrow' to cover bread and butter today.

The basic determinants of business success are costs and net

timber prices. The Forestry Commission sets standard values for these, against which performance is then measured. Having set its own standards, they are (surprisingly) as a rule achieved.

The NAO can qualify the 1986/87 accounts and ask searching questions but, as the 'only expert' on forestry matters is the Forestry Commission, can it really review its own technical and business performance?

The Enterprise's current operating deficit runs to £33.5 million. Modest improvements in efficiency would reduce operating costs and increase net timber revenues enough to produce an annual cash surplus from the commercial plantations. The percentage changes required are within the range of recently privatised companies in Britain. Full consideration could be given to environmental protection, with no increase in the planned volume of timber felled. Substantially increased returns could be generated, as more of the plantations mature.

A similar turnaround was made in New Zealand within two years from corporatisation of the Forest Service to disposal of the state owned forests. In Ireland, corporatisation helped to increase efficiency by 19% in two years, thanks to a clear definition of commercial objectives. (The New Zealand experience is reviewed in Appendix 3).

The Enterprise's activities include the provision of free recreation facilities and environmental improvements. The accounts do not disguise the fact that there is no measure of value for money or accountability for this. Local organisations would have to do so. Likewise the privatised water companies *do* demonstrate, to their shareholders, the benefits of good environmental management.

Plantation valuation

Accounting in forestry business is an arcane art. 'Historical costs methods' have two great drawbacks. First, expenditure incurred in planting many years ago has little relation to the cost of the same operation undertaken today. Second, 'Historical costs' values plantations on the cost of past operations, however expensive and inefficient these may have been, not on their actual or potential profitability.

Methods using current market valuations for calculating balance sheet valuations can also create problems where, in a given country, the portfolio of forests represents a high proportion of the total forest acreage. A disposal of one owner's assets may subvert market valuations. Forest-owning companies therefore often choose to value their plantations on a discounted cash flow basis.

The main item in the Enterprise balance sheet is the value of plantations of £2,271 million. This is based on the expectation of their future cash flows, in current prices, discounted at 3%. Assuming that, on average, timber prices and operational costs will rise in line with inflation, this is a real interest rate.

However, such a system is so complex that it is scarcely useful as a measure of the Enterprise's success. Many of the Forestry Commission's commercial plantations, if assessed separately, should produce a significantly higher return on capital employed (categories A and C -- see Appendix 4). However, many of the traditional woods (category B) and those established on very poor land (category D) cannot achieve a 3% return. Where tree planting is not likely to achieve a 3% return a subsidy is included to ensure that it does.

This method of valuation is a sensible way of looking at the value of an asset which is not yet producing a regular, positive cash flow. But it has drawbacks in the case of an organisation which has such a wide range of objectives and types of plantation:-

- i) **Lack of Comparability:** All forests are analysed in the same way even though they are as different as chalk and cheese. A Sitka spruce forest in Northumberland is analysed in the same way as an oakwood in the Forest of Dean. This does not give a clear picture of either.
- ii) **Discount Rate:** The discount rate of 3% was set merely because most of the Forestry Commission's forests can achieve it. As there is no actual or theoretical link to discount rates used in assessing other types of investment, meaningful comparisons are not possible. At the same

time, commercial forestry's potential performance is disguised by aggregation with forests which cannot be commercial.

- iii) **Subsidies:** The inclusion of subsidies within the calculation distorts the picture and ensures that the 3% return is a self-fulfilling forecast.
- iv) **Unrealised Targets:** It appears that the Forestry Commission uses values, in predicting future cash flow, which they do not currently achieve. For instance the Auditor General noted in 1988, that standing sale values had been used in predicting all future timber revenue, when the Forestry Commission's target for such sales was only 40%. Initial analysis indicates that net revenue per unit of timber may be more than double when it is sold standing compared to that achieved when the Forestry Commission harvest themselves.

It is understood that such anomalies have been reviewed. However, if a net figure of £9.07 per cubic metre is taken (that actually achieved in 1989/90), preliminary calculations at a 3% discount rate, using published output forecasts and costs, give a plantation value of approximately half that in the balance sheet.

- v) **Market Value:** The Forestry Commission's own estimate of market value of £1,600 million is 30% lower than the balance sheet figure. This does not allow for constraints that exist in title, statute and environmental considerations which would reduce the value further.

The accounts are symptomatic of a business lacking direction, which finds it hard to explain its operations, justify its existence or motivate its workforce. Until the Enterprise has clear commercial objectives for its commercial woods and explicitly accepts that the management of non-commercial woods should be judged in a different way and undertaken by somebody else, this confusion will continue.

The Enterprise is now in urgent need of an accounting system which addresses these problems, so allowing its efficiency to be assessed and comparisons made with other types of public and private investment. A method based on current cash generation, and discounting at a proper market rate may point the way ahead. After all, the Enterprise is now an established business. It is time to reconcile the methods of forest economists (designed largely to assess the return on forests from planting to felling) with those of accountants and investors using criteria related to current performance.

5.

Traditional woods

The forests that the Forestry Commission Enterprise owns and manages fall into two broad groups:-

- i) woods where the value of conservation, amenity and location outweigh that of timber production.
- ii) woods whose main objective is commercial timber production.

An outline methodology for identifying the two types is described in Appendix 4. In reality the use of such theoretical models will need to be flexible. The definition would require considerable discussion with relevant groups. The benefits, in terms of ensuring that the nation's forests are managed in ways appropriate to their capabilities, are considerable. The temptation to hide behind the woolly definitions of multipurpose forestry must be overcome (see Appendix 5).

Traditional woods are of great benefit to both the local community and the nation. Although significant amounts of timber may be produced, non-timber benefits are far more important. Ownership of these woodlands by an organisation which has a primarily commercial rôle both undermines its ability to operate profitably and restricts the non-financial benefits which woods should provide to society. It is therefore proposed that their ownership is transferred from the Enterprise. The Enterprise can become a coherent business, while the future of the traditional woods can be safeguarded.

Possible owners of traditional woods, other than private landowners, include i) direct central government, as now ii) Local Authorities iii) charities iv) devolved public conservation bodies -- whose management could be undertaken by the Enterprise or any other body, or on contract.

i) *The State* could continue to own the woodlands. This system would be relatively simple, though with no advantage of local accountability. But it may be appropriate for some nationally important woods such as the New Forest in Hampshire.

This approach has been adopted in New Zealand, where all the native forests have been transferred to a Department of Conservation. However, the vast tracts of forest involved tend to be used not only by local communities, but by the nation as a whole.

ii) *Local Authorities* already own and manage parks. So woodlands which are used like parks should not present a problem. The City of London Corporation already manages Epping Forest, Burnham Beeches and Ashted Common with just such objectives.

iii) *Charities* such as the National Trust administer several estates adjoining traditional woods. Rationalisation here would often make sense.

iv) *Devolved Public Bodies*, such as the National Park Authorities would be appropriate owners in many places. These bodies are already charged with balancing public amenity and conservation on both a national and local level.

Transfer of woodlands from central government ownership would generally be in the form of a gift. Where woods cannot be expected to be self supporting, some dowry would be required if management is transferred to a local body. They will usually be a net drain on resources, even when mature. For instance the Hanover City Forest in Germany generates only 20% of gross expenditure from timber sales. Local taxpayers must fund the difference as the price of a pleasant environment. At least they can see that their money goes into a tangible local benefit controlled by a locally accountable body. The same cannot be said for the Forestry Commission, where remote, unaccountable decisions and labyrinthine accounts obscure the source and destination of money spent on amenity and environmental improvements.

Many woods in the traditional category have been sold by the Forestry Commission over the last decade in its enforced rationalisation programme. As a means of raising money and disposing of non-commercial assets this has made sense. However, many of these properties are exactly the type of woodland which could best be owned and managed by local bodies for local recreation and conservation. The money forgone by central government in handing over such woods would be small in relation to the benefits of maintaining and enhancing open public access.

6.

Commercial forestry without State ownership

Historically -- except where revolutions have led to seizure of private land -- the State has owned forest land of two main types: natural or semi-natural forests which have never been claimed by private individuals and plantations created by State investment. The latter are a more recent phenomenon, established during this century against (so it was thought) timber shortages and to foster economic development.

One can well argue that the State or the community should control natural and semi-natural forests, especially where people are prepared to pay in taxes for non-commercial benefits. One can also argue that the State should concern itself in creating plantations where none now exist. But what reasons are there for continued State ownership of plantations once a viable industry has been created (so long as appropriate environmental safeguards obtain)? Why should commercial tree growing be a natural monopoly best owned by the State?

In New Zealand, where the State had made an initial investment, a Labour government saw no good reason why the State should continue to own plantations; so it sold them to the private sector. Yet no coherent plan for the disposal of commercial woodlands has been put forward in Britain.

Wood Production

The Forestry Commission is the country's dominant wood producer. It produces more timber than the whole private sector. No individual private owner begins to match it. National output can be summarised as follows:

Wood Production 1989

(Thousand cu.m. overbark)

	Conifer	%	Broadleaves	%	Total	%
FC	3,490	53%	110	2%	3,600	55%
Private	1,860	28%	1,170	17%	3,030	45%
Total	5,350	81%	1,280	19%	6,630	100%

Forest Ownership

The Forestry Commission owns a greater area of older conifers than the private sector, which is why it is so preeminent in conifer production. Most of the private sector's coniferous forests are less than 25 years old and not yet in production. The broadleaved woodlands, although older, are relatively unproductive.

Productive Woodlands 1990

(thousand hectares)

	Conifer	%	Broadleaves	%	Total	%
FC	814	38%	50	2%	864	40%
Private	701	33%	565	27%	1,266	60%
Total	1,515	71%	615	29%	2,130	100%

It can be argued that the FC's Enterprise *harms* the efficiency of a commercial forestry industry. For example, the image of commercial

forestry (as with any investment) is enhanced by a good track record. Most commercial private woodlands are too young to be significant producers or have had past investment decisions distorted by tax and considerations of amenity. The prime model for profitability should be the Enterprise. It should demonstrate economies of scale and already be producing a positive cash flow. Why it does neither is discussed in detail in Chapter 4. However, whatever the reasons, the result is an impression that all forestry is unprofitable.

The Forestry Commission claims to achieve a 3% return on forestry investment. This disguises returns of 5-6% in real terms, fairly usual on good commercial conifers. Which is in line with the long term performance, over and above inflation, of the London stock market, allowing for the reinvestment of dividend income.

Taken together with the recently discontinued relief of income tax on expenditure, this has resulted in an image for all private forestry as an intrinsically unprofitable tax break. The Enterprise, in its present form, is unable to dispel this misconception.

The Forestry Commission is often accused by those outside forestry of being a mainstay of the private sector forestry lobby. However, in recent years, its ambiguous profitability has prevented the Enterprise, the industry's largest operation, from putting the case for commercial forestry, either to a wider public or to politicians. Government departments do not like to admit that they fail to make a proper profit because of inherent conflicts within their structure, inefficiency and past mistakes. Obfuscation and secrecy is the outcome.

The Select Committee on Agriculture recently brought this situation into light when the largest forest owners in the country, the Forestry Commission, were unable to make an effective case for commercial forestry. Until a body so pre-eminent in the industry can speak freely from a position of profitability, outside government, the remainder of the industry is emasculated as a lobbying force.

The Government's rôle also obscures the Enterprise's approach to timber marketing. Political considerations come into play in offering

long term supply contracts to new industries; the commercial foundation for such contracts is sometimes questionable, and the cost is shown in reduced Enterprise profitability rather than as a subsidy to the processor. Private sector timber sellers can also feel aggrieved at being undercut, while processors without such contracts can also complain of discrimination.

At the same time, as pointed out in Appendix 1, a private sector Enterprise, owning a large forest estate, would still need to ensure buyers for its timber. To do so it would enter into long term supply contracts. However, such contracts would be on terms determined by markets. Any State subsidies would need to be clear and separate.

Commercial Accountability. Lack of clear commercial accountability or objectives for the Enterprise reduces incentive at all levels. If an investment achieves 3% there is no reason to try harder to make it perform better. If it does not make 3% then subsidies will see to it.

Lack of funds for further investment also prevents the Enterprise from evolving. For instance the number of commercial leisure facilities (cabins and camp-sites) *declined* during the 1980s, though demand increased to a record level. Nor has there been any vertical integration into leisure developments or timber processing, either directly or via joint ventures.

Finally the Enterprise still absorbs money from the Exchequer and represents a major capital asset on which there is no sign of a cash return. Luckily, unlike many other government investments in business, the low risk of commercial forestry has ensured that the Forestry Commission's forests have a substantial capital value.

The estimated market value of all the Forestry Commission's plantations, given in the Enterprises's 1989/90 accounts, is £1.6 billion. Even though there is doubt about this figure and about the appropriate allocation between commercial and traditional woods, an underused asset of this size (or at any rate one which the public do not believe is well used), should be closely examined.

7.

The sale of the Enterprise

The reorganisation of the Forest Authority and the transfer of traditional woods to local bodies will leave central government with the commercial forests of the Enterprise. But the domination of the Enterprise will no longer be of benefit, tying up as it does several hundred million pounds of taxpayers' money.

The piecemeal sales over the last decade and the 100,000 hectares (12% of the plantation area) planned for the next decade solve none of the fundamental problems.

As discussed above, properties of a particularly sensitive nature would be excluded from the sale to the private sector.

Three options have been advanced by which the State could realise its investment in the commercial plantations.

- i) Open market sale of all commercial plantations.
- ii) Sale of the Enterprise as a whole by flotation.
- iii) Sale of the Enterprise as a whole by tender.

Option i). This has been the approach adopted in New Zealand -- where however the situation is different to ours. The Forestry Commission's forests are more fragmented. Nor do we have an indigenous timber processing industry with the resources to acquire substantial areas of forest. Most of the major processing industries are foreign-owned and sales to them might well be politically unacceptable.

Even if such purchases were acceptable, in order to secure supplies against purchase by their rivals, industries would have to reallocate capital to plantations, so diverting their attention from developing new processing capacity. Classical economics would suggest that industrial operation would simply raise more capital, if purchasing plantations was regarded as a good economic investment. However, other factors such as present high gearing and cyclically low profitabil-

ity for many products, may preclude new investment. This is especially so for many of the Forestry Commission's plantations which are not yet mature enough to provide timber for processing. The experience of Fletcher Challenge in New Zealand is that they have been forced to retrench in order to secure their supplies of timber in their home market. Even so they have not purchased immature plantations, concentrating only on those able to supply timber in the short term.

Such a sale would tend to be spread over some years and many of the less attractive properties would be very hard to sell at any price, as has happened in New Zealand. It would also distort the existing market for plantations in a way that the trickle of woodlands sold to date has not.

Some commentators have suggested that the financial institutions are the natural buyers for the commercial forests. And some insurance and pension funds do have woodland portfolios. However, direct forest property investment can be illiquid and difficult to value -- both important factors in getting widespread participation of institutions in a sale of this magnitude.

To protect public access rights various legal arrangements are possible. New Zealand-style forest leases may be an option but all methods would tend to restrict the marketability of plantations as far as traditional forestry investors are concerned. Recent announcements show that the Forestry Commission will seek to enter into access agreements with local authorities, before selling woods to the private sector; this too is likely to affect marketability. The Forestry Commission appreciate this and are budgeting (undisclosed) reductions in anticipated prices.

Option ii). Businesses which have been successfully sold by public flotation have usually shown a good cash flow and immediate high dividends. Although the Enterprise could show some cash flow now, the age of its plantations preclude immediate high rewards.

The necessary reorganisation in order to create a commercially orientated operation may not be easily achieved while the Commission

is still in government ownership. The turn around of the corporation in New Zealand was motivated by management's thinking they would be able to buy the business from the Government.

The improvement in performance has been less noticeable in Ireland, where prospects for a management buy out are slight.

Even given a successful reorganisation, cash flow will be small compared to future potential, as the plantations grow older. This militates against a successful public flotation in the near future.

Time is of the essence. The argument that the industry needs a period of stability, after the shock of the 1988 budget changes to the tax structure, is flawed. Low morale in the Forestry Commission and difficulty in planning for the future within the private sector make for urgency. Ministerial denials of impending privatisation are not regarded as credible by any of the parties involved.

Option iii). A sale by negotiation or tender to investors and managers who understand the problems and opportunities would stand the best chance of introducing fresh capital to the forestry industry. Institutional investment should be available for an asset-backed business with the prospect of a rapidly growing cash flow. Once this cash flow begins to be generated, a stock market flotation of the company would be possible.

The scale of the Enterprise's operations might suggest that it should be split to avoid any abuse of monopoly powers. But note that its output represents only 7% of Britain's wood product consumption. Imported wood products will continue to dominate the market -- while the Enterprise's proportion of British output will fall as present private sector forests mature.

If the Enterprise is to establish itself as a real force in the international market place it must be of a certain size. For instance, MoDo, one of Sweden's largest timber products companies, owns over one million hectares of forests, and Fletcher Challenge, one of the world's largest, has cutting rights on over three million hectares world wide.

The current Forestry Commission has 864,000 hectares of plantations. Such assets provide for security of supply and solid backing for the massive long term investments that forest industries now require. For instance the Kymmene Corporation's mill at Irvine cost £215 million in 1988/89 and is about the smallest economic unit for a pulp mill of its type. Any split of the Enterprise asset base would reduce its capital base and affect its ability both to act as an equal partner in joint ventures with multinational forest industries and to raise money to diversify its own operations.

In order fairly to assess the potential of the business, any consortium wishing to tender for the Enterprise will require the cooperation of the existing Forestry Commission management. However, this need not preclude any group of Forestry Commission executives from offering themselves, so long as they are clearly separated from those responsible for providing information to outside bidders.

Issues of national concern could be safeguarded within the proposed framework. The NFA would lay down the required environmental constraints. The Government could retain a golden share or shares for a limited period to ensure a degree of control and prevent foreign ownership.

The sale would demand that woodlands controlled by the Enterprise should remain open to public access. As the Enterprise's central objective would be to make money from timber production, rather than land ownership, this constraint would affect value less than if plantations were sold individually. That is because potential purchasers of individual woods often object to public rights of way and other rights of access (and so offer much less, if they offer at all). Indeed by selling the commercial estate as a whole it would be possible to adopt a lease arrangement, similar to that in New Zealand, on the majority of the properties, with ownership of the land being retained by the State.

Conclusion

From outside the forest industry, the claim by the Forestry Commission that it achieves a balance in its multifarious objectives are acknowledged grudgingly, if at all. It is as though an audience was half-heartedly clapping a juggler with one arm tied behind his back, trying to keep a number of different balls in the air. An increasingly diverse British forestry industry now has to keep an increasing number of balls in the air. The audience is clapping ever more slowly.

Up until now the sheer complexity of the industry and the fact that many of the Forestry Commission's critics have been anti-forestry, has meant that criticism has often been ill-informed. The suggestions for partial solutions have been seen by the industry as evidence that critics do not understand the intrinsic difficulties of one armed juggling, the great skill it requires and the need for a 70-year apprenticeship.

In fact, the basic outline for a scheme of reorganisation can be made concise and clear. This paper, then, ends with a seven-point statement.

- i) The Forestry Commission has achieved its original objectives set out in 1919.
- ii) It is, however, no longer able to meet the proper objectives of the 1990s.
- iii) A National Forestry Authority (NFA) should be established as a non-departmental body.
- iv) Forests fulfil different purposes for different sectors of the population, and must not be treated as though they were all the same.
- v) Traditional woods, where access and conservation take precedence over timber production should be given to appropriate bodies.

- vi) The NFA should be the guardian of the environmental issues and rights of access.
- vii) The present Enterprise, which has no clear commercial direction, should be sold in its entirety by tender.

APPENDIX 1

The arguments for assistance to forestry

a) Planting

All parties would like to see more trees planted in Britain. But there is less agreement on the type of trees or where they should be. Two reasons are advanced why not only amenity but also commercial tree planting should receive continued support;-

- i) New afforestation must compete with agriculture for land. The Centre for Economic and Environmental Development (CEED) analysed the competing merits of agriculture and forestry in a paper published in 1986.

They concluded that net financial returns per average hectare were negative to the nation, for all agriculture in less favoured areas (LFA's). Therefore, such land had a zero opportunity cost from a national perspective. On this basis virtually any commercial forest crop will achieve a higher land value.

Therefore, it can be argued that it is in the national interest to pay subsidies for new planting, which may initially be higher than agricultural subsidies, to help overcome the inertia of the system. But assistance to forestry should be targeted at areas where land quality is good enough to grow forests which will produce acceptable returns on capital employed. (Marginal land, too, is often vulnerable from the point of view of amenity and conservation.)

- ii) If foresters are to ensure that commercial planting is also to the benefit of conservation and landscape objectives, that is another argument for continuing with grants.

b) Processing

Initiation of major timber processing industries is dependent on the existence of fair-sized forests. It has been argued that, because some of these industries have received government assistance, the benefits to

the economy are not derived from forestry (even though their raw material is). Two refutations:-

- i) less than half the new employment in harvesting, haulage and processing has been subsidised;
- ii) some of the additional assistance to bring the investment to Britain may not have been required.

APPENDIX 2

FORESTRY COMMISSION ENTERPRISE ACCOUNTS

Balance Sheet as at 31 March 1990

FIXED ASSETS	£ million
Plantations	2,271.2
Other tangible assets	135.6
	<hr/> 2,406.8
CURRENT ASSETS	
Stocks	8.5
Debtors	12.7
Cash at banks and in hand	5.4
	26.6
	<hr/> 11.3
CREDITORS - amounts falling due within one year	
	15.3
NET CURRENT ASSETS	
	<hr/> 2,422.1
TOTAL ASSETS LESS CURRENT LIABILITIES	=====
PROVISION FOR SUPERANNUATION	313.3
	<hr/>
CAPITAL AND RESERVES	
Capital at 31 March 1987	1,483.5
Cumulative movements in the triennium to 31 March 1990 transferred to Capital	
Grant-in-aid	11.6
Revaluation Reserve	449.8
Retained Surplus	163.9
	<hr/> 625.3
	<hr/>
Capital at 31 March 1990	2,108.8
	<hr/> 2,422.1
	=====

Operating Account
For the year ended 31 March 1990

	Plantations £million	Recreation and Amenity £million	Other Activities £million	Total £million
Income	78.6	1.3	5.6	85.5
Expenditure				
Forest costs	68.8	5.9	3.8	78.5
Administrative expenses	26.1	4.7	1.0	31.8
	94.9	10.6	4.8	110.3
Less subsidies	4.3	9.3	--	13.6
	90.6	1.3	4.8	96.7
Surplus/(Deficit) of Income over Expenditure	(12.0)	--	0.8	(11.2)
Growth in Standard value of plantations	79.7	--	--	79.7
Surplus/(Deficit) on sale of properties	(2.5)	--	--	(2.5)
Net Operating Surplus for the year	65.2	--	0.8	66.0
Appropriated to Provision for Superannuation				8.7
Retained surplus for year				57.3

APPENDIX 3

The New Zealand experience

Several countries such as Sweden, France, Austria, Norway and Finland, have separate forest authorities and State forest owning bodies. Others like Ireland have put the ownership and management of commercial forests in the hands of corporations. But New Zealand has undertaken the most comprehensive reorganisation. There in 1986, a Labour government resolved to make better use of the country's great forests. The programme:-

- i) Separated authority and enterprise and identified non-commercial forests.
- ii) Improved the performance of the commercial operations.
- iii) Sold to the private sector.

All three parts have had successes and failures. Although not directly comparable with our situation many lessons can be learned.

1. REORGANISATION

New Zealand forests were summarised as follows:

	<u>Million Hectares</u>
State Owned Plantations	0.6
Privately Owned Plantations	0.6

Total Plantations	1.2
Native Forest	6.2

Total	7.4
	= =

Before 1987, the New Zealand Forest Service, similar in structure to the British Forestry Commission, managed the State owned plantations and most of the native forest. Commercial timber exploitation in the native forests had become increasingly unacceptable to the public at large. At the same time the inefficient use of the valuable plantation assets offended the Labour Government. But this was resolved by the Ministry of Forestry retaining the role of policy making and ultimate authority, while splitting the Forest Services's other responsibilities.

Management of most of the native forests was transferred to the Department of Conservation -- which has been popular. Although the New Zealand native forests are on a larger scale, it is useful to compare them with the Forestry Commission's non-commercial woodlands.

The Forestry Corporation Ltd was a State owned company and was set up by enabling legalisation in 1986. Since April 1987 it managed the State owned plantations under a Deed of Licence. It is charged with operating as a purely commercial venture within broad environmental guidelines.

The Forest Research Institute is the world's foremost centre for research into plantation forestry. It has remained under the control of the Ministry of Forestry although its funding has been cut and it is bound to raise ever more of its money from the private sector.

2. THE FORESTRY CORPORATION LTD

The Forestry Corporation Ltd comprised two main subsidiaries: Timberlands Ltd, which operated the plantation resource and Prolog Ltd, which operated two sawmills. This appendix concerns itself solely with Timberlands Ltd.

The performance of Timberlands Ltd shows not only that the operation of commercial plantations can be profitable, but also that it is possible to achieve a rapid turnaround in performance, with existing management, once an organisation is given clear objectives.

The turnaround is most graphically illustrated by the half yearly surplus funds generated since 1987. These increased by 138% in two years, with no significant increase in timber sales or reduction in planting, at a time of economic uncertainty:

Timberlands Ltd
Surplus Funds From Operations

	<u>1987/88</u>		<u>1988/89</u>		<u>1989/90</u>
	<u>1st half</u>	<u>2nd half</u>	<u>1st half</u>	<u>2nd half</u>	<u>1st half</u>
NZ \$ m	27.1	33.6	36.1	46.3	64.4

As Timberlands Ltd do not own the plantations, their accounts are on a cash basis, and attribute no income to the growth in value of plantations. The Managing Director, Andrew Kirkland, summed up the achievement in the 1989 Annual Report.

...Corporatisation has reversed decades of net funding by tax payers of NZ forestry and set the scene for the sector to stand on its own feet commercially. The State's commercial forests are capable from now on of yielding increasing returns...

3. PRIVATISATION

It was generally anticipated that The New Zealand Forestry Corporation Ltd would be sold as a whole with the State owned plantations it managed. Indeed it is believed that the management were offered the chance to buy the company, but were unable to agree a price with the Treasury. However, the government decided that the plantations should be sold to the highest bidder and the corporation wound up. A tender date of 29th June 1990 was set.

The rationale for this decision was that New Zealand already had a number of large and indigenous forest products companies who owned large plantations.

<u>Company</u>	<u>% of NZ Plantation Resources (1989)</u>
Elders Resources NZFP	13.3%
Fletcher Challenge (Tasman Forestry)	11.5%
Other Large Companies	7.3%

	32.1%

Such companies already had management in place and wished to purchase selected plantations so as to secure timber supplies for a new generation of processing plants.

In order to protect Maori land rights and public access the plantations were sold on 35 year rolling leases renewable annually.

This method of sale has not been an unqualified success. Less than half of the 550,000 hectare estate was sold at the closing date. The main buyers were the two forest product giants with some buying by local consortia and Japanese and South East Asian organisations. In many cases only the prime forests, close to existing processing plants, were sold. Others have remained unsold because of their age, location or legal problems.

Coming at a time of high indebtedness, the price of securing future supplies in the home market has been the need for mergers, restructuring and retrenchment in the private forest sector. One of the aims of the sale, to encourage the expansion of processing capacity, has therefore been frustrated, in the short term at least.

The Government has been left with 310,000 hectares of plantations. It is now the intention of the current National (conservative) government to sell Timberlands Ltd and 121,000 hectares of these plantations as a going concern, preferably by competitive tender. It remains to be seen how attractive such a package will be now that many of the best forests have been sold-off.

With the benefit of hindsight, it could be concluded that the maximum benefit to the Treasury, the nation and the forest industry would have been an orderly sale of the entire New Zealand Forest Corporation at an early date. This would have ensured that the Treasury received a competitive price. The nation would have benefited by drawing in funds from abroad to help finance the management consortium, while still retaining control and the forest industry would not have been forced to reverse expansion plans to fight one another for access to the resource.

APPENDIX 4

Definition of forest types

Forest Benefits

One of the Forestry Commission's principal problems is the diversity of its forests. In the past it was usually assumed that the most important forest product was always timber. This is no longer invariably so for all woodlands. To help clarify the situation it is necessary to identify those forests where management for conservation and amenity benefits is of greater importance to the nation than management for financial return.

The benefits from a forest can be varied, falling into two main categories.

- i) Benefits amenable to direct financial analysis
eg: timber production.
- ii) Benefits not usually amenable to financial analysis
(but possibly quantifiable using environmental economics or cost benefit analysis) eg: nature conservation, informal recreation.

The categories often contain contradictions. For instance, the conservation of a rare species may not be compatible with unrestricted public access. Likewise between categories, high timber productivity is not necessarily incompatible with high informal recreational value.

Categories of Forest

In forestry, any combination of financial and other benefits may occur:

A. High financial and high non financial benefits

A forest such as the Forestry Commission's at Grizedale in the Lake District can grow timber rapidly and profitably but also provides substantial benefits in terms of amenity as witnessed by the numbers of people using its visitor centre.

B. Low financial but high non financial benefits

The ancient and ornamental woods of the New Forest in Hampshire are prime examples of this type of forest. They are of considerable recreational, conservation and historical interest but produce very little timber income.

C. High financial but low non financial benefits

Although important to the local landscape and environment, highly productive forests, such as the Clashindarroch in Buchan, are of greatest importance as timber producing factories.

D. Low financial and non financial benefits

Some forests, as a result of mistake or historical accident, produce little of benefit in either category. For instance the plantations in the Flow Country have had a largely negative impact on the environment while achieving slow growth rates which seriously compromise the financial benefits.

Regulation and owners' objectives

By whomever they are owned, there will need to be regulations to ensure that even the most straightforward commercial forest in category C is managed within well-defined environmental parameters. Equally, from such an analysis, it is unlikely that a commercial business should own category B woods where the intangible benefits to society of non money making management are so high.

This leaves categories A and D without an obvious owner. Everyone wants highly productive woods of considerable amenity and environmental importance; but not even national bodies want unproductive environmental disasters (at least when they recognise them as such).

In reality, however category D woodlands are the easiest to deal with. Once established, virtually any plantation can produce a profit when sunk costs have been written off. Therefore a commercial enterprise can justify owning such plantations for the current rotation. The financial benefits of subsequent rotations

will depend on the ability to improve productivity and the extent to which operations can be carried out at low marginal cost.

It is possible that some plantations in category D will not be replanted, either for economic reasons or because the regulatory authority considers that past environmental damage is reversible. This would represent a thoroughly realistic decision, recognising, with the benefit of hindsight, that some afforestation has been a mistake.

In many instances, category A woodlands can be seen as aggregations of category B and C areas. For instance the immediate environs of Kielder Reservoir has a high recreational and amenity value and would best be regarded in category B. Much of the remainder of Kielder Forest is then clearly category C. There is little or no practical problem in having different ownership and pursuing different objectives on different areas of the same forest as long as they can be demarcated and all forests are subject to minimum environmental standards.

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