

Guide to the Use of the Document

Final Draft dated 16 May 2002

This Guide is in two parts. The first is an outline of the contents, chapter by chapter. The second is a guide to the framework for decision-making.

1. Outline of Chapter Contents

Chapter 1

Chapter 1 outlines the background to the term ‘wise use’, describes why and how the document was prepared, and sets out the purpose and concept of the document and its intended use.

Chapter 2

Chapter 2 defines the principal terms used in the document, describes the process of peat formation, the different types of mires and peatlands¹, the extent and location of peatlands, rates of peat and carbon accumulation, and the characteristics of mires and peatlands. The principal characteristics highlighted are:

- peat formation requires high water levels in the peatland;
- drainage causes oxidation resulting in fundamental changes to the mire;
- there is an intimate relationship between the vegetation type, the type of peat in a mire and its water quality and fluctuations;
- a peatland is closely linked to its surrounding catchment area through water flow.

The chapter concludes with an account of the importance of mires as habitats and ecosystems.

Chapter 3

Chapter 3 outlines different approaches to what values are: why different people value the same entity² differently. Two categories of values are identified:

- instrumental value - the value an entity has as a means to an end: and
- intrinsic value – the value an entity has in itself, irrespective of its importance to others

This document is based on the human-centred (anthropocentric) approach that only human beings have intrinsic value. However, many people have a non-anthropocentric approach and believe that other entities also have intrinsic value.

¹ The term ‘peatland’ includes mires. Where ‘peatland’ is used on its own in this document it is understood to include ‘mire’.

² ‘Entity’ is used in this document as meaning anything which exists whether physically or conceptually (cf. Latin “ens”).

Instrumental values are divided between *material life-support values* (those which contribute to the maintenance of physical health) and *non-material life support values* (those that contribute to the health of spirit and mind).

Within these categories of instrumental values, a number of functions of mires and peatlands are described:

Material life-support values

These include:

- production functions: the role of peatlands in the production of peat for such uses as energy and horticulture, in the production of plants as food and raw materials, in the provision of drinking water, in supporting animals which provide food, and in supporting forestry.
- carrier functions: the role of peatlands in providing space and/or a base for such purposes as water reservoirs, fish ponds and waste deposits.
- regulation functions: the role of peatlands in regulating climate, and the hydrology, hydrochemistry and soil chemistry in their catchment areas.

Non-material life-support values

- Informational functions - the role of peatlands in such areas as social identity, providing recreation, the appreciation of beauty, the perception of the spirit, and the development of knowledge.
- Transformation and option functions - the role of peatlands in helping develop new tastes, and in creating reassurance that their biological and regulation functions will be there for future generations.

Finally, conservation and economic values derive from different instrumental values but can also reflect different approaches to intrinsic values.

Chapter 4

Where different values come in conflict with one another there has to be a way to make sensible judgements between them. As a starting point it is established that the fulfilment of absolute human needs takes precedence over the fulfilment of wishes or 'wants'.

Conflicts can be divided into those dealing with facts and those dealing with choices. The first kind can be dealt with by communication and the exchange of information. Conflicts dealing with choices can be divided into those arising from having:

- different preferences as between different instrumental values
- different beliefs as to which values take precedence over others

- different priorities as between different values, and
- different positions as to which entities have intrinsic moral value.

In resolving conflicts between *different preferences* a unit of measurement (e.g. monetary value) can sometimes be used. More usually exploring different perspectives may lead to a more comprehensive solution. In general, solutions should tend towards equality and the preferring of needs over wants.

Conflicts between *different precedences* deal with conflicting rights. Conflicts between equal rights can not be solved by balancing pros and cons. A series of principles can be applied which will help in resolving conflicts. In general the lesser interests of individuals are to be sacrificed for the sake of greater benefits to the greatest number.

Conflicts dealing with *priorities* are most significant in relation to intergenerational justice - the obligation of the present generation not to so exploit natural resources as to damage future generations. To take the future into account we must distinguish between what is vital and what is normal (non-essential). A number of vital issues in relation to mires and peatlands are identified. In balancing the present and future the techniques of discounting and of *monetisation*³ can be helpful.

Conflicts between *different positions* on which entities have intrinsic value cannot be solved by compromise, as they involve peoples' fundamental value systems. These conflicts can only be approached by each acknowledging and respecting the others' position. While not easy to use in practice, a pluralist approach offers the best prospect of making progress.

Non-anthropocentric positions do not exclude human beings but treat them as part of the elements under consideration. Such a holistic ethos puts in question a system of ethics based only on relationships between human beings. The right to live according to one's own value system implies that such positions have to be considered in conflicts, even by those who do not consider them 'rational' or 'objective'. Such respect implies that environmental conflicts should be evaluated on the basis of seeking to cause the least possible harm rather than in black and white terms.

Chapter 5

Chapter 5 sets out a framework for the Wise Use of Mires and Peatlands, which is defined as that use for which reasonable people now and in the future will not attribute blame. The framework involves two stages of decision-making:

Decision in principle: any proposed intervention in a mire or peatland can first be judged against a series of questions (a '*decision tree*') which establish the effects of the proposed intervention (a) on the function which the intervention is intended to provide, and (b) on other functions of the mire or peatland. The proposed intervention is then

³ The attribution of monetary value to entities or services which are not normally seen to have a financial or commercial value.

subjected to some *general considerations* - for example does it relate to needs or wants, will it be egalitarian in its effects, is it the best means to achieve the intended end.

If after these considerations the reaction to the proposed intervention remains positive the proposal can then be considered against a set of *guidance principles*. These fourteen principles include checking, for example, whether

- the proposal is subject to public access to information,
- the proposal will be made on the basis of the best available information,
- any intervention will be the minimum necessary, and so on.

The guidance principles are subject to *modification* depending on the time and place of the proposed intervention.

The next filter is to examine whether a number of *instruments* are in use or will be used in relation to the proposed intervention. These instruments would operate at a variety of levels. For example at **national level** it should be checked whether the proposed intervention will be subject to such instruments as relevant national policies, legislation, land-use planning and environmental licensing.

Instruments to be checked on at the **level of the enterprise** include good corporate governance, the use of cost-benefit analysis in the appraisal of projects, the existence of an environmental management system, and policies on the rehabilitation of peatlands after use.

All of the filters to be used in coming to a decision on a proposed intervention are summarised in checklists, which in turn can be used as a basis for codes of conduct.

In considering the sequence of filters outlined in the framework it is again recalled that participants in any conflict will include persons who do not accept an anthropocentric point of view, who believe that entities other than human beings have intrinsic value.

In conclusion, the importance of dialogue and of seeking to understand the other person's point of view is paramount. Imbued with such a frame of mind the proposed framework will provide decision-makers with a basis for deciding between different options.

2. Guide to the framework for decision-making

By talking of ‘Wise Use’ we implicitly accept that there are conflicts between what is wise and unwise. Conflicts can relate to different appreciation of facts or to different choices.

Conflicts dealing with facts

These conflicts can be divided between those based on *different understandings* or those based on *different judgements*.

Different understandings: The first of these arise from different understandings of terms. Chapter 2 of this document gives clear definitions of terms used in the document. This does not mean that these definitions are the only possible ones but it does emphasise the need for a clear understanding in all cases of what people mean by particular terms. Conflicts can arise for example, from different understandings of what the word ‘peatland’ means - some use it to mean wetlands with the potential to accumulate peat, others to describe areas with a minimal thickness of peat.

A second form of conflict between understandings can arise from different levels of knowledge. We have thus included in Chapter 2 and in the second part of Chapter 3 an outline of the relevant state-of-the-art knowledge on mires and peatlands, their types, extent, characteristics and functions. For those who want further information a wide range of references is given.

Conflicts arising from ***different judgements*** of which means will best achieve a given end. For example a community in an area with many peatlands might agree that their aim was to maximise financial benefit to the community. Some might believe that the best means was to drain the mires for agriculture and forestry. Others might believe that it would be better to preserve the peatlands and develop scientific, educational and environmental tourism. This sort of difference of opinion as to the best means to an end can best be solved by information. Examples of the elements which could assist in making a decision include

- cost-benefit analysis (as in Chapter 5) of the two options;
- the use of both utility and financial discounting (Chapter 4);
- comparative information based on monetarisation (Chapter 4);
- general considerations such as that benefits accrue widely and not just to a few, and
- guidance principles - such as involving public participation (Chapter 5).

A similar sort of conflict could arise from disagreement on the best management option for a peatland to reduce the greenhouse effect. Faced with a drained peatland some might argue for a carbon sink arising from re-flooding, others for a sink based on planting a forest. Comparative studies can be carried out, as illustrated in Chapter 3 and Appendix 1.

Conflicts dealing with Choices

The resolution of conflicts dealing with choices requires an understanding of values - a value is that which causes a person to attribute worth to another person, living being, idea or thing. Chapter 3 contains a brief study of what values are and the types of values. The two principal categories of value are *instrumental values* (valuing something as a means to an end, for example valuing mires for their beauty) and intrinsic value (valuing something in itself - everyone except murderers accepts the intrinsic value of human life).

The different types of conflicts dealing with choices which can arise are discussed, with examples, in what follows.

Different preferences as between different instrumental values. One person might prefer a cultivated flower in a vase which had been grown in extracted peat. Another might prefer an orchid growing wild on an undisturbed mire. These are different preferences between two expressions of the same non-material life-support value and aesthetic function. One person might prefer to extract peat from a mire to heat their home; another might prefer to leave the mire intact and harvest the berries growing wild on it. These are different preferences between two production functions of material life-support values. In solving conflicts between preferences, the meeting of needs should come before meeting wants, and those preferences more related to needs should prevail over those more related to wants. As between equal wants, cost-benefit analysis and monetarisation may give a minimum comparative value. Respect for the choices of others and the acceptance of different perspectives may also assist in conflict resolution.

Another choice may arise for example between production functions (she wants the heat from extracted peat) and cognition functions (he wants to preserve the mire for scientific research). But such a choice is not only between two preferences. It also involves an assessment of other functions - would drainage for peat extraction improve agricultural production on surrounding mineral soils; would drainage adversely affect important regulation functions; if the mire is neither unique nor rare is it worth preserving for research; what eventual effect on biodiversity would drainage or preservation have; are alternative fuels available. The decision-making framework set out in Chapter 5 is intended to deal with the complexity of apparently simple choices.

Attaching different precedence to different values: These are essentially conflicts between different rights: the question of rights and duties is outlined early in Chapter 4. Examples would be the right of a group of landowners to drain and develop 'their' mire against the right of humanity to the carbon store in that mire: the right of a farmer to drain 'his' land against the right of a province to the integrated management of the water in a catchment: the right of humanity to preserve a globally threatened species inhabiting a mire against the right of a local community to drain the mire to get rid of disease-carrying insects: the right of a local community to cut turf from a bog against the right of a government to preserve a rare and important mire.

In such conflicts each person or group has the right to prefer its interest over that of others; but may not violently harm others, nor interfere with their universal rights, nor deprive them of essential needs. Within those constraints one should look to the greatest good of the greatest number. In dealing with such conflicts some of the instruments outlined in Chapter 5 can be used - property rights and compensation can ensure that if the common good prevails over the individual, the latter is compensated; legislation and land-use planning can provide a context within which to make decisions. Education and awareness programmes can ensure that people taking decisions, or benefiting or suffering from decisions, are well informed.

Different priorities with respect to values: These conflicts are essentially those between the wants and needs of the present and those of the future. The present generation has duties to future generations, but there are different opinions as to the extent of these duties. Certain approaches can be helpful in such conflicts, including: utility or financial discounting of future benefits to give them a present value; distinguishing between what are normal or non-essential functions and what are vital; having a balanced approach to risk and uncertainty; and the use in certain circumstances of monetarisation (attribution of monetary value to non-material functions). An example of such a conflict would be the need for agricultural land to feed landless peasants in Indonesia versus the long-term environmental and climatic benefits of tropical peatland forests. In such cases it is possible to establish a discount 'value' for both intervening and not intervening; both the need for food and the environmental and climate functions of the peatland are vital; the risk of the intervention failing and the risk to the future peatland functions even if the intervention succeeds can be estimated. These sorts of cases also lend themselves to cost-benefit analysis; there is general experience (see Chapter 3) that agriculture on peatlands can be marginal, and cost-benefit analysis would estimate the total real costs against the total real expected gains.

Different positions on which entities have intrinsic moral value: This document is based on the premise that only human beings have intrinsic moral value (an anthropocentric view). However, some people attribute intrinsic value to some other beings (for example, sentient beings) while others attribute intrinsic value also to species, ecosystems, even the biosphere (different non-anthropocentric views). The right of people to live according to their own value systems means that all such points of view should be respected, and should be approached through moral pluralism. Anthropocentrists attribute worth to mires and peatlands for their instrumental values (what they can do for mankind). Non-anthropocentrists often value them for themselves.

This can be a fundamental issue in peatland conflicts. If the reason why people disagree in a peatland conflict arises from fundamentally different world-views it is important to establish this fact and deal with it. What many appear to be a conflict between precedents (one considers exploitation more important than conservation) may in reality be a conflict between one who attributes intrinsic value to a mire or a species and one who does not.

Framework

In general in dealing with peatland conflicts an approach based on moral pluralism is relevant - different considerations apply in different cases.

The framework in this document can be summarised in a series of questions which could be posed in relation to any proposed intervention in a peatland (an 'intervention' would include e.g., a proposal to preserve). While the word 'conflict' is used it is not always intended in the sense of disagreement or controversy - it may also refer to different options or choices available in a particular circumstance.

- Are all decision makers and participants in the conflict or choice ("those concerned") using terms with the same meaning, and have they a basic knowledge of mires and peatlands and their characteristics, extent and functions.
- Do those concerned understand the nature and categories of values and why people have different positions with respect to values.
- Do those concerned understand the different types of conflicts or choices which arise and have they identified the type of 'conflict' which arises in this particular case?
- Is the proposed intervention positive for human beings and is the function to be provided essential and non-substitutable.
- Will the proposed intervention ensure a continuous supply of the function (for example, peat for energy) and are the peatlands affected abundant.
- Will the proposed intervention negatively affect other functions, and if so are the negatively affected functions essential, are they abundant or are they substitutable.
- Does the proposed intervention interfere with fundamental human rights, is it intended to satisfy needs or wants, will the benefits be evenly distributed, and is it the best available means to achieve the desired end.
- Is the proposal clear and publicly communicated; will it produce greater advantage than not intervening; will a decision be based on the best available information, take into account effects on other entities, be limited to the minimum necessary, be adapted to the characteristics of the peatland, and respect ecological processes and habitats.
- Are the answers to the last set of questions relevant to the specific time and place of the proposed intervention.
- Is the proposed intervention affected by international law or international co-operative instruments.

- Is the proposed intervention regulated by public policy, national legislation, land-use planning and environmental licensing. Are property rights protected and is there provision for rehabilitation of the peatland after use. Does the country have a policy to protect areas of environmental importance, and are there programmes of education and awareness.
- Does the enterprise which will be responsible for the proposed intervention base its activities on commercial strategy, has it a good record of corporate governance, does it employ cost-benefit analysis in assessing proposals, has it in place an environmental management system, does it use the best available technology to minimise environmental impact, and does it exploit product diversification and alternatives which would reduce intervention in peatlands.
- Do those concerned appreciate the importance of dialogue; that there is no single set of concepts or principles which can govern every situation; and it is not possible to reduce all complexities to simple principles or single measures.

This framework should result in conflicts being resolved or options chosen with:

- a knowledge of the relevant information on mires and peatlands and their functions;
- an understanding of relevant values;
- a knowledge of the type of conflict or choice being faced;
- respect for the different points of view involved;
- a knowledge of the effect of the intervention on the proposed function and on other functions;
- an awareness of the guidance principles which will govern the intervention; and
- a knowledge of the legal, regulatory and business framework within which the intervention will be carried out.

While such a framework cannot remove vested interest or emotion from choices, it can provide a rational and inclusive basis for deciding between different options.