Agricultural Land Classification: protecting the best and most versatile agricultural land

Most of our land area is in agricultural use. How this important natural resource is used is vital to sustainable development. This includes taking the right decisions about protecting it from inappropriate development.

Policy to protect agricultural land
Government policy is that such decisions rest with planning authorities. Where significant development of agricultural land is unavoidable, poorer quality land should be used in preference to that of higher quality, except where this would be inconsistent with other sustainability considerations. Government policy is set out in Planning Policy Statement 7 (PPS7) Sustainable Development in Rural Areas published in August 2004 (paragraphs 28 and 29). The Government has re-affirmed the importance of protecting our natural resources and the services they provide in Securing the Future - delivering UK sustainable development strategy published in March 2005 (see chapter 5).

The ALC system: purpose & uses
Land quality varies from place to place. The Agricultural Land Classification (ALC) provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system. It helps underpin the principles of sustainable development.

The ALC system classifies land into five grades, with Grade 3 subdivided into Subgrades 3a and 3b. The best and most versatile land is defined as Grades 1, 2 and 3a by policy guidance (see PPS7). This is the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non food uses such as biomass, fibres and pharmaceuticals. Current estimates are that Grades 1 and 2 together form about 21% of all farmland in England; Subgrade 3a contains a similar amount.
developers and the public if development is proposed on agricultural land or other greenfield sites that could grow crops.

The General Development (Procedure) Order refers to the best and most versatile land policy in requiring statutory consultations with Defra. Following the NERC Act (2006) Natural England became responsible for Minerals and Waste Consultations. The ALC grading system is also used by commercial consultants to advise clients on land uses and planning issues.

Criteria and guidelines
The Classification is based on the long term physical limitations of land for agricultural use. Factors affecting the grade are climate, site and soil characteristics, and the important interactions between them.

- **Climate**: temperature and rainfall; aspect, exposure and frost risk.
- **Site**: gradient, micro-relief and flood risk.
- **Soil**: texture, structure, depth and stoniness; chemical properties which cannot be corrected.

The combination of climate and soil factors determines soil wetness and droughtiness. Wetness and droughtiness influence the choice of crops grown and the level and consistency of yields, as well as use of land for grazing livestock.

The Classification is concerned with the inherent potential of land under a range of farming systems. The current agricultural use, or intensity of use, does not affect the ALC grade.

Versatility and yield
The physical limitations of land have four main effects on the way land is farmed. These are:

- the range of crops which can be grown;
- the level of yield;
- the consistency of yield;
- the cost of obtaining the crop.

The ALC gives a high grading to land which allows more flexibility in the range of crops that can be grown (its ‘versatility’) and which requires lower inputs, but also takes into account ability to produce consistently high yields of a narrower range of crops.

Availability of ALC information
After the introduction of the ALC system in 1966 the whole of England and Wales was mapped from reconnaissance field surveys, to provide general strategic guidance on land quality for planners. This Provisional Series of maps was published on an Ordnance Survey base at a scale of One Inch to One Mile in the period 1967 to 1974. These maps are not sufficiently accurate for use in assessment of individual fields or development sites, and should not be used other than as general guidance. They show only five grades: their preparation preceded the subdivision of Grade 3 and the refinement of criteria, which occurred after 1976. They have not been updated and are being allowed to go out of print. A 1:250 000 scale map series based on the same information is available. These are more appropriate for the strategic use originally intended. This data is now available on Magic, an interactive, geographical information website. [www.magic.gov.uk/](http://www.magic.gov.uk/)

Since 1976, selected areas have been re-surveyed in greater detail and to revised guidelines and criteria. Information based on detailed ALC field surveys in accordance with current guidelines is the most definitive source. Revisions to the ALC guidelines and criteria have been limited and kept to the original principles, but some assessments made prior to the revision may need to be checked against current criteria. The guidelines introduced in 1988 with improved criteria for climatic limitations and climate-soil interactions adopted only two Subgrades for Grade 3.

More recently, strategic scale maps showing the likely occurrence of best and most versatile land have been prepared for selected areas. Mapped information of all types is available from Natural England (see Further information below).

New field survey
Digital mapping and geographical information systems have been introduced to facilitate the provision of up-to-date information. ALC surveys...
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are undertaken by field surveyors using handheld augers to examine soils to a depth of 1.2 metres, at a frequency of one boring per hectare for a detailed assessment. This is usually supplemented by digging occasional small pits (by hand) to inspect the soil profile. Information obtained by these methods is combined with climatic and other data to produce the ALC map and report.

There is no comprehensive programme to survey all areas in detail. Private consultants may survey land where it is under consideration for development, especially around the edge of towns, to allow comparisons between areas and to inform environmental assessments. (ALC field surveys are usually time consuming and should be initiated well in advance of planning decisions.) ALC maps are normally produced on an Ordnance Survey base at varying scales from 1:10,000 for detailed work to 1:50 000 for reconnaissance survey.

Consultations

Through its presence in Government Offices, Defra is normally consulted on the preparation of all development plans, and consultations are required on planning applications that are not consistent with an adopted local plan and involve the loss of twenty hectares or more of the best and most versatile land. The land protection policy is relevant to all planning applications, including those on smaller areas, but it is for the local planning authority to decide how significant are the agricultural land issues, and the need for field information. Defra will not normally become involved with specific development proposals unless they raise interests of more than local importance. The local authority may seek Defra's advice if it needs technical information or policy guidance.

Consultations are required on all applications for mineral workings or waste disposal if the afteruse is agriculture or where the loss of high quality agricultural land will be 20 ha or more. These consultations are dealt with by Natural England.

For mineral workings or waste disposal by landfill, there would normally be no objection to such development on high quality land, where Natural England was satisfied that this would be restored to its former physical characteristics, following its reclamation. Non-agricultural afteruse, for example for nature conservation or amenity, can be acceptable even on better land if it does not alter the physical characteristics of the land.

Other factors

The ALC is a basis for assessing how development proposals affect agriculture within the planning system, but it is not the sole consideration. Local planning authorities are guided by PPS7 to also take into account the value of land in agriculture, for example for its environmental or heritage attributes. Other factors include impact on farm size and structure, use of buildings and other fixed equipment (including irrigation and drainage), or any stimulus the development might give to rural economic activity, for example in demand for renewable energy.

Further information

Details of the system of grading can be found in: Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land (Defra Publications, 1988, Price: £7.00 Tel: 08459 556000). www.defra.gov.uk

For further information please contact the Natural England Enquiry Service on 0845 600 3078 or e-mail enquiries@naturalengland.org.uk.

Natural England Technical Information Notes and other technical publications are available to download from the Natural England website: www.naturalengland.org.uk.