

### Chapter 1

#### AT THE MARGIN

#### THE MARGIN AND THE MEDIEVAL ECONOMY

The causes and the extent of economic change in medieval England remain matters of controversy. In the quest to understand the dynamics of the economy, historians have considered the relative influence of such factors as technological innovation, class structures and relations, demographic trends, and contemporary economic attitudes. Nevertheless, while subject to sustained assault in recent years, the current weight of historical scholarship still suggests that the changing balance between land and labour was the most important influence behind economic change. The basic principles of this 'population-resources' model were first outlined in a series of seminal articles by the late Michael Postan, and have influenced the work of many later scholars. In recent years, more sophisticated analysis of manorial records has yielded detailed evidence about medieval agriculture and demography which has

An amended version of this opening section can be found as M.D. Bailey, 'The concept of the margin in the medieval economy', Ec.H.R. 42 part 1 (1989).

- <sup>1</sup> The literature on this topic is extensive, but see J.D. Chambers, Population, economy and society in pre-industrial England (Cambridge, 1972); M.M. Postan, The medieval economy and society: an economic history of Britain in the Middle Ages (Harmondsworth, 1975); J.L. Bolton, The medieval English economy (London, 1980); and T.H. Aston and C.H.E. Philpin, eds., The Brenner debate: agrarian class structure and economic development in pre-industrial Europe (Cambridge, 1985).
- <sup>2</sup> These articles have been collected and published as M.M. Postan, Essays on English agriculture (Cambridge, 1973). His later views are best expressed in M.M. Postan, 'Agrarian society in its prime: Part 7, England', in The Cambridge economic history of Europe, vol. 1 The agrarian life of the Middle Ages, ed. M.M. Postan (second edition, Cambridge, 1966), pp. 548-632. See also J.Z. Titow, English rural society 1200-1350 (London, 1969); E. Miller and J. Hatcher, Medieval England: rural society and economic change 1086-1348 (London, 1978); J. Hatcher, Plague, population and the English economy 1348-1530 (London, 1977).



## A marginal economy?

demanded some refinement of the model.<sup>3</sup> Yet one central constituent that has been accepted almost without question is its concept of 'the margin'.

The model postulates that population increase in the twelfth and thirteenth centuries resulted in both the expansion of cultivation and the general growth of the economy. However, by around 1300 the population had outstripped the ability of agriculture to maintain it and there followed at least a century of demographic and economic decline. The two centuries after Domesday are regarded as a period of progressive land shortage, when the pressure of rising population forced society to colonise lands which in more propitious times would have been regarded as unfavourable for cultivation. Cumulatively, the 'journey to the margin' involved the cultivation of hundreds of thousands of previously underutilised acres. Woods and pastures on the peripheries of anciently settled villages were converted to arable land, and, where more land was available, tracts of heath and moorland were ploughed up for grain production.

It is not surprising that so many of the acres newly won in the twelfth and thirteenth centuries should have been marginal not only in location but also in quality . . . the thin and hungry heathlands of Norfolk breckland or Suffolk 'Fielding' where no or almost no grain was to be grown in any other period of English history bar our own, or on the southern slopes of Dartmoor . . . or on the skin-deep overlays of Longbarrow warren above Winchester . . . these are not lands on which society would draw except in times of real land hunger. 4

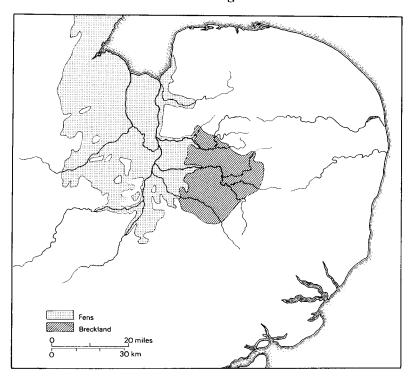
The development of these marginal regions was an important safety-valve in the conditions of the thirteenth century, but was no longer necessary when the pressure on land was released by demo-

<sup>3</sup> See, for example, Z. Razi, Life, marriage and death in a medieval parish (Cambridge, 1980), and the review by R.M. Smith in Journal of Historical Geography 8 (1982), pp. 305-6; B.M.S. Campbell, 'Agricultural progress in medieval England: some evidence from eastern Norfolk', Ec.H.R. 36 (1983), pp. 26-45.

<sup>4</sup> Postan, 'Agrarian society in its prime', pp. 551-2; W.G. Hoskins, The making of the English landscape (London, 1955), pp. 103-6; E. Miller, 'The English economy in the thirteenth century: implications of recent research', Past and Present 28 (1964), pp. 23-5; Miller and Hatcher, Rural society and economic change, p. 56, assert that 'arable villages were established... on Domesday sheep pastures in the Norfolk and Suffolk Breckland'; R.A. Donkin, 'Changes in the early Middle Ages', in Anew historical geography of England before 1600, ed. H.C. Darby (Cambridge, 1976), pp. 98-106; D.B. Grigg, Population growth and agrarian change (Cambridge, 1980), p. 65.



## At the margin



Map 1. East Anglia showing Breckland

graphic contraction in the fourteenth and fifteenth centuries. Consequently, land was abandoned and arable shrank, occasionally to the point that whole villages were deserted, and it is assumed that the margin led the general retreat of settlement. This 'downturn in internal colonisation' pre-dated the arrival of plague in 1348–9 in upland areas of Oxfordshire and Yorkshire, and Saltmarsh writes of having visited ruined churches in Breckland 'built by the latest pioneer settlers of the high Middle Ages, never enlarged and early abandoned'. This interpretation of the immediate pre-plague

K.J. Allison, M.W. Beresford and J.G. Hurst, 'The deserted villages of Oxfordshire', Occasional papers, Department of Local History, Leicester University 17 (1965), pp. 5-6; J. McDonnell, 'Medieval assarting hamlets in Bilsdale, north-east Yorkshire', Northern History 22 (1986), p. 276; J.A. Saltmarsh, 'Plague and economic decline in England in the late Middle Ages', Cambridge Historical Journal 7 (1941), p. 24.



# A marginal economy?

period has not stood unchallenged,<sup>6</sup> but few historians doubt that the demographic decline of the later fourteenth century resulted in a fall in land values and an abandonment of some arable. This contraction was most evident at the margin; 'villages on the furthest frontiers of cultivation... contracted, some of them to the brink of demise'. This belief is explicit in the works of many historians. Hoskins states that

the retreat from marginal lands was most evident in the sandy Breckland of south-western Norfolk and north-western Suffolk . . . it was the vast mortality of the successive epidemics that led to the piecemeal abandonment of these villages and hamlets on marginal land. On and around the edges of the Breckland there are no fewer than twenty-eight deserted villages. Most of them were small and poor, and the desertions were gradual, extending over two, three or four generations, so that most instances of final abandonment occur during the fifteenth century.<sup>7</sup>

Hence there are important general implications to be drawn from the performance of the margin. Because the economic development of marginal areas is assumed to be determined solely by changes in demographic pressure, historians regard them as highly sensitive indicators of population change. The contraction of arable at the margin is taken as a firm indication that population in England had begun to decline before the Black Death. Furthermore, it is argued that the productivity of marginal soils was itself an important factor in inducing overall population change. Much of England's better arable lands are assumed to have suffered from soil exhaustion in the thirteenth century as agriculture strained to feed a larger number of mouths, and so to some degree the cultivation of new lands merely represented a replacement of the old and not a net addition to it.8 Given that these newest lands were also responsible for sustaining the latest increments of population, then their performance and fertility assume considerable importance for society's well-being: crop failure at the margin would exacerbate the state of over-population. Yet it was inevitable that the margin would fail, for most of these soils were

<sup>6</sup> B.F. Harvey, 'The population trend in England between 1300 and 1348', Transactions of the Royal Historical Society, fifth series 16 (1966), pp. 23-42.

Hoskins, English landscape, pp. 120-1. See also Postan, Medieval economy, p. 39; P. Zeigler, The Black Death (Harmondsworth, 1969), p. 175; M.W. Beresford and J.G. Hurst, Deserted medieval villages (London, 1972), pp. 6-7.

<sup>&</sup>lt;sup>8</sup> J.Z. Titow, Winchester yields: a study in medieval agricultural productivity (Cambridge, 1972).



## At the margin

thin and hungry ... worth cultivating only for short periods. Before long the stored fertility of the soil would be mined out, and the land would lie exhausted. This may well have been the natural history of the East Anglian Brecklands or the Hampshire and Wiltshire chalklands and some of the Cotswold uplands . . . [lands] most likely to suffer from insufficient manuring and . . . abandoned by the plough.<sup>9</sup>

The failure of the margin is regarded as a major cause of the crisis of over-population in England around 1300:

It will not be too fanciful . . . to see in the falling production of the later centuries a natural punishment for earlier over-expansion . . . after a time the marginal character of marginal lands was bound to assert itself, and the honeymoon of high yields was succeeded by long periods of reckoning when the poorer lands, no longer new, punished the men who tilled them with failing crops. <sup>10</sup>

Implicit in this interpretation is the idea that a marginal region is one which is exploited as a necessary increment only when the strain of population on resources becomes perilously high. It also assumes that neither medieval agrarian technology nor the economy itself was sufficiently developed to make productive use of poor soils. In the medieval context, these regions would have been under-developed before the twelfth and thirteenth centuries, an argument which appears plausible enough. But exactly what characteristics constitute a marginal region in the population-resources model? Because grain production is regarded as the prime objective of pre-industrial economies, it is assumed that all regions inherently unsuited to arable farming are therefore marginal. Hence Postan defines marginal soils as those with low physical productivity, those 'incapable of producing per acre of land, or per bushel of seed, or per plough-day of cultivation as much as other or better land'. 11 All he is really describing are poor soils, although strictly speaking poor soils become marginal soils only when they are proved to have been exploited as an increment in the thirteenth century. However,

Postan, 'Agrarian society in its prime', pp. 558-9; Postan, Medieval economy, pp. 63-73; Titow, Rural society, p. 93-5.

Postan, 'Economic foundations of medieval society', in Essays on English agriculture, p. 14.

M.M. Postan, 'Note', Ec.H.R. 12 (1959-60), p. 89. In Medieval economy, p. 20, he explicitly admits that 'most of these lands were marginal simply because they were, to use a humdrum adjective, poor'. Grigg, Population growth, p. 65 writes, 'marginal land had to be brought into cultivation, poorer soils, from which only very low yields could be obtained'.



# A marginal economy?

Postan equates marginal soils with all poor soils because he accepts the Ricardian view that cultivation will first be concentrated on good land, and that poorer land will only be utilised intensively when the tension between population and resources rises above a certain level. This explains why historians have come to regard poor soils as synonymous with marginality, so that Breckland, for example, is designated marginal, not because it is proved to have been late colonised as an incremental region, but because its soils are exceptionally poor and so could only have been exploited according to the chronology outlined above.

This definition of marginality has also been extended to include other regions where the production and marketing of grain is assumed to be difficult. As Abel writes, 'a hard climate and remoteness from trading centres were [other] conditions unfavourable to farming', and such areas would also remain largely under-developed so long as population and resources were reasonably balanced. Their colonisation would be assured when the pressure of population on resources began to mount significantly, only to bear the brunt of subsequent demographic decline: 'nothing was more natural than that the occupiers [of these lands] . . . should leave their old farms to start afresh under better natural conditions'. <sup>13</sup>

The argument that all regions of poor soil, harsh climate and remote location are therefore marginal has its roots in the theory of economic rent. Economic rent, as opposed to contract rent, is a difficult and often confusing concept, but basically represents a 'return due to the land alone as a factor of production'. Ricardo argued that a colonising society would initially settle on an area of 'rich and fertile' land, for which no rent would exist. Yet, in order to feed a growing population, society would be forced to cultivate 'second and third' quality land, and rent only exists when this differential is apparent. In other words, the necessity of cultivating inferior land is the cause of rent on the superior land: as the population increases, and as grain prices rise, so the margin of cultivation is extended and the rent level at the intensive margin increases. 15

W. Abel, Agricultural fluctuations in Europe from the thirteenth to the twentieth centuries (London, 1980), pp. 88-9; G. Duby, Rural economy and country life in the medieval west (London, 1968), p. 301.
13 Abel, Agricultural fluctuations, p. 89.

<sup>14</sup> D. Grigg, An introduction to agricultural geography (London, 1984), p. 49. See this, and other basic economic textbooks, for a more detailed discussion of economic rent.

<sup>15</sup> For Ricardo, see E.C.K. Gonner, ed., Ricardo's economic essays (London, 1923); M. Blaug, Economic theory in retrospect, third edition (Cambridge, 1983), pp. 91-152.



## At the margin

A similar concept underlies the notion that remote regions are marginal for grain production. If corn is sold at a fixed price, and if soil quality is assumed constant, then economic rent will decline with distance from the market. When economic rent reaches zero, cultivation for the market will cease, although subsistence agriculture will continue. However, if the price of corn was to rise, the margin of cultivation would move and new lands would be brought under the plough: if the price was to fall, the opposite would be true. In both of these theoretical models, the 'margin of cultivation' is a constantly moving and highly specific point. This is somewhat different from the blanket use of the term by some medieval historians, who simply describe all regions of harsh climate, poor soil and geographical remoteness as marginal for cultivation.

It is not disputed that regions where economic rent approximates to zero should be designated as 'marginal for cultivation'. However, this book contends that the classical theory of rent has been adapted too crudely by the population-resources model to the conditions of the medieval economy. Ricardo assumed that the extensive margin of cultivation comprised 'inferior' - meaning poor quality - land, although this could also include 'less advantageously sited' land. It is important to appreciate that this theory of differential rent was not developed as a theory of land colonisation per se. Yet, despite this, subsequent writers have referred to a Ricardian view of land colonisation, where the most fertile lands are settled first. This is firmly embodied in the populationresources' definition of a 'marginal economy': all regions with disadvantages in grain production were, ipso facto, the 'marginal economies' of medieval England. All areas of poor soil and geographical remoteness were therefore late cultivated and early abandoned in the Middle Ages, and hence sensitive indicators of demographic change. They were developed only as incremental regions and therefore backward in technological and economic developments affecting the economy at large. And they were essentially dependent upon demand for bread grains (and by extension demographic fluctuations) for their economic utilisation.

This view of the margin is partly derived from the classical theory of economic rent, but is also based upon a number of prior assumptions about the nature of the medieval economy. It assumes

<sup>&</sup>lt;sup>16</sup> Grigg, Agricultural geography, pp. 49-53.



## A marginal economy?

that 'fertility' was an exhaustible, stored-up component of the soil, which was somehow graded by society for settlement purposes at an early date. It assumes that agrarian technology was primitive and unchanging, so that poor soils were doomed to exhaustion after a few years' cropping. It assumes that a region's ability to grow grain was the main determinant of its wealth and economic success. How tenable are these suppositions?

## Soil fertility and agrarian technology

As a general term, 'fertility' refers to the crop-growing capacity of land, to its physical productivity. This is largely determined by the soil's natural properties, but also by prevailing farming techniques. The population-resources model assumes that agrarian technology was poorly developed throughout the Middle Ages, and so the effect of farming systems on soil fertility was likely to be deleterious rather than favourable. With little capacity for raising the land's natural fertility, it is argued that the early Saxon settlers sought out and cultivated the better lands. Hence land with the highest physical productivity had been largely colonised by 1086, whilst the remaining 'inferior' lands awaited progressive colonisation until the barren – or 'sub-marginal' – lands were reached.<sup>17</sup>

Such a view of soil fertility is too simplistic, even by the standards of medieval agriculture. There are both theoretical and empirical grounds for supposing that fertility was not merely a stored-up and exhaustible component of the soil, but could be altered by factors both exogenous and indigenous to the economy. In the first place, long-term climatic and environmental change could significantly alter the fertility of upland areas, and render once barren lands suitable for cultivation. The data are not ideal, but both Lamb and Parry have argued that a climatic optimum occurred in Europe between 1100 and 1250, followed by two centuries of cooling. The effect of these changes on agriculture was considerable, for apparently small changes in mean temperature and rainfall over long periods could have an exponential effect on both the performance and viability of arable farming. Put simply, the warmer weather increased the area of potentially cultivable land, indepen-

<sup>&</sup>lt;sup>17</sup> Postan, Medieval economy, pp. 17–20. See also H.C. Darby, 'Domesday England', in New historical geography of England, pp. 45–7.

<sup>&</sup>lt;sup>18</sup> M.L. Parry, Climatic change, agriculture and settlement (Folkstone, 1978), p. 97; H.H. Lamb, Climate history and the modern world (London, 1982), p. 193-4.



## At the margin

dent of economic trends, and the colder weather had the reverse effect.<sup>19</sup> It would be premature to conclude that climatic change could itself be a prime cause of expansion or contraction at the margin, although by changing the parameters of cultivation in upland areas it certainly accentuated the effects of economic changes. It would thus appear that fertility – and by extension the performance of marginal regions – could be significantly altered by the action of exogenous variables.

Secondly, it is not impossible that soil fertility could be maintained or even improved through adaptation and technical progress, in other words by changes indigenous to the economy. To establish this requires a brief analysis of the factors affecting technical change in the Middle Ages, itself a complex and contentious issue. However, if such changes were discernible, then it would demand some revision of the view that soil exhaustion was an inevitable feature of cultivation at the margin. Proponents of the population-resources model argue, with some plausibility, that the spread of innovation in agriculture was inhibited by the strict communal organisation of open-fields, and that agrarian investment was stifled by the manorial system.<sup>20</sup> Agrarian technology was static, and the very fact that marginal regions had to be brought into cultivation in the twelfth and thirteenth centuries indicates the failure of medieval agriculture to increase productivity sufficiently on existing lands.<sup>21</sup> And if it was not possible to improve agrarian techniques on the inherently more fertile lands of England, it would surely have been impossible in marginal regions.

<sup>19</sup> Lamb, ibid., p. 170, argues that by 1250 it had become possible to cultivate up to 1,300 feet above sea-level on Dartmoor and to 1,050 feet in Northumberland. Parry, Climatic change, p. 103, believes that 60 per cent of the high land surrounding the river Tweed, which was sub-marginal in the seventeenth century, could have been ploughed before 1250. However, this theory has not passed unquestioned by historians, who are not fully convinced that the sources for medieval climatic surveys are entirely satisfactory. Indeed, the climatic factors which encouraged arable expansion and then contraction in the Middle Ages coincided almost exactly with demographic and economic changes inducing the same tendencies, which makes it perilously difficult to establish the precise contribution of climate to the fortunes of marginal regions. At present our knowledge of climate is more tenuous than our knowledge of price and population movements, and we need more certainty as to its chronology, its extent, its effect on lowlands areas and so forth. See D.B. Grigg, The dynamics of agricultural change: the historical experience (London, 1982), p. 86–8.

<sup>&</sup>lt;sup>20</sup> Postan, Medieval economy, pp. 18-19, 45-62 and 112-14.

Postan, 'Agrarian society in its prime', p. 560; Postan, Medieval economy, p. 17. See also Titow, Rural society, p. 72: 'the level of medieval productivity of land was extremely low'.



## A marginal economy?

Implicit in this interpretation is the view that population increase and the prevailing conditions of resource scarcity could not stimulate technical change in agriculture.<sup>22</sup> Yet such a view stands in direct contrast to other theories of technical change, which maintain that population growth will nearly always result in technological innovation. In one such interpretation, Clark argues that a rigid, unyielding system of agriculture is an historical rarity in a period of rising population, and that productivity will be raised by adaptation.<sup>23</sup> In another, Boserup argues that rising demographic pressure will force farmers to crop their arable land more frequently and reduce the area under fallow. This policy would rapidly result in soil exhaustion, unless the farmer simultaneously adopted other cultivation and fertilisation techniques - such as marling, better manuring arrangements, the wider use of leguminous crops - to offset this tendency. Hence the progressive shifts to higher cropping frequencies involve a replacement of the scarce resource, land, by the more abundant labour and capital.24

Neither Boserup nor Clark concerned themselves directly with the problems of medieval England, but their belief in the capacity of population growth to effect an improvement in agricultural techniques has important implications for the medieval economy. Under these conditions, 'fertility' is not regarded as some inherent, stored-up and exhaustible component of its soil, but more as a variable factor dependent upon inter-related changes in agrarian technique and population density.<sup>25</sup> This means that soil exhaustion need not have been an inevitable or universal feature of thirteenth-century England. It also means that lands at one time regarded as marginal could, with the advent of certain technical advances, come to be regarded as fertile lands at a later date. For example, the medieval fenlands comprised peat and silt soils of high intrinsic richness and fertility, but it required the development of more sophisticated drainage techniques to make them workable for arable cultivation. Similarly, Breckland was regarded as a region of easily worked, productive soils, until demographic and technical

<sup>&</sup>lt;sup>22</sup> Indeed, central to the Malthusian and Ricardian systems is the view that population and economic growth will eventually peter out owing to the scarcity of natural resources: Blaug, *Economic theory*, p. 91.

<sup>23</sup> C.G. Clark, Population growth and land use (London, 1967), p. 253.

E. Boserup, The conditions of agricultural growth: the economics of agrarian change under population pressure (London, 1965), pp. 13 and 58-9; E. Boserup, Population and technology (Oxford, 1981), pp. 5 and 95. See also Grigg, Population growth, pp. 36-8.

<sup>25</sup> Boserup, Conditions of growth, p. 13.