

Early Modern Agriculture: a new harvest gathered in

By E A WRIGLEY

[Review article of, J Thirsk (ed), *The Agrarian History of England and Wales*, CUP, 1984-5, V, 1640-1750, 2 parts, xxxi + 480; xxx + 952; 168 text figures; 28 plates; £35, £55.]

IT is sometimes said of a particular work that it is impossible to do justice to it in a review, usually for reasons of space. Composite works of exceptional length, such as the fifth volume of the *Agrarian History*, pose especially acute problems. Even in a comparatively lengthy review, individual consideration of the contributions of nineteen different authors is scarcely feasible, especially when between them they have penned about 700,000 words, or their equivalent in tables, etc, at a rough count. But another feature of this work causes a greater difficulty if justice is to be done to it. The preface, written in early 1983, refers to the work having been ten years in the making. In a sense, however, since the planning of the series as a whole began in January 1956, the work must reflect decisions taken over a thirty-year period. Moreover, individual authors finished their contributions at different dates, so that even if each volume is treated in isolation, it must be exceedingly difficult to avoid unconscious injustice in writing of a given author's contributions. Perhaps, therefore, it is as well to begin this review by stating unambiguously that it is certain to be unjust since I shall write both of its organization and content from a 1986 vantage point. To do so may be manifestly unfair to an author who may for good reason have laid down his pen in the later 1970s (as appears to have been the case in at least one instance). Similarly, in writing of the organization of the book, it is absurd to make the implicit assumption that

it was clear in 1973 what direction research would take over the next thirteen years. Not to do so, however, would make for an excessively tortuous exercise in which the wish to be fair might prove hopelessly at odds with clarity.

The work is divided into two parts which appear as separate volumes, the first devoted to 'Regional Farming Systems', the second to 'Agrarian Change'. About two-thirds of the total text is to be found in the second part. The first part is a triumphant vindication of one aspect of the grand design of the series. No scholar could hope to achieve the detailed knowledge of a particular region which can be attained by a local specialist. Collective work is imperative, and yet Joan Thirsk has exercised editorial control with such judgement and discretion, and has received in turn such intelligent collaboration from her contributors, that the penalties usually paid for collective work are seldom evident and never severe. The agricultural ecology of each region is explained; the constraints imposed by factors such as distance to markets and transport facilities are described; topics such as field systems, holding size, and ownership and tenancy characteristics covered. Above all the detailed nature of local farming technology and practice is reconstructed and its often bewildering variety is exposed.

In this connection it is striking how heavily all the authors depended upon probate inventories as a prime source of information. Other local sources were, of

course, widely employed, notably manorial documents and those related to the payment of tithes, but the bulk of the telling detail was derived from inventories. The analysis of inventories enabled confident statements to be made about trends in flock size or in the relative importance of the main cereals. Inventories were invaluable both in providing a quantitative underpinning to the description of the regional farming systems, and in giving authority to statements about the nature of agricultural change between the mid-seventeenth and mid-eighteenth centuries. They were also very useful in the exploration of another topic well treated in the first volume, the interlinkage between agriculture and other forms of economic activity. Although naturally subordinated to the description of local farming, care has been taken to describe the nature and prevalence of local manufacture and mining, both as a general phenomenon of the region and as it impinged on the activities of individual yeomen and husbandmen, whose households at their death often contained implements and stocks of materials affording precise evidence of the extent of non-agricultural activity on the farm. In passing one might note how arbitrary later distinctions and conventions can be. The making of cheese from milk is often regarded as an activity within the agricultural sector whereas the spinning or weaving of wool may be classed as manufacturing, yet both represent the further processing of a primary agricultural product to make it useful to the final consumer.

The regional chapters also represent a vast storehouse of miscellaneous information which will be of great value to both agricultural and economic historians—on the early history of the potato as a substantial crop in the north-west (pp 23–4, 64); on the stinting of commons as a cheaper alternative to their enclosure (pp 117–18); on the means adopted to lengthen the period in each year during which cows were in milk (p 233); on the reasons why tenant farmers might prefer

short to long leases (pp 114–15); on the circumstances which led to the substitution of wheat for barley (p 179); and so on.

Minor deficiencies do occasionally obtrude. It would be a well-informed scholar, for example, who could define the differences not merely between tups, hogs and wethers, but gimmers and dinments as well, when reading about sheep; or who would be confident that he had grasped the import of the remark that the cattle 'still ran over the rowens and etch, on the ollands and summerleys, as well as on permanent pasture' (p 235). The resort to esoteric terms is sufficiently common to suggest that it would have been wise to include a glossary of terms somewhere in the volume.

Inevitably, too, in the course of twelve regional chapters averaging thirty-five pages in length, there are times when the text grows tedious as the contents of yet another inventory are summarized, or the agricultural ecology of a sub-region described. But any tendency to pile Pelion upon Ossa on the part of the individual authors must have been firmly curbed by the editor and the overall impression of part I is of an effective use of space to excellent effect.

Part II is less successful. The ordering of the two parts suggests that part I was intended to provide a rich empirical base and that part II would draw out the significance of what had been earlier described. The organization of part II is topical, each chapter dealing with a particular aspect of the history of the period—agricultural innovation; the marketing of produce; landlords and estate management; rural building; market gardening; agricultural policy on the part of the state; prices, wages, rents and profits. A chapter is devoted to each of these subjects (or, to be precise, two chapters in the case of landlords and estate management and rural building; in each case Wales is covered separately from England). In addition there is what is in effect a short chapter on tithes, though not designated as such, in the body of the work, and appendices dealing with

weights and measures; land measures; and the statistics of prices and wages, together with scattered data on output, productivity and overseas trade in agricultural goods.

Several of the chapters are splendid achievements. Thick's account of the rapid development of market gardening, for example, is admirable. From exceedingly modest beginnings in the sixteenth century market gardening grew at great speed in the following century. As in so many other spheres of economic activity, the growth of London was an especially important catalyst both by affording a large market and by providing a large return flow of human and animal manures and waste products such as soot to enable even the least promising soils to yield abundantly, sometimes the year round with the assistance of glass cloches. Market gardening was the point of entry for many crops and cropping practices which ultimately helped to transform full-scale agriculture. The seed trade developed in close proximity to market gardening and not only helped to alert farmers and growers to the existence of new or improved varieties of useful crops but began to print and distribute sales catalogues and instructions about cultivation.

Similarly, Chartres's chapter on the marketing of agricultural produce is most informative and impressive, being especially successful in conveying a vivid sense of the extent of change during the century 1640–1750. He is equally at ease with evidence pointing to the growth of an integrated national market; with the gradual rise in the proportionate share of export demand within the total to peak levels exceeding 10 per cent of total production by the end of the period (in the case of grain); with the nature and implications of transport changes; and with the development of new marketing methods and structures as the farm gate and the inn yard began to supplant fairs as the main sites for bargaining and sale. Chartres also shows an appreciation of the fundamental importance of attempting

some estimates of the size of the physical output of agriculture and of its animal stocks (tables 17.4 and 17.5, pp 444–5), displaying a willingness to attempt the kinds of measurement which, however difficult, are essential to discussions of national agricultural structure and change over the period.

Thirsk's two chapters in part II, on agricultural policy and on innovations and their diffusion, display a characteristic depth of scholarship, made accessible by a felicitous pen, and enlivened with much telling detail. She ranges very wide in the chapter on public policy from government concern about the shrinkage of domestic timber supplies under the Commonwealth to the reasons why cheese producers were active in promoting river improvements, while at the same time succeeding in conveying a clear sense of the sea-change taking place in government thinking about the proper balance between public and private initiative. Her chapter on innovation covers ground in part traversed previously but reorganizing the information to link effectively both with the regional chapters in part I and with some of the topical chapters of part II, notably that on horticulture by Thick.

Bowden in his chapter on prices and wages extends over a further century his earlier work on Tudor and early Stuart trends, marshalling very large quantities of data in the chapter and its related statistical appendix. He deals at length with many facets of the behaviour of the series he has compiled – secular trends, annual movements, regional differences, seasonal patterns, commodity terms of trade, etc. The work will be of great benefit to all those in need of long-run data, especially relating to price, though their value is limited for many purposes by being listed solely in an indexed form in almost all his tables.

Bowden's forays into interpretation are not always felicitous. For example, the issue of the relationship between price behaviour, corn yields and the weather deserves

re-examination. Price data are relatively good and show a marked tendency to 'clump' with runs of high or low prices occurring more frequently than would happen if annual fluctuations were random, but it is dangerous to assume that prices were mirroring similar runs in yields (p 56). It can be shown, for instance, that in nineteenth-century France, for which both price and yield data are available, prices behaved in a manner very similar to that to be observed in earlier English price data, but yields showed no similar tendency. Their fluctuations were random: there is no evidence that there were any runs in the yield data other than those which would arise from time to time by chance.¹ There is also good reason to be doubtful about the justification for the view that patterns in weather fluctuations underlay both yield and price behaviour. Again, some statistical inferences appear dubious. Years that were good for wheat were bad for hay and vice versa, in Bowden's view. There is good reason on general grounds to believe that this view is correct. The method employed to test it, however, would only be appropriate if the two series were each trendless, but hay prices were significantly higher in the second half of the period than in the first, while the reverse was true for wheat. Or to take a wider issue, Bowden's assumptions about the relationship of bad harvests and increases in mortality, and especially about a link between poor harvests and plague outbreaks (pp 58-9) do not accord well with recent research.²

Clay's expertise in matters relating to landlords and their estates ensured that his chapter would be authoritative and fully informed; nor is it lacking in evidence of the far wider range of knowledge recently

deployed so successfully.³ Moreover, it is a pleasure to read; an example of much learning carried lightly. To accommodate national differences in this case, as also in the case of the chapters dealing with rural building, Wales is treated in a separate, parallel chapter.

The chapters on rural building, though fascinating *in se*, and replete with excellent plans, elevations, perspective sketches and photographs, nevertheless bring to the fore a problem relating to the strategy of the enterprise. The choice of the adjective 'agrarian' to describe the scope of the series as a whole indicates that it was intended to cover a broader canvas than simply agricultural history. Rural building was unquestionably an important aspect of the rural scene, though perhaps not so prominent a feature as to justify devoting to it a sixth of the main text of the two parts, excluding the appendices. But a number of other topics seem to suffer from under-representation, so that the balance and strength of the work as a whole is affected. It is time to consider such wider issues.

First, the work would have benefited from being placed in a wider setting, both chronological and geographical. Over the seventeenth and eighteenth centuries as a whole English agriculture achieved a degree of advance which stands in strong contrast to comparable trends on the continent. Population grew substantially faster over these two centuries than in other European countries, yet there is reason to believe that the agricultural labour force rose very little. Most of the growth in population was urban or in that sector of the rural labour force which found its main income outside agriculture. England remained largely self-sufficient in food throughout which implies that there were large gains in productivity per head in agriculture.⁴ It is

¹ E A Wrigley, *People, Cities and Wealth. The Transformation of Traditional Society*, Oxford, forthcoming, ch 5, 'Some reflections on corn yields and prices in pre-industrial economies'.

² The issue has attracted a vast literature. There is a useful set of recent essays on the subject to be found in R I Rotberg and T K Rabb, eds, *Hunger and History. The Impact of Changing Food Production and Consumption on Society*, Cambridge, 1985.

³ C G A Clay, *Economic Expansion and Social Change: England 1500-1700*, 2 vols, Cambridge, 1984.

⁴ E A Wrigley, 'Urban growth and agricultural change: England and the continent in the early modern period', *Journal of Interdisciplinary History*, XV, 1985, pp 683-728.

also probable that over the period as a whole yields per acre roughly doubled, a notable achievement in itself, but all the more so if labour inputs were increasing very little. England proved adept at avoiding the kind of difficulties over declining marginal returns which Ricardo was later to specify so firmly.⁵ While it is true, of course, that volume V of the *Agrarian History* covers only the central half of this longer period, it forms part of a series covering events from the pre-Roman times to 1939, and much that happened in 1640–1750 needs to be considered in a longer perspective if its significance is to be appreciated.

Such wider issues have always received a good deal of attention and it would have been valuable to have had them reviewed in the light of the empirical findings brought together in volume V. In addition, the arguments and evidence marshalled by Jones and John, the careful empirical yield studies of Overton, and the econometric work of Crafts and more recently Jackson, all represent work carrying important explicit or implicit inferences for the period 1640–1750.⁶ Jackson's work is too recent to have been used in the volume, and parts of the relevant writings of Crafts and Overton are also of recent date, but such modes of argument if not their particular formulations could have been considered.⁷

Second, and perhaps in part because of the lack of a wider perspective, some topics were

treated only in passing when their importance suggests that a fuller and more formal treatment was called for. It is surprising, for example, that enclosure is not treated at greater length. It has long been a major element in the discussion of early modern English agriculture, and much land was enclosed between 1640 and 1750.⁸ The assessment of the significance of enclosure is very problematic. Even its definition has remained controversial, but, if only because of the importance which has at times been attributed to it, it appears to justify explicit discussion.

There are other topics which were relatively neglected. Rural society in the seventeenth and eighteenth centuries is sometimes depicted as moving from a situation in which the land was worked by husbandmen and yeomen to one in which the characteristic English system of landlord, tenant farmer and labourer was the norm. This is a caricature of a much more complex reality, but one whose limitations might have been re-examined in the light of recent research.⁹ Some illuminating work has been published in recent years on related topics. For example, the history of the institution of service in husbandry throws much light on the changing nature of social structure in the countryside, and on the characteristic career pattern of the agricultural labour force.¹⁰ Female participation in the agricultural labour force, and the conventions regarding the sexual division of farm work is a topic of importance which might have been addressed with advantage.¹¹ And, reverting to an issue

⁵ D Ricardo, *On the Principles of Political Economy and Taxation*, ch 2 'On rent', in *The Works and Correspondence of David Ricardo*, ed P Sraffa with the collaboration of M Dobb, 1, Cambridge, 1951.

⁶ See for example, the pair of articles, E L Jones, 'Agriculture and economic growth in England, 1600–1750: agricultural change', and A H John, 'Agricultural productivity and economic growth in England, 1700–60', *Journal of Economic History*, xxv, 1965, pp 1–18, 19–34; M Overton, 'Estimating crop yields from probate inventories: an example from East Anglia, 1585–1735', *Journ of Econ Hist*, 39, 1979, pp 363–78; N F R Crafts, 'Income elasticities of demand and the release of labour by agriculture during the British industrial revolution', *Journal of European Economic History*, 9, 1980, pp 153–68; R V Jackson, 'Growth and deceleration in English agriculture, 1600–1790', *Econ Hist Rev*, 2nd ser, XXXVIII, 1985, pp 333–51.

⁷ For example, Deane and Cole reviewed the implications of estimates of eighteenth-century population growth, food imports and exports, changing consumer preferences, yield trends, *et sim* in P Deane and W A Cole, *British Economic Growth 1688–1959: Trends and Structure*, Cambridge, 1962, pp 62–75.

⁸ See especially J R Wordie, 'The chronology of English enclosure, 1500–1914', *Econ Hist Rev*, 2nd ser, XXXVI, 1983, pp 483–505. Wordie estimates that almost twice as much land was enclosed in the seventeenth as in the eighteenth century (table 7, p 502).

⁹ This debate received a new injection of vigour in the form of the controversy following the publication of R Brenner, 'Agrarian class structure and economic development in pre-industrial Europe', *Past and Present*, 70, 1976, pp 30–74.

¹⁰ A Kussmaul, *Servants in Husbandry in Early Modern England*, Cambridge, 1981.

¹¹ There is a valuable review of the literature on this topic as well as an important new contribution to the topic itself in K D M Snell, *Annals of the Labouring Poor. Social Change and Agrarian England, 1660–1900*, Cambridge, 1985, chs 1 and 6.

which illustrates the value of keeping in mind international comparisons, any evidence or reflections concerning the significance of the ratio of livestock to land would have been welcome. The work of O'Brien and Keyder, for example, suggests that this may have been one of the distinctive advantages of English agriculture compared with French at a later date.¹² Whether it was a difference of long standing; and whether any change in the ratio was associated with rising yields via better manuring, or with gains in labour force productivity via the substitution of animal for human muscle, may be problems of great difficulty in the present state of knowledge, but such issues deserve to be identified and discussed if only to serve as a stimulus to future research.

Third, one might question where the boundaries of the 'agrarian' circle should be drawn. If it is proper to devote much space to rural building, may it not also be proper to consider other aspects of rural society? For example, the mode of operation of the poor laws was of the greatest importance to members of rural society, a large proportion of whom were likely either to be in receipt of relief or contributors to the rates. A substantial number at different points in their lives fell into both categories. The nature of what is sometimes termed the moral economy of rural society in different parts of England constitutes another topic of the highest interest, especially to those who view this as a feature of rural life subject to gradual erosion with the spread of capitalist attitudes into local economies. Much has been written over the period during which this volume was in preparation about the rise of proto-industry in rural areas. It is reasonable to doubt the final value of some formulations of the concept of proto-industry, both as to its attributes and genesis, but the concept has been so widely used in writing about the development of rural society that it is curious to find that it figures

so modestly in this volume. A similar comment might be made concerning the value of the distinction between 'open' and 'closed' parishes. And if rural housing is a topic demanding attention, why not, say, rural dress and rural diet?

Criticism of the type in which I have indulged is easily made and often most unfair. For unimpeachable reasons the original planning of collective volumes often proves impossible to implement. And an already massive work would have grown to monstrous proportions if it had been extended to cover a fuller range of topics. There are great riches within the covers of the two volumes. Even if there are some sins of omission, there are few of commission. Yet an enterprise like the *Agrarian History* is apt by its prestige to colour the general perception of the nature of a subject and its agenda for a generation. In this regard volume V is not an unqualified success. Somewhere between Tudor times and Regency England, English agriculture succeeded to an extraordinary, perhaps unprecedented degree in raising productivity per acre while simultaneously also greatly increasing output per head.¹³ It is doubtful whether any other country in Europe came close to matching this achievement. For reasons which Adam Smith, writing towards the end of the period, was to set out so forcefully, success in the countryside had much to do with the increasingly remarkable and ultimately revolutionary change in train elsewhere in the economy.¹⁴ Volume V covers the central

¹² P O'Brien and C Keyder, *Economic Growth in Britain and France, 1780-1914*, 1978.

¹³ It is probable that both cereal yield per acre and output per head roughly doubled during this period. There is a convenient survey of eighteenth-century yield estimates in M Turner, 'Agricultural productivity in England in the eighteenth century: evidence from crop yields', *Econ Hist Rev*, 2nd ser, XXXV, 1982, pp 489-508. Earlier data are also briefly surveyed. See also the further debate in M Overton, 'Agricultural productivity in eighteenth-century England: some further speculations', and M Turner, 'Agricultural productivity in eighteenth-century England: further strains of speculation', both in *Econ Hist Rev*, 2nd ser., XXXVII, 1984, pp 244-51 and 252-7. On output per head, Wrigley, 'Urban growth and agricultural change', esp pp 698-702 and 717-21.

¹⁴ See, for example, A Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed E Cannon, 1904, pp 430-1.

section of this long period, but somehow the wider issues which are of such compelling interest, and which should inform the discussion and description contained in the

regional and topical chapters, do not come into focus. We have some excellent portraits of trees but the wood is only visible intermittently.

Notes and Comments

WINTER CONFERENCE, 1986

As is now customary the Winter Conference was held jointly with the Historical Geography Research Group of the Institute of British Geographers. Five papers were delivered on the theme of 'Agricultural Censuses and Statistics'. The first, by J J N Palmer, on 'Computer Mapping of Domesday England', was given to the accompaniment of two microcomputers which generated maps of Domesday England. B A Holderness followed with an assessment of 'The Political Arithmetic of Arthur Young', while after lunch M E Turner spoke on 'The 1801 Returns and the Livestock Enquiries' and R J P Kain reported on his 'Atlas and Index of the Tithe Files of England and Wales'. The final paper of the day — BM Short, 'Lloyd George's Domesday: the Countryside of England and Wales in 1910' — discussed a source with which most of the audience were unfamiliar yet which seems to have enormous potential for the study of the Edwardian countryside. The Society is grateful to Dr Michael Turner for organizing a successful conference and for arranging the 1987 Winter Conference which will be held on Saturday 5 December.

SPRING CONFERENCE, 1987

Full details and a booking form for the 1987 Spring Conference, which is to be held in the Northern

Counties Hotel, Portrush, Northern Ireland, should be inserted in this copy of the *Review*.

ANNUAL GENERAL MEETING, 1987

The 35th Annual General Meeting of the Society will be held at 9.00 am on Tuesday 7 April 1987 at the Northern Counties Hotel, Portrush, Northern Ireland. Nomination forms for officers and members of the Executive Committee should be inserted in this issue of the *Review*. Nominations should reach the Secretary *no later than* Tuesday 1 April 1987. It was agreed at the 1986 AGM that those nominating candidates for the Executive Committee should supply a twenty-word statement about each candidate to be circulated at the AGM of the Society.

WOODLANDS IN BRITISH HISTORICAL GEOGRAPHY

The summer residential conference of the Historical Geography Research Group of the Institute of British Geographers will be held in Oxford from 3 to 5 July 1987. Further information is available from Dr M Williams, School of Geography, Mansfield Road, Oxford OX1 3TB.