

The Landlord and Agricultural Transformation, 1870-1900¹

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I

BY now the distinguishing features of the fortunes of English agriculture between 1870 and 1900 are well known.² The succession of wet seasons culminating in that of 1879, accompanied by the drastic fall in the prices of cereals throughout the 1880's spelt disaster for many farmers in the cereal-growing regions of the south-east of England, especially if they happened to work heavy clayland farms. For the livestock producer, though the initial situation in 1879 was still serious, in the long run it was less gloomy. With rising real wages for much of the time, and a rising population, the demand for livestock products was promising. Meat prices did not fall till after 1885, and then the decline was much smaller than for cereals. *Per capita* consumption of meat and dairy products rose continuously right up to 1914. A good deal of this rising consumption was supplied by overseas producers, but not all of it; there was still an opportunity for home producers to supply this buoyant market with those foods where their advantage as producers was greatest, such as high quality meats, dairy foods, poultry, eggs, and fresh milk. But to do this successfully required from the farmer increased specialization and the adaptation of his enterprises to the changed market conditions after 1879, if he had not taken steps to do so before that date.

Of course to some extent British agriculture had changed its emphasis in the twenty years before 1873.³ As early as 1849 Caird had anticipated an improvement in vegetable and livestock product prices as a result of rising population, and a relative deterioration in cereal prices as imports increased. The fall in cereal prices did not come till the 1880's, but in the meantime there is no doubt that there was a marked improvement in animal product prices after 1850.⁴ This encouraged farmers on mixed farms to increase their production of livestock by making it more profitable for them to use the grain they produced as

¹ I am grateful to the Archivist, Mr F. W. Stitt, and the staff of the Stafford County Record Office for making the documents I have used available to me so readily. I am also grateful to Mr E. J. T. Collins for valuable suggestions made during the preparation of this article. The responsibility for the opinions stated is my own.

² T. W. Fletcher, 'The Great Depression of English Agriculture, 1873-96', *Econ. Hist. Rev.*, 2nd series, XIII, 1961.

³ E. L. Jones, 'The Changing Basis of Agricultural Prosperity, 1853-73', *Agric. Hist. Rev.*, x, 1962.

⁴ E. L. Jones and E. J. T. Collins, 'Sectoral Advance in English Agriculture, 1850-80', *Agric. Hist. Rev.*, xv, 1967, p. 79.

feed, rather than selling it for cash. A further impetus to livestock farming was given by the imports of oilcake from Europe and further afield which grew from 273,000 tons in 1856 to 740,000 tons a year by the 1880's.¹ These developments required increased capital both from the tenant farmer and from the landlord. From the tenant more capital was required to buy in more livestock and also for purchased feeding stuffs if they were used; from the landlord increased livestock usually implied heavier expenditure on new buildings to house them, especially if the farmer concentrated on stall- or yard-feeding.² In the 1850's and 1860's this type of farming spread from mixed farming regions, where it had originated, to the dairying parts of Cheshire and Gloucestershire and into parts of Cornwall and Cumberland which had previously depended on grain.³ Developments after 1879 encouraged further reliance on livestock. Prices of cereals and oilcake fell, acting as a stimulus for farmers to use purchased cattle foods, and the greater efficiency of fattening cattle in covered fold yards, where they put on weight more rapidly with less inputs than if they had been fed in the open, was especially attractive to farmers at a time when profit margins were under severe pressure and every economy was desirable. Furthermore, the fact that the provision of new buildings was, on most estates, the landlord's responsibility relieved the tenant of the need to make outlays in this direction. But even in areas where more intensive methods of cattle feeding were not adopted there was generally still a need for landlords to undertake increased expenditure when greater reliance was placed upon livestock farming. With marginal arable land converted to pasture there would still be a need for extra buildings to carry the increased number of stock in winter, and even the 'arable dairy farming' practised in parts of Essex still required milking parlours and accommodation for the dairy herds.⁴

Thus successful adaptation, whether it was carried out before 1879, or after, required from the landowner a certain level of expenditure, both on land and on farm buildings. The purpose of this article is to examine statistics of income and expenditure on these items for eight estates in different parts of England between 1872 and 1892, and for one estate between 1870 and 1900, to find out the extent to which landlords seemed to be incurring the extra costs of transformation before 1879, and how the process proceeded after that date. Also, some attempt will be made to judge the success of this work by seeing how far

¹ F. M. L. Thompson, 'The Second Agricultural Revolution, 1815-1880', *Econ. Hist. Rev.*, 2nd series, XXI, 1968, pp. 67-8.

² W. Wilson, *British Farming*, 1862, pp. 437-8; W. Wright, 'On the Improvements in the Farming of Yorkshire. . .', *Journal Royal Agric. Soc. of England* [henceforth *J.R.A.S.E.*], XXII, 1861, p. 91; M. Evershed, 'Early Fattening of Cattle', *J.R.A.S.E.*, 2nd ser., XIV, 1878, p. 162; J. A. Clarke, 'Practical Agriculture', *loc. cit.*, pp. 498-503.

³ Jones, *loc. cit.*, p. 229, footnote 4.

⁴ Sir W. Gavin, *Ninety Years of Family Farming*, 1967, p. 86.

large estate expenditures on buildings and land are correlated with small declines in the rents of such estates (Part II). Part III is concerned with a comparison of two sets of estates, namely, the Shropshire and Staffordshire estates of the Dukes of Sutherland and the Bedfordshire and Buckinghamshire estates of the Dukes of Bedford, to see what other factors besides mere levels of estate expenditure affected the success, or otherwise, of agricultural transformation.

II

In February 1894 the second Royal Commission on Agriculture sent out a letter¹ to a number of large landowners in England and Scotland explaining that "The Commission desire to be informed at first hand by the experience of landowners in different parts of the country, of the effect upon rents of the present agricultural depression, as compared with a period of 15 or 20 years ago; and of the way in which the diminution of gross income has been accompanied by a diminution of the owner's outlay under different heads." The Commissioners asked for information between 1872 and 1892, though not all the replies they received went back as far as 1872. Of the thirty replies they got for England some sixteen did so, though not all of these are suitable for purposes of comparison.² In all, eight were found to be suitable, four of these were in counties which were predominantly arable areas and four were in counties where livestock farming predominated. In certain cases, because the landowner did not want his identity to be disclosed, it is not possible to identify the precise location of the estates. (See TABLE I.) In the arable group of estates this problem presents the least difficulty as regards Suffolk which it is admitted was heavily committed to cereal production at this time. Also the Duke of Bedford's estates were described as being largely comprised of "some of the best wheat land in England"³ and the Duke of Richmond has been regarded as the champion of the corn-growing interest;⁴ nor does the inclusion of the Holkham estate in this group require any justification. In the livestock counties, the estates in Cheshire and Northumberland present no problem as these were predominantly livestock counties, and so, too, was Gloucestershire. Also, Harewood Hall was situated in the West Riding of Yorkshire which was predominantly livestock-oriented.⁵

As we would expect, the estates in the arable counties showed a greater fall

¹ *R.C. Agriculture, 1894-97. Particulars of Expenditure and Outgoings on Certain Estates in Great Britain, and Farm Accounts*, p. 4.

² For example, one estate in Middlesex gave no figures for its acreage, and some of the others were plainly very small outlying estates of large landowners.

³ Duke of Bedford, *The Story of a Great Agricultural Estate*, 1897. p. 55.

⁴ Fletcher, *op. cit.*, p. 425.

⁵ *R.C. Agriculture, 1894-97, Final Report*, p. 7 and map facing that page, which defines arable and livestock counties in 1895.

in rents and net estate income than the estates in the livestock counties between 1872-4 and 1890-2. The Cheshire estate was the best off, with a rise in net estate income, and though the major part of this comes from a falling off in expenditure in 1890-2 these years do also see a small increase in rent over the

TABLE I¹

EIGHT ESTATES: COMPARISON OF AVERAGE ANNUAL ACREAGE
RENT, EXPENDITURE, AND NET INCOME BETWEEN 1872-4 AND 1890-2

(²)	<i>Estates</i>	<i>Years</i>	<i>Acres</i>	<i>Rent</i> £	<i>Expen- diture</i> £	<i>Net</i> <i>Income</i> £	<i>Per cent</i> <i>Change</i>
LIVESTOCK COUNTIES							
8-9	An Estate in Cheshire	1872-4	16,110	31,378	13,676	17,702	
		1890-2	16,110	31,890	9,454	22,436	26.7
22-23	An Estate in Northumberland	1872-4	11,333	8,864	4,030	4,834	
		1890-2	11,483	8,023	3,631	4,392	9.2
6-7	An Estate in Yorkshire ³ (Earl of Harewood)	1872-4	28,221	37,396	12,461	24,935	
		1890-2	28,193	31,735	10,375	21,360	-14.4
18-19	An Estate in Gloucestershire (Lord Fitzhardinge)	1872-4	17,379	36,773	10,087	26,686	
		1890-2	18,387	31,742	9,499	22,243	-16.6
ARABLE COUNTIES							
12-13	An Estate in Norfolk ³ (Holkham Estate)	1872-4	44,037	58,833	20,243	38,590	
		1890-2 ⁴	45,177	44,492	14,275	30,217	-21.7
32-33	Goodwood Estate, Sussex	1873-5	14,247	18,550	7,752	10,797	
	(Duke of Richmond)	1890-2	14,247	13,794	5,637	8,157	-24.5
16-17	Estates in Beds. and Bucks.	1872-4	30,619	48,849 ⁵	26,067	22,782	
	(Duke of Bedford)	1890-2	24,634	31,366	17,997	13,369	-41.3
14-15	An Estate in Suffolk	1872-4	15,075	20,182	2,730	17,452	
		1890-2	15,326	11,514	5,160	6,354	-63.6

¹ *R.C. Agriculture, 1894-97. Particulars of Expenditure. . . and Farm Accounts.*

² These are the page numbers of the returns.

³ These estates identified in the *Final Report, Report by Mr George Lambert*, p. 207.

⁴ Return starts in 1873.

⁵ These figures are an overstatement of agricultural rents as those making the return inadvertently included urban property.—Duke of Bedford, *The Story of a Great Agricultural Estate*, 1897, p. 65.

early seventies. At the other end of the scale come the Duke of Bedford's estates in Bedfordshire and Buckinghamshire and the estate in Suffolk. It might be objected that the position of the Duke of Bedford's estates is made to look worse than it really was by the fall in acreage between the two periods;

but even when this is taken into account the net income per acre fell from 16s. 3d. in 1872-4 to 12s. 3d. in 1890-2—a decline of 24.3 per cent—which makes the estates equal with the Duke of Richmond's Goodwood estate. On the Suffolk estate, expenditure does rise in the period 1890-2 but even on this estate the decline in rents between the two sets of dates accounts for the major part of the decline in net estate income, as it does on the other estates.

When the Commissioners sent out the forms of reply to the landowners they left separate columns for the ordinary expenses of running the estate such as rates, taxes, management charges, and repairs to fences and buildings, and for items of extraordinary expenditure, that is, money spent on new buildings and land improvements. However, when they came to the work carried out on the estate very few owners made any distinction between these two classes of expenditure in their accounts.¹ Usually money spent on new buildings was included along with sums spent on maintenance and repairs in the estate building account. From the landlord's point of view this was logical because both classes of work were carried out by the same labour as and when the need for them arose.² However, the failure to make this distinction does create problems if one wants to compare the sums spent on permanent improvements with the ordinary expenditure of the estate. Some estates did make returns with the items for permanent improvements separated but for the sake of comparability all cases considered so far include expenditure on both current and capital items. But TABLES II and III, which deal with expenditure on the actual estate itself, make this distinction where it is possible to do so.

On the four estates in livestock counties, expenditure on land and buildings was at quite high levels in the seventies, in no case being much below 20 per cent of the rent received. On the Cheshire estate the level of expenditure shows a tendency to decline in the late eighties, but this seems to indicate that the transformation of the seventies was a success and allowed the landlord to reduce his infusions of capital without rents suffering to any great extent. This would be in accordance with much of what is already known about Cheshire, which probably fared best of all the English counties during the depression³ because of its heavy concentration on livestock and dairying, especially milk production for which the Lancashire and Merseyside cities provided a buoyant market. Also, the lower level of expenditure on these items for this estate, than

¹ *Select Committee (House of Lords) on the Improvement of Lands*, 1873, Q.1964, 1698-1700.

² R. J. Thompson 'The Enquiry into the Agricultural Land in England and Wales in the Nineteenth Century', *Jnl Roy. Stat. Soc.*, LXX, 1907, p. 602, considered the distinction between 'repairs' and 'permanent improvements' in many cases a purely artificial one. While it would not be fair to charge the cost of improvements, lasting over a number of years, against one year's rent they may be fairly charged against income over a number of years, as their effects would be reflected in the rents.

³ T. W. Fletcher, 'Lancashire Livestock Farming in the Great Depression', *Agric. Hist. Rev.*, ix, 1961, p. 17.

for some others, would seem to indicate that relatively little was required to be spent on the process of transformation. The Northumberland estate seems to have undergone very heavy expenditure on new buildings and land improvements, especially between 1880 and 1885, and it would seem that more expenditure from the landlord was necessary to maintain rents on this estate than on the Cheshire estate. The Gloucestershire estate of Lord Fitzhardinge shows a lower level of expenditure on fresh items, but substantial sums were spent on repairs and maintenance and, overall, the level of expenditure on the fabric of the estate seems to have been very high.

One feature which all the estates have in common is the comparatively high level of expenditure on drainage and land improvements immediately after 1879. This is not surprising as no matter how much the landlord had spent on new buildings the effects of the wet years 1879-81 on the actual land itself were quite independent and most estates could have some land which was particularly badly affected and would have needed immediate treatment to remedy the situation, either by drainage, expenditure on fertilizers, expenditure on grass seeds, or some combination of the three.

As far as the estates in the arable part of the country were concerned (TABLE II) estate expenditure on these items was generally significantly lower than in

TABLE II¹

Years	Estate	<i>Expenditure as a percentage of rent received</i>			
		<i>Repairs, fences, and insurance</i>	<i>New buildings</i>	<i>Drainage and land improvement</i>	<i>Total</i>
1872-9	Cheshire	17.1		4.7	21.8
1880-5		12.2		5.9	18.1
1886-92		6.5		1.7	8.2
1872-9	Northumberland	5.0	18.3	9.1	32.4
1880-5		5.7	29.0	8.9	43.6
1886-92		7.1	17.3	5.8	30.2
1872-9	Yorkshire (Earl of Harewood)	16.8		2.6	19.4
1880-5		12.8		5.0	17.8
1886-92		17.1		4.3	21.4
1872-9	Gloucestershire (Lord Fitzhardinge)	23.6	4.5	2.6	30.7
1880-5		21.4	7.5	8.6	37.5
1886-92		17.3	8.2	2.0	27.5

¹ Same source as TABLE I.

the livestock area; so was it on buildings and repairs. The level was lowest of all on the Suffolk estate where the decline in net estate income was greatest. Here little expenditure on new buildings was undertaken: even in the period 1886-92 work was only carried out during four of those years, and even normal repairs were at a very low level; the column for drainage and land improvements bears the remark "available to ascertain." The accounts of this estate point to very little being spent on transformation either before 1879 or after it. Also, both the Earl of Leicester's Norfolk estate and the Duke of Richmond's Sussex properties exhibited lower levels of expenditure on these items than did the estates in livestock areas. But the Duke of Bedford's Buckinghamshire and Bedfordshire estates do not follow this rule. Here expenditure was higher than on either the Yorkshire or Cheshire estates before 1879, yet the fall in rents and net estate income was much higher. This points to the fact that the landlord was not able to control the fall of rents simply by the size of his expenditure. There were other factors at work about which nothing has been said so far. These factors were, broadly, the frame of mind of the estate management towards meeting changed conditions, and the limitations which the nature of the estate itself imposed on the management in this direction.

TABLE III¹

Years	Estate	Expenditure as a percentage of rent received			
		Repairs, fences, and insurance	New buildings	Drainage and land improvement	Total
1872-9	Norfolk—Holkham	13.9		0.8	14.7
1880-5		15.4		1.5	16.9
1886-92		9.2		0.1	9.3
1873-9	Goodwood, Sussex (Duke of Richmond)	7.9			7.9
1880-5		9.2		Nil	9.2
1886-92		7.6			7.6
1872-9	Beds. and Bucks. (Duke of Bedford)	18.4	10.3	3.6	32.3
1880-5		14.2	7.7	7.0	28.9
1886-92		11.3	4.6	4.5	20.4
1872-9	Suffolk	4.3	0.7		5.0
1880-5		2.8	1.2	Nil	4.0
1886-92		5.8	9.0		14.8

¹ Same source as TABLE I.

Natural limitations would include climate, soil type, and soil fertility which would determine the sorts of farming it was both possible *and profitable* to carry out on the estate. However, the general rule for these eight estates was that the larger expenditures on repairs, new buildings, and land improvements were associated with the smaller declines in rent and net estate income. This was tested by calculating Spearman's rank correlation coefficient between the expenditure on the permanent structure and land of the estates, expressed as a percentage of the rents received over the 21 years, 1872-92, and the decline in rent per acre between 1872-4 and 1890-2. This figure was found to have a value of -0.67 .¹

III

As our concern is to analyse the role of the landlord in this period of agricultural depression, something should first be said about the circumstances of the Dukes of Sutherland and Bedford before we go on to compare their estates. In the first place, both were substantial landowners, having other agricultural properties besides those which are of immediate interest here. In 1892 the properties of the Duke of Bedford comprised 22,845 acres in Lincolnshire, 24,792 acres in Devon and Dorset, and 25,401 acres of the Woburn estate in Bedfordshire and Buckinghamshire—73,038 acres in all.² The Duke of Sutherland was the largest private landowner in the United Kingdom with 1,326,453 acres in the counties of Sutherland and Ross, a mere 1,853 acres in Stitterham, Yorkshire, besides his Shropshire and Staffordshire estates. In all he owned some 1,358,545 acres in 1880.³ Neither of these landowners was wholly dependent on their agricultural properties for their incomes. The Duke of Bedford had substantial urban properties, especially in London, which yielded a steady income,⁴ and the Duke of Sutherland had substantial industrial properties around North Staffordshire and in the Wolverhampton area, which were very profitable in the 1870's. So both these landowners had at least adequate external sources of income which would be used to meet the bills for repairs, new buildings, and land improvements, supposing the normal incomes from the estates were not enough to meet these, and the other costs of running the properties. Also, both landowners took an interest in the welfare of their estates and the progress of agricultural development. The Dukes of Bedford had traditionally fostered experimental agriculture, and since 1876 the resources of the Woburn Abbey home farm had been at the disposal of

¹ For a sample of size 8 this value is significant at the 5 per cent level and implies a real inverse correlation between the two variables.

² Duke of Bedford, *op. cit.*, p. 68.

³ J. Bateman, *Great Landowners of Great Britain*, 1883, p. 361.

⁴ F. M. L. Thompson, *English Landed Estates in the Nineteenth Century*, 1963, p. 336; D. Spring *The English Landed Estate in the Nineteenth Century: its Administration*, 1962, p. 41 where he describes the London property as "perhaps the most valuable land in the world."

Lawes and Gilbert for investigations into livestock feeding and the laying-down of permanent pasture.¹ The Dukes of Sutherland had also shown an interest in agricultural improvements, both in the past by their drainage of a large portion of the Shropshire estate in the 1800's, and in the 1870's when the third Duke spent colossal sums in Scottish land reclamations.²

But despite this similarity in circumstances and attitudes between the two landlords, the financial history of the two estates is distinctly different during this period. The performance of the Duke of Sutherland's Shropshire estate³ is summarized in TABLE IV. As in the case of most of the estate figures taken from the Royal Commission, no distinction was ever made between items of current and capital expenditure when it came to farm buildings and work on land improvements.

A number of points in the pattern of expenditure are important. Firstly, the large amount spent on buildings in the early seventies was caused by the fresh construction of farm buildings and cottages—mainly farm buildings. This suggests that the estate was taking considerable care over transformation, even before 1879, and will be referred to again later, though it is true that not everything was done in this direction before the eighties. A second rise in expenditure in the nineties is accounted for by further work on farm buildings. Secondly, as on so many of the estates looked at so far, particularly those in livestock areas, expenditure on drainage and land implements rises in the 1880's. On this estate it was a reaction to the need for drainage and the conversion of heavy arable land to pasture.

The overall effects of this expenditure was that net estate income was very well maintained throughout the eighties and was in fact higher in the quinquennium 1888-92 than it had ever been in the seventies, despite the fall in rents. The most serious fall in rents and net estate income came between 1893-7, partly as a result of the renewed fall in agricultural prices of the early nineties and the difficult seasons which were bound to have repercussions on rents, and partly as the result of renewed expenditure on buildings after 1892 which reduced net estate income further. The recovery of net estate income in 1896-1900 was due solely to the fact that the management felt it had done all it could by the provision of new buildings, and so in 1896 the

¹ Duke of Bedford, *op. cit.*, pp. 162-4.

² E. S. Richards, *James Loch and the House of Sutherland 1812-1855*, Unpublished Ph.D. thesis, Nottingham University, May 1965; C. G. Roberts, 'Sutherland Reclamation', *J.R.A.S.E.*, 2nd ser., xv, 1879.

³ Information on the Duke of Sutherland's properties came from the Staffordshire County Record Office, series D593, the Sutherland collection [hereafter cited as S.C.R.O. D593]. The Shropshire property comprised land in the east of the county in the parishes of Lilleshall, Muxton, Sheriffhales, Kinnersley, and Longdon-on-Tern. The figures in TABLE IV refer to a constant acreage of farms paying £50 p.a. rental, or more, amounting to 13,953 acres.—S.C.R.O., D593 G/1/24/2-27 & D593 H/14/3/19.

decision was taken drastically to reduce the size of the estate building and other departments. The work done on land improvements was also reduced at this time.

TABLE IV

DUKE OF SUTHERLAND'S SHROPSHIRE ESTATE: EXPENDITURE AND INCOME, 1871-1900
(overlapping quinquennial averages)

	<i>Expenditure</i> ¹				<i>Income</i>	
	<i>Drainage and land improvements</i>	<i>Buildings and repairs</i>	<i>Other</i> ² <i>expenses</i>	<i>Total expenses</i>	<i>Rents from</i> ³ <i>farms of over £50 rental</i>	<i>Net income from farms</i>
1871-5	£ 1,240	£ 7,947	£ 4,790	£ 13,977	£ 23,423	£ 9,446
1873-7	1,543	9,396	4,780	15,719	23,464	7,945
1886-80	2,239	7,927	4,816	14,982	22,590	7,608
1878-82	2,694	6,757	4,778	14,229	22,538	8,309
1881-5	2,985	6,526	4,531	14,042	22,562	8,520
1883-7	2,998	6,045	4,333	13,376	22,228	8,852
1886-90	2,849	5,754	4,120	12,723	22,657	9,934
1888-92	2,529	5,669	4,042	12,240	22,776	10,536
1891-5	2,352	7,056	4,210	13,618	21,675	8,057
1893-7	2,359	7,514	4,406	14,279	20,683	6,404
1896-1900	1,991	5,414	4,273	11,678	20,027	8,349

¹ S.C.R.O. D593 F5/4/10-39.

² This includes general management, rates, taxes, and tithes.

³ Shropshire County Record Office, 673/2/76-81; S.C.R.O., D593 G/1/24/2-27.

Unfortunately it is not possible to present the same sort of breakdown of expenditure on the Duke of Sutherland's Staffordshire properties¹ because this estate, on the edge of the Potteries, contained a fair proportion of urban property besides farms. At times large sums were spent on this town property and the estate accounts are constructed in such a way that it is impossible to separate these sums from purely farm expenditure. Nevertheless, the estate accounts and correspondence indicate a pattern of activity between 1870 and

¹ The Staffordshire property comprised land in the parishes of Trentham, Barlaston, Blurton, Hanford, Normacot, Clayton, and Hanchurch. The estate had an agricultural acreage of 6,505 acres being farms of £50 rental p.a., or over.--S.C.R.O., D593 H/14/2/10 and D593 G/2/6/82.

1900 which was very similar to that carried out in Shropshire. Although it had a high percentage of pasture,¹ the Staffordshire estate was worse off than the Shropshire estate, especially just after 1879, because it had a higher proportion of clayland. The effect of this can be seen in the decline of rents in the early 1880's. On the Shropshire estate the average rent per acre received between 1876-8 and 1882-4 fell by less than 1 per cent. On the Staffordshire estate there was a fall of over $4\frac{1}{2}$ per cent.² But even on the heavy land the fall was not so severe as on the Bedfordshire and Buckinghamshire estates where in 1879 half a year's rent was remitted to the farm tenants, with remissions of 25 per cent in 1880 and 1881 and 10 per cent in 1882. In 1883 and 1884 rents were paid in full.³ On the Bedfordshire and Buckinghamshire estates by 1895 the position was as follows:⁴

Total rental in Bedfordshire and Buckinghamshire in 1878	£43,975
Total amount of rents remitted since 1879	132,222
The revaluation of rents made in 1895, and brought into force with effect from Michaelmas, 1895, was	20,063
Showing a reduction of	23,912
Being (say) 55 per cent.	

Only on the Shropshire estate of the Duke of Sutherland was anything ever approaching an overall revaluation ever carried out, and even this, which was undertaken in 1893, was only partial and amounted to only 6 per cent of the rent proper of the tenants affected, and even with the land tax and the fire insurance for the farm buildings which the landlord now took over at that date, it only came to 8 per cent.⁵

The management's attitude on the Duke of Sutherland's estates to tenants' demands for rent reductions was to resist any demand for a universal reduction. When the tenants on the Shropshire estate presented a petition in 1881⁶ asking for a reduction on the grounds of low prices of farm produce, competition from both foreign grain and cattle, disease amongst their livestock, and the gradual reduction of their capital, the estate was able to reply that: "nothing like a case calling for a general and substantial reduction of rents has been made out, but on the contrary, all have been most liberally dealt with as to buildings. Most of the cases having a special claim have already been assisted and are in course of receiving assistance in a way most likely to render their farms increasingly valuable—and further that there is a majority. . . whose holdings

¹ 75 per cent of the land on the Staffordshire estate was pasture in 1870, rising to 85 per cent in 1900.—Public Record Office, [hereafter cited as P.R.O.] M.A.F. 68 (Parish Agricultural Returns).

² S.C.R.O., D593 G/1/24/2-4 & 8-10; G/1/22/22-24 & 30-33.

³ Duke of Bedford, *op. cit.*, pp. 122-3.

⁴ *Ibid.*, p. 126.

⁵ S.C.R.O., D593 G/4/17.

⁶ S.C.R.O., D593 L/3/69 Memorial from sundry tenants asking for a reduction of rents. (This document gives the estate's reply to the petitioners.)

would let at equal or increased rents." Again in 1893 when a petition caused a reduction, the principle of treating every case on its merits was still adhered to. On the Bedfordshire and Buckinghamshire estates, however, the regular remissions were given as a means of avoiding a revaluation of the estates' rental which the management wanted to avoid at all costs, as it was hoped that circumstances might improve; and if a revaluation were adopted it could not be confined to the Bedfordshire and Buckinghamshire estates. Hence the policy of remissions along with assistance to tenants in the form of laying down land to grass, etc.¹ But the policy was only of limited success and with the revaluation of 1895 the estate finally accepted the inevitable. Thus, though the objects of both estate managements were similar—the avoidance of permanent or "across the board" rent reductions, and the offering of improvements to tenants to help them adapt to the changed circumstances—the outcome in each case was dissimilar.

The reasons for this difference in outcome seem to lie with the attitude of the management and the sort of agriculture which was predominant on the estates. Both the Duke of Sutherland's estates were in livestock counties and were subject to a system of dairying or mixed farming with a strong emphasis on the livestock side. Thus it was possible to concentrate production on livestock as prices for this branch of production improved from the 1850's onwards. In 1858 the Shropshire estate was revalued and from that date, till 1881, something like £80,000 was spent on the farm buildings—the greater part of this being for additions to capital—and about £19,000 on drainage, over £10,000 of this being for fresh work. So something like £90,000 was spent on transformation in the 24 years before 1881. As a result of this the management told the Shropshire tenants in that year that the rise in beef and mutton prices had "fairly met the fall in grain."² The chief enterprise of the Shropshire estate was the fattening of cattle, on grass to some extent, though more were finished off in the winter on oilcakes under cover.³ On the light land in the parishes of Lilleshall and Sheriffhales there was also some concentration on sheep and barley,⁴ the sheep being folded on the root crops one year and on the barley enriched with their manure, the next. But on the Bedfordshire and Buckinghamshire estates the first place was given to corn-growing and the 1850's and 1860's saw increasing emphasis on this crop.⁵ Against this sort of background the unpreparedness of these estates for the changes after 1879 is not surprising.

The experience of the Duke of Sutherland's properties after 1870 also

¹ Duke of Bedford, *op. cit.*, pp. 182-3.

² S.C.R.O., D593 L/3/69.

³ *Ibid.*

⁴ G. W. Robinson, *A Survey of the Soils and Agriculture of Shropshire*, 1916, p. 29.

⁵ W. Bennett, 'The Farming of Bedfordshire', *J.R.A.S.E.*, XVIII, 1857, p. 17, where the author refers to the Duke allowing a tenant to break up second-rate pasture for corn-growing.

points to a more or less successful process of transformation. Nationally the numbers of sheep dropped after 1879 but this did not happen on the Shropshire estate. In 1870 the density of stocking was 86 per hundred acres of pasture; it was the same in 1885, but by 1900 it had risen to 95 sheep and lambs per hundred acres. Also the acreage of barley on the estate, which was 8 per cent of all arable and pasture land, was 10 per cent in 1900. The fattening of cattle continued to develop. In 1870 the ratio of calves to every hundred cows in milk and calf was 94, but by 1900 this figure had reached 194, which points to an increased tendency to fatten more calves bred on the farm instead of buying in from outside.¹ All this seemed to point to increased agricultural production on the estate by 1900 which was a sound basis for the preservation of rents. On the Staffordshire estate, dairying developed despite the decline in the farm manufacture of cheese after 1875.² The Potteries provided a ready market for fresh milk, and so did London for those farms which were conveniently placed for reaching stations on the London and North Western Railway line.

All this is not to deny that the years after 1879 imposed something of a strain on the management of the Duke of Sutherland's properties, but the cost was nowhere near as great as for the Duke of Bedford. For instance, if we consider the burden of farms in hand, between 1880 and 1899 these cost the Shropshire estate £4,398, or an average of £220 per annum.³ On the Bedfordshire estate only, however, the cost of farms in hand amounted to £23,116 between 1879 and 1896, or an average of £1,284 per annum.⁴

The sort of assistance offered to tenants on the Duke of Sutherland's estates after 1879 appears to have been thoroughly in keeping with the needs of the times. On both estates farmers were provided with Dutch barns for the storage of fodder during the winter. The Dutch barns consisted of a galvanized iron roof resting on iron supports and needed far less maintenance than an ordinary barn. Also they saved the farmer the annual expense of having to pay for hay ricks to be thatched, which was important at a time when labour costs were rising; straw also tended to be scarce as less corn was grown, especially on the Staffordshire estate. On the Shropshire estate, some tenants were offered covered fold yards to assist the winter fattening of cattle⁵ and one was given a small railway along which fodder trucks full of feeding stuffs could be pushed, to save on labour costs in stall-feeding.⁶ In addition, heavy arable was drained and converted to pasture on both estates as and when circumstances demanded.

In contrast the response to changing circumstances was never so positive on

¹ P.R.O., MAF 68.

² *Agricultural Gazette*, n.s., vi, 20:8, 1877, p. 185.

³ S.C.R.O., D593 F/5/4/20-39.

⁴ Duke of Bedford, *op. cit.*, p. 185. These sums are not included in the figures for expenditure in TABLES I and IV.

⁵ These were offered to some tenants on the Shropshire estate in 1893 in lieu of rent reductions.

⁶ S.C.R.O., D593 K/5/2/16 749-50.

the Bedfordshire and Buckinghamshire estates, nor, when it was attempted, was it followed by such successful results. This was partly because these estates were forced to incur a large proportion of the expenses of transformation all at once, whereas they had been more evenly spread out on the Duke of Sutherland's estates. Also the job was much larger on estates which were largely geared to cereal production than on those where livestock already predominated. But it seems that the attitude of the management also contributed to the difficulties after 1879, being unaware of the reasons for change and psychologically unprepared to make these changes. Writing of the views of those responsible for the Bedfordshire and Buckinghamshire estates in 1880, the Duke of Bedford said:¹ "Agriculturists and the nation at large were alike insensible to the real character of the depression. Nevertheless the causes at work were not obscure even in 1880. The gust of prosperity consequent on the continental wars of 1870 and 1877-78 had spent itself. Cheap marine transport had already thrown open the English market to the cereals of four continents. . . It is easy to be wise after the event, but it is strange that a catastrophe which was no longer merely impending but had actually taken place should have been regarded by those best able to judge as a passing cloud."

However, it must be emphasized that this was certainly not the attitude of those responsible for the management of the Duke of Sutherland's properties at that time. Both before 1879 and after, the situation had been correctly appraised and sufficient steps taken to deal with it. In 1879 the agent for the Shropshire and Staffordshire properties reported to his employer² that "heavy land will generally not now bear the cost of cultivation with the corn prices which, so far I think, may be taken as practically permanent and therefore. . . a change from arable to pasture is desirable—on the ground that so far as can be judged from experience it will yield more rent in that form than in any other possible at present. *This has been long recognised here and a good deal has been done in the direction of this change.*"

On the Bedfordshire and Buckinghamshire estates, in contrast, heavy land appears to have been infrequently, if at all, seeded down before 1879. We are told that in 1881 the ninth Duke of Bedford "anxious to gain experience in this direction" had 64½ acres of arable, whose rental had been 27s. an acre in 1878, seeded down to grass. The operation cost £10 os. 6d. an acre initially and a further £5 an acre for incidental and necessary outlays: in the valuation of 1895 this land was put at 5s. an acre.³ The problem here was that on the extremes of heavy clay and light sands, where the natural fertility of the soil was

¹ Duke of Bedford, *op. cit.*, p. 181.

² S.C.R.O., D593 K/3/9/65 G. Menzies to the Duke of Sutherland, 6:9:1879 (Italics not in the original.)

³ Duke of Bedford, *op. cit.*, pp. 196-7 and p. 204 for further examples.

limited, it was impossible under any circumstances to make an expensive conversion to pasture pay. Between 1880 and 1895 the landlord converted 1,308 acres on these estates to pasture, but large areas were also converted by the tenants or else just allowed to "tumble down".¹ This last feature was entirely absent on the Duke of Sutherland's estates where all conversion to pasture was carried out properly, with manures and seeds from the landlord. This experience would seem to point to the fact that the Bedfordshire and Buckinghamshire estates contained a proportion of marginal land which it was profitable to turn to corn production when prices were high, but which was profitable for neither cereal nor intensive grass production after 1879 and 1885 when the prices of both corn and livestock had declined. Under these circumstances the landlord's verdict² was: "It is best to accept the situation and accept that these lands must revert to the condition they were in before the then high price of corn justified their being broken up and brought into cultivation. If they only produce a rental of 5s. an acre it is more profitable for the landowners and farmers than if the latter lost £5 an acre by corn growing."

IV

If the examples quoted from the Royal Commission are representative, it would seem that there was a broad correlation between the amount a landlord spent on the farms on his estate and the extent to which rent levels were maintained after 1879. Also, it would seem that landlords in livestock areas were generally willing to spend more money on their estates than landowners in the arable part of the country, both before and after 1879. The relative reluctance of landowners in the arable districts to spend money before 1879 may have been because they thought it unnecessary to do so while cereal prices were being maintained. Their failure to do so afterwards may have been because they found the costs of transformation, especially for heavy land, coming with the precipitate fall in rents, too much for them to meet. However, the availability of capital to the landlord is not the only variable which has to be taken into account. The comparisons made between the Duke of Bedford's arable estates and Duke of Sutherland's livestock-producing estates show that both the attitude of their managements and the limitations imposed by climate and soil types played an important part in affecting the success of any schemes adopted. The Duke of Bedford's managers who had stuck to cereal production in the 1860's showed more inertia and reluctance to accept changes in the structure of farming after 1879 than the managers of the Sutherland estates, who were prepared to do everything to encourage the extension of livestock production, even before the situation regarding cereals had reached calamitous proportions. But even as late as 1880 the appreciation of the situation by the management of the Bedford-

¹ Duke of Bedford, *op. cit.*, p. 203.

² *Ibid.*, p. 206.

shire and Buckinghamshire estates was still incomplete, and this incomplete appreciation led the management to apply measures which only imperfectly answered it. Perhaps a more satisfactory solution would have been achieved if the estate had accepted from the start that rents on this sort of land were bound to fall and that the answer was to encourage the tenants to try new systems of farming,¹ or else for the estate to run the farms which came in hand under a rigorous system of management,² paying strict attention to costs, with the object of making a profit, instead of spending money on the costly conversion to pasture of land which was really unsuitable for such treatment.

¹ *R.C. Agriculture, 1894-97, Final Report, Report by G. W. Lambert*, pp. 205-6 and *Report by F. A. Channing*, pp. 251-8 for accounts of successful farming, many in predominantly arable districts.

² F. M. L. Thompson, 'Agriculture since 1870', *V.C.H. Wiltshire*, IV, 1959, p. 197; Gavin, *op. cit.*, p. 86.

Letter to the Editor

MADAM,—My attention has been drawn to Dr Chaloner's note on p. 161 of volume 17 of the *Agricultural History Review* in which he writes, "It would be interesting to know when the first British broiler plant was established."

I believe that, as a result of a Nuffield Farm Scholarship in 1952, I was the first to establish a broiler plant in the U.K. in 1953, with my partner, Fred Fitz, under the name of Fitz and Sykes, Oakley Farm, Dinton, Salisbury, with 3,000 birds. We expanded in May 1953 to 6,000-bird capacity. We developed this plant in an ex-Army camp. By the end of 1953 a number of such plants were in operation in the U.K.

The lag between the establishment of the broiler industry in America and in Britain requires explanation. It is not difficult to account for it from 1939 onwards. Feed to poultry and pigs was restricted by the rationing system from September 1939 to September 1953. In this period, the broiler industry was a practical impossibility. As a result of this rationing, our pig and poultry industries went through a protracted period of technical stagnation. On the other hand America and Canada

in the war and post-war years were producing big harvests of feed grains which they could not export. Moreover, the war generated an increased demand for animal products. Hence, over this long period, the U.S. and Canadian poultry and hog industries blossomed in many respects.

The modern poultry industry is, of course (together with the farming of fish), the most efficient method today of producing animal products economically. By 1953 the Americans and Canadians had managed to evolve a low-cost animal production technology, whilst war-torn Europe, with its vast populations requiring *economically produced* proteins, was in no shape to do so. Thus the great contribution of our broiler industry lay in successfully pioneering business procedures such as vertical integration which rapidly put this right throughout Europe.

GEOFFREY SYKES

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