AGRICULTURE AND AUTHORITY - RESPONSSES TO THE FOOD PRODUCTION CAMPAIGN 1917 - 1918

by

CHRISTOPHER M. REASON B.A.

A thesis submitted for the degree of Master of Social Science.

Department of Economic and Social History
Faculty of Commerce and Social Science
University of Birmingham
1982
SYNOPSIS

The aim of this thesis is to examine aspects of the food production campaign of 1917 - 18, and to test the strength of existing conceptions about its methods, problems and results.

Histories of the period regard the campaign as a significant success at all levels and tend not to delve too deeply into the mechanics of food production. As a result, little detailed investigation has been made of the degree to which compulsion was needed to ensure the co-operation of farmers; there is still considerable confusion surrounding the question of labour shortage and supply; and a somewhat limited appreciation of the contribution made by new machinery, especially tractors.

These issues are discussed with reference to both national and local experience, drawing in particular upon the surviving records of various War Agricultural Executive Committees. Evidence from these sources suggests that compulsion was far from sparingly used, that the shortage of labour was less than contemporary writers believed but subject to significant local variation, and that the tractor programmes may have been of greater value in some cases than is generally supposed.

The final chapter assesses the overall impact of the campaign and argues that the uncertainty surrounding the government's long term plans for agriculture, and the resentment engendered by the methods employed to achieve success, resulted in the food production drive having a negligible influence on the immediate post-war period.
I am indebted to Dr. W. R. Garside B.A. PhD for his constructive supervision of this thesis; to my brother David Reason B.A., Lecturer in Sociology at the University of Kent; and to my family for their support and encouragement at all times.
## CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>CHAPTER ONE</td>
<td>THE ORIGINS OF FOOD PRODUCTION POLICY</td>
<td>4</td>
</tr>
<tr>
<td>CHAPTER TWO</td>
<td>THE QUESTION OF COMPULSION</td>
<td>23</td>
</tr>
<tr>
<td>CHAPTER THREE</td>
<td>THE SUPPLY OF LABOUR TO AGRICULTURE</td>
<td>45</td>
</tr>
<tr>
<td>CHAPTER FOUR</td>
<td>THE ROLE OF NEW MACHINERY</td>
<td>83</td>
</tr>
<tr>
<td>CHAPTER FIVE</td>
<td>THE FINAL RECKONING</td>
<td>96</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td></td>
<td>110</td>
</tr>
</tbody>
</table>
INTRODUCTION

The task of providing sufficient food to meet the needs of the civil population during the First World War involved two distinct operations - food production and food control. The former concentrated upon increasing the amount of arable land being cultivated in Britain and sought to mobilise the agricultural community through the offices of the County War Agricultural Committees, while the latter involved the organisation and regulation of supplies to the consumer - in some cases by means of rationing.

In the third volume of his memoirs, David Lloyd-George stated that "the food question ultimately decided the issue of this (the Great) War", suggesting that without the increase in production that he himself did much to encourage "the consequences might have been as serious here as they were in Russia and afterwards became in Germany."

The official histories of food production and food control, published in the 1920s, confirm the Prime Minister's view of the importance of this work and remain the most comprehensive survey yet produced. Indeed few studies of this aspect of the First World War have appeared in the last half-century, and of these only P. E. Dewey's work on agricultural labour supply presents any significant challenge to established ideas about farming in this period.

2. Ibid. p. 1294
3. MIDDLETON T. H. BEVERIDGE W. Food Production in War. Oxford 1923
   British Food Control. Oxford 1928
   The Economics of Wartime Shortage. Durham (N.Ca.) 1963
   State Intervention in Great Britain. New York 1949
5. DEWEY P. E. Agricultural Labour Supply in England and Wales during the First World War. EcHR 28 (1) 1975 pp. 100 - 109
   Government Provision of Farm Labour in England and Wales 1914 - 18 AHR 27 (2) 1979 pp. 110 - 121
The aim of this study is to examine aspects of the food production campaign and more particularly to test the strength of existing conceptions about its methods, problems and results. It will investigate the degree to which compulsion was necessary to achieve the campaign's objectives; the scale and severity of the apparent labour shortage caused by competition between agricultural requirements and military recruitment; the impact of the attempt to mechanise farming, principally through the introduction of tractors; and the success and significance of the campaign as a whole.

While the administration and organisation of this campaign and the daily responsibilities of its executive branches have been quite accurately portrayed in previous texts, only deeper investigation can provide a detailed impression of the way in which policy was implemented, and reveal the full extent of the campaign's contribution to the war effort. In this respect local sources are particularly valuable. The records of many Agricultural Executive Committees were destroyed between the wars, but four major collections have survived. These are to be found in the County Record Offices at Bedford, Huntingdon, Norwich and Worcester. The Public Record Office also holds a number of papers relating to the management of the food production campaign, including a selection designed to illustrate the routine work of an Executive Committee which refer to the county of Essex. Before the First World War, Bedfordshire, Essex, Huntingdonshire and Norfolk were all geographically within the East Anglian region, where the area of arable land consistently exceeded that of pasture and one third of the country's wheat acreage was concentrated. In some areas dairying had developed in response to the effect of the Great Depression of the late nineteenth century, particularly on the heavier soils in parts of Essex and Huntingdon, while elsewhere in Essex and in Bedfordshire important market gardening centres flourished, supplying nearby London. But these were predominantly arable counties, and as such they possessed less potential for increased food production than a county like Worcestershire.
Here grassland predominated. Some farmers practised a fairly regular four course rotation of two years grain (either wheat or oats), one year fodder and one year rotation grass, and there were also prosperous market gardens supplying the Midland cities. However, the bulk of the county was given over to permanent pasture, a sizeable proportion of which had been laid down in the twenty years prior to 1914, as the following table illustrates.

<table>
<thead>
<tr>
<th></th>
<th>1874</th>
<th>1884</th>
<th>1894</th>
<th>1904</th>
<th>1914</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arable</td>
<td>206,136</td>
<td>176,885</td>
<td>155,889</td>
<td>140,735</td>
<td>123,137</td>
</tr>
<tr>
<td>Permanent Grass</td>
<td>184,753</td>
<td>225,910</td>
<td>247,880</td>
<td>259,403</td>
<td>260,585</td>
</tr>
<tr>
<td>TOTAL</td>
<td>390,889</td>
<td>402,765</td>
<td>403,769</td>
<td>400,138</td>
<td>383,722</td>
</tr>
</tbody>
</table>

Wheat and barley had been reduced by 59% and 70% respectively over this period, and although there was an increase in the acreage under oats this was prompted by its usefulness as a food for livestock. The number of cattle for example had risen from 62,017 to 73,565. Under these circumstances, the war years witnessed both a reluctance on the part of the farmers to follow a food production policy based upon the conversion of grassland to arable use, and a determination on the part of the Agricultural Executive Committee to make the best possible use of the available resources by whatever means necessary.

The scarcity of comprehensive local material of necessity focuses attention on particular regions. Therefore, although it can be argued that the places for which records do exist are fortuitously representative of a much wider area, to avoid any loss of perspective conclusions based upon evidence drawn from one region (in this case primarily from Worcestershire) are supported wherever possible by evidence from other local or national sources.

When Britain went to war with Germany on August 4th 1914, there was a general expectation that the fighting would be over in a few months. The lessons of the American Civil War were overlooked, as were those of the more recent war between Russia and Japan, where the Battle of Mukden was an awful portent of the horrors to come. Generals and politicians alike recalled the swift decisive actions of 1870 and looked upon those who forecast a lengthy struggle with incredulity. Even Lord Kitchener's view that the war would last three years and require an army of a million men was dismissed as 'unlikely if not impossible'. The fighting would be over by Christmas and young men rushed to the colours lest the end should come before they had tasted action.

A logical consequence of this view was that little thought was given to the economic effects of a European war. If it were as short as expected the level of dislocation, though inconvenient, would at least be manageable, while if it were to last into 1915 there would be ample time to consider any wider implications and deal with them accordingly. 'Business as usual' was not just a sop to public opinion but a tenet of official government policy. Nowhere was this attitude more prevalent than within the agricultural community. In 1905 a Royal Commission had reported on the supply of food and raw materials in time of war. It regarded the wide variety of sources from which Britain's supplies were drawn as being a major guarantee of her continuing security, particularly as more came from foreign countries than British possessions and was thus held to be less vulnerable to disruption - assuming of course that all belligerents accepted the rights of neutrals. The report went on to state that

"while there will be some interference with trade and some captures, not only is there no risk of a total cessation of our supplies, but no reasonable probability of serious interference with them, and that even during a maritime war, there will be no material diminution in their volume." ¹

After all, between 1815 and 1914 British farming had remained completely untouched by the effects of wars in Europe. It was natural therefore that there should have been a feeling that this state of affairs was irreversible. Thus, in 1914 Lord Lucas (the President of the Board of Agriculture) could announce with certainty that he saw

"no occasion whatever for public alarm over food supplies." ²

There were five months supply of bread corn within the United Kingdom, and six weeks supply of imported wheat. Soon the harvest would be gathered - what need was there to plan beyond this?

Those who viewed the immediate future with greater apprehension were not slow to point out the inherent foolishness of this argument. When the Royal Commission had reported there were still two years to the rapprochement between Britain and Russia and the conclusion of the 'Triple Entente'. The Royal Navy still ruled the waves. Nevertheless the alliances that had already been sealed pointed to the probability of French and Russian involvement in a general European war, while the naval race with Germany had already begun to alarm the Admiralty, the Government and the nation. Neither situation was to improve over the next few years - indeed the Moroccan crisis of 1911 highlighted the growing involvement of Britain in a European power struggle that was becoming increasingly dangerous. How strong therefore were the grounds for believing that merchant shipping would remain inviolate, or that the 19% of imported wheat supplied by the Russian Empire would continue to arrive? By the early twentieth century imports accounted for three quarters of the wheat consumed, more than half the butter, cheese and pigmeat, and about two fifths of the

1. ROYAL COMMISSION. *Supply of Food and Raw Materials in Time of War* Cd. 2643 1905 p. 59
2. WHETHAM op. cit. p. 70
beef, mutton and lamb. In such circumstances, the fleet might in the event of war be able to keep the seas open, but it could not control the actions of foreign and domestic speculators, nor allay fear of shortages on the part of the civil population. Moreover if imports were severely disrupted some provision would have to be made for the increase of home production. A more thoughtful policy was therefore a necessity. It need not have required immediate implementation - indeed it might not have had to be implemented at all; but the situation required careful monitoring, and the problem had to be faced so that adaptations to changing circumstances could be made as quickly as possible.

However, government planning in economic matters was not yet commonplace and would have been regarded as an unwelcome interference. The old principle of 'laissez-faire' may have been compromised in the fields of social welfare and education, but it still held sway in industry and business, while in farming conservative traditions were even more difficult to overcome. The prosperity of Britain had been viewed for so long in terms of industrial output that the condition of agriculture had been neglected for a number of years, and farmers were naturally contemptuous of the sudden interest in their activities.

Its declining importance is clearly indicated by the fact that the agricultural contribution to the gross national product fell from 20% in the late 1850s to less than 10% in 1890, and to less than 7% by the outbreak of war. Much of this period coincided with the Great Depression in agriculture, chiefly the last quarter of the nineteenth century - a period of contraction, deprivation and transformation in which the government played a characteristically negative role, and the lessons of which were fresh in many minds. Contemporary writers emphasised the appalling weather of the late 1870s, when heavy rainfall and snow, flooding and frost, below average summer temperatures and reduced amounts of sunshine, accompanied by outbreaks of disease, brought distress of almost Biblical proportions to much of agrarian Britain. Nowadays the significance of meteorological factors is regarded as the manner in which they misled the agricultural community into believing that the collapse of High
Farming (which they had come to accept as the norm) was a temporary phenomenon, thereby blinding them to the reality of their international trading position. Historians are agreed that the root cause of the Depression lay in the delayed effect of the abolition of the Corn Laws in 1846. Following improvements in transport which opened up the markets of western Europe to the producers of North America, British farmers faced severe competition. Between 1870 and 1900 grain imports rose from 30 million cwt. to almost 70 million cwt. as the cost of moving a quarter of wheat from Chicago to Liverpool fell from 15/11 to 3/11. They could not hope to meet such a challenge, for offsetting the effects of a string of poor harvests had drained many of them of their accumulated capital and left them without the means to increase efficiency.

The most striking feature of the Great Depression, and the one which was to have the most far reaching consequences, was the collapse of the price for home grown cereals. Oats and barley were affected first, wheat prices holding firm until 1882. However from 1882, and an average price of 45/- a quarter, wheat fell to 24/- a quarter in 1894, precipitating a period of acute financial distress for arable farmers. Evidence to this effect abounds in the report of the Richmond Commission, appointed by the government in 1881 to assess the state of agriculture. 1 Here too is evidence of the degree to which all blame was laid upon the weather. Of course, the depression was by no means uniform in its effects nor necessarily destructive. However much individual farmers may have complained about their financial difficulties, those who farmed the heavy clay soils of eastern England bore a far heavier burden than those of the largely pastoral west and north. In many areas new forms of agriculture were developed in response to the absence of profit from traditional pursuits, and quickly became established in their own right. Paramount among these was market gardening,

which developed in areas close to the major conurbations. Nevertheless, it is impossible to ignore the general trend towards an increase in livestock farming and the conversion of arable to grassland.

In many respects this was the inevitable solution to the farmer's problem. He received little assistance from the government. Farming had acquired some grants for research, a few County Council smallholdings, new laws relating to the control of disease among livestock and the adulteration of feeding stuffs, and the guiding hand of the Board of Agriculture. But the national interest was best served at this time by providing the industrial workforce with the cheap food made available by the rising tide of imports, not by protecting the home producer. The farmer had to fashion his own salvation and those who had escaped the worst effects of the Great Depression did so by adopting a form of husbandry which involved small risk, reduced effort and expenditure, and a regular if modest profit. In the hard hit counties of the Midlands and the East thousands of acres were converted from arable to grassland. There was a steady increase in the number of cattle in almost every county, so that by 1911 there were over seven million, while between 1875 and 1895 the area planted to wheat fell from three million to less than one and a half million acres, the lowest total on record. In all some two and a half million acres of land had been laid down to pasture by the turn of the century. For the resulting grass to be of real value the job had to be done very thoroughly. The ground required careful weeding and regular dressings of farmyard manure and fertiliser, together with an initial outlay on stock, fencing and possibly water supply. Inevitably therefore some land might be more accurately described as abandoned rather than converted. Large areas of marginal land were barely fertilised and inadequately drained, with overgrown hedges and broken fences. In his latter day 'rural rides' on


behalf of The Times newspaper, A. D. Hall came across just such an area between Stratford upon Avon and Droitwich:

"a poor country, as badly farmed as though it were a thousand miles from a market. On the low limestone hills, field after field was entirely derelict, given over to briars and rabbits, with the stones protruding through the thin scurf of vegetation ... For such entire neglect there can be no excuse in England."

Nevertheless, progress was such that the census of agricultural output taken in 1908 recorded the value of dairy produce sold from farms in Britain at about £30 million, or about 20% of the total, while the value of livestock marketed annually after deducting the cost of imported feeding stuffs amounted to about £125 million.

By the outbreak of war therefore, the adaptation to livestock farming was well advanced. There were also small improvements in crop yields stemming from the technical and scientific work of the previous decade. The fact that British farming continued to tolerate average standards of production well below the potential capacity of the cultivated land seemed to worry few contemporaries. Some agriculturists regarded the outlook as hopeful. Rowland Prothero (later Lord Ernie) assessed the state of the industry as 'sound and prosperous', Ernest Pulbrook observed that the system 'provided a living and was leading to quiet prosperity such as it had not known for many years', while T.H. Middleton recognised the wisdom of changes which had restored 'the bankrupt system of the 1890s' to prosperity and solvency.

1. HALL A. D. A Pilgrimage of British Farming London 1913 p. 185.
2. Rider Haggard believed the only bar to the wider adoption of dairying was the difficulty of getting young men and women to work with cows, especially on Sunday. Quoted in WHETHAM E. H. and ORWIN C. S. A History of British Agriculture 1846 - 1914 Newton Abbott 1971 p. 344.
4. Quoted in PERRY op. cit. p. 17.
6. MIDDLETON op. cit. p. 6.
farmers were loath to abandon the security of livestock farming and lend their support to a government policy that might well go against their immediate interests and prejudice their long term stability. Until food shortages became a reality there was little sense in planning or executing a food production programme.

II

Like all the great European powers Britain possessed a 'War Book', detailing measures drawn up by the Committee on Imperial Defence to deal with problems arising from the outbreak of hostilities. However, little mention was made in this context of any likely problems relating to food beyond a decision to obtain certain information. Although this was in keeping with prevailing British attitudes, it was in direct contrast to Germany where a conscious and successful effort was being made to increase the productivity of the land. Agriculture in Britain continued to be regarded simply as another industry, with no claim to special status. As a consequence, its mode of production was determined solely by considerations of profit.

Under such circumstances it is hardly surprising that farmers took a dim view of suggestions that they should make immediate efforts to increase production. Thus the important question was not 'how much can I make my land produce' but 'how much can I afford to produce at present prices?', and although to withhold from cultivation land that was expensive to plough diminished the degree to which home produced food might be increased, farmers and their supporters defended themselves keenly against the charge that such action was 'unpatriotic'. Rowland Prothero (who was later to play an important part in the Food Production campaign) argued the following case:
'He (the farmer) cannot reasonably be expected to sacrifice his livelihood any more than an artisan can reasonably be asked to give his labour for nothing. He is only unpatriotic if he takes an unfair advantage of the national necessities by exacting extortionate profits or shirks his fair share of the national burdens or makes unreasonable use of the land which is not only private property but a national asset.'  

Clearly, for the first two years of the war majority opinion held that definitions of unreasonable use did not include the maintenance of large areas of pasture. The undoubted cause of this was that over this period there was no appreciable shortage of food and therefore no apparent need for drastic action. 'Business as usual' was the motto and the method.  

However, this is not to say that there was no sign of impending difficulty, or that the war had not affected the agricultural community. One immediate effect had been the loss of the sugar supplies from Germany and Austria, and interference in trade with Russia, which increased sharply after the entry of Turkey into the war and the closing of the Dardanelles (October 1914). South American meat supplies were also threatened, partly because shipowners had suspended their contracts with the meat companies, and thereby triggered an increase in freight costs, but more especially because the disruption of international finance left the companies without the means to buy cattle or pay wages overseas. Concern about the continuing supply of wheat quickly led to government action, and the setting up of a Wheat Commission empowered to make bulk purchases of stock. (A similar organisation was also established to guarantee sugar supplies). The secret buying of wheat by this Commission continued throughout 1915 and 1916, with the result that from the spring of the latter the government continuously held a large stock of wheat. Those who argued that this clandestine action had raised prices unnecessarily found the government invoking 'the national interest' in its defence. However, price  

rises (of bread and other essential foodstuffs) were becoming a major cause of unrest and belied the assurance of plenty that remained the basis of official policy.

Employment Exchanges were required to submit lists of the prices of basic items in their areas to the Board of Trade each week. The data shows that, compared to July 1914, the retail price index had risen 16% by the end of the year, 32% by July 1915 and 84% by the end of 1916. In February 1915, Labour MPs forced a parliamentary debate on this issue, and claimed that many labourers were getting only one good meal a week. In reply, the Prime Minister Mr. Asquith admitted that the cost of certain items had risen dramatically (notably flour, sugar and imported meat), but justified government inaction on the grounds that these rises were no more severe than those which had followed the Franco-Prussian War of 1870-71. For farm labourers this statement was particularly disappointing. Although wages had increased in some trades, theirs had fallen markedly and this became the basis of the main criticism levelled against farmers in the first years of war. An early manifestation of discontent was the outcry over the employment on farms of schoolboys, at rates of pay well below those of adults. Reluctance to increase wages in line with prices also fuelled suggestions that farmers were making excessive profits, and their protestations of innocence were not helped by newspaper stories to the effect that the farmer was 'having the time of his life'.

Certainly agriculture had been affected by loss of manpower and horses, and by the interrupted supply of imported feeds and fertilisers. Nevertheless, by September 1915 the wheat acreage had been increased by 22% and that of oats by 7%, while the area under potatoes was being maintained at the level of the previous year. Without doubt the prime motive had been not patriotism.

1. BEVERIDGE op. cit. p. 322
2. MARWICK A. The Deluge Harmondsworth 1967 p. 42
3. MARWICK ibid. p.96 GREEN F. E. The English Agricultural Labourer London 1920 p. 235
4. The Times March 15th 1915
5. REW R. H. Food Supplies in Peace and War London 1920 p. 46
but self-interest, and the profit that could be made from the sudden value of previously uneconomic products. That the government was not unduly alarmed about agricultural production is apparent from the fact that no appeal was made to the patriotism of farmers until September 1915. It was only in rejecting the proposals of the Committee on Agriculture, established in June of that year under the chairmanship of Lord Milner, that the government called upon farmers to increase production in order to assist 'King and Country'. However, by the end of 1916 the limits of voluntary action had been reached and major increases could only be achieved by the breaking up of grassland.

III

The revitalisation of arable farming had been a subject dear to the hearts of many in pre-war years. The drift from the land and the 'neglect' of agriculture was said to have exercised a depressing influence upon the nation. A rediscovery of the concept that production and productive capacity was of paramount importance was regarded as a necessity -

"and of all forms of productive capacity there is none more vital, indispensable and steadying than the application of human industry to the cultivation of the soil." 1

In the summer of 1915 there appeared the first indications that mounting concern over the rising cost of food, coupled with the belief in certain quarters that home production should be increased, would provide the pretext for the eventual state control of food production and distribution. In June, Lord Milner's Committee on Agriculture had been asked to report:

"on what measures, if any, were desirable to increase the output of agriculture in England and Wales, assuming that the war would continue beyond the harvest of 1916."

Faced with evidence of a 26% reduction in plough land since 1872, a 54% decline in the area sown to wheat between 1870 and 1914 and an increase in population of about 30% over the same period, the Committee felt disposed to make recommendations that would enable the government to direct agricultural policy. Guaranteed prices and markets were recommended for a period of four years, whether or not the war continued beyond 1916. A minimum price of 45/- was suggested for wheat, to be implemented as a deficiency payment on all marketable home grown produce when the 'Gazette' price fell below that of the guarantee. To guard against the possibility that farmers might be paid for wheat they would have grown anyway, they would be required to prove that at least 20% of their land was under wheat, or that the area had increased by that amount since October 1913. The Committee also thought that a guaranteed price would enable farmers to offer higher wages, thereby inducing former agricultural workers to return to the countryside, and to undertake the ploughing of pasture - particularly where this had been laid down on arable land. Their final recommendation was that County Councils should appoint Agricultural Committees to supervise an increase in food production in their areas.

However, despite having appointed the Committee, Mr. Asquith and his government rejected the proposals. By way of explanation, the Minister of Agriculture, Lord Selborne stated that

"in view of the superabundant harvest in Canada and Australia, and in view of the great financial stringency which will certainly prevail after the war, the Government decided that they would not incur the additional responsibility involved in the guarantee."

1. Quoted in WHETHAM op. cit. p. 75

2. Quoted in LLOYD-GEORGE op. cit. p. 1272
Guaranteed prices had not been recommended by the Committees dealing with Scotland and Ireland, and as yet the submarine menace had not reached a sufficiently dangerous level to increase official anxiety about food supply. The one tangible result of the Committee's labours was the adoption of the County Agricultural Committee as a link between the Board of Agriculture and the farmer - a move which was to have an important effect in later years.

Nevertheless, the final report of the Milner Committee, published in October 1915, reiterated the belief of the majority of its members that a more intensive cultivation of land was vital, not only to the war effort but for the stability of national life in the post war world,

"for then the nation's indebtedness will have reduced the purchasing power abroad, and the need will be felt for the extra employment that arable land provides."

By mid-1916, the wisdom of the Asquith government's initial response to the Milner proposals was being called into question. Food prices were still rising, and some commodities were becoming scarce. Moreover, the spring had been cold and wet and prospects for the coming harvest were not good. In response to this situation, a second Agricultural Policy Committee was established under the chairmanship of Lord Selborne. Working under the auspices of the Ministry of Reconstruction, the Committee's terms of reference dealt exclusively with post-war planning. In practice, many of its recommendations were regarded as applicable to wartime conditions. Giving evidence before the Committee in October 1916, Lord Crawford, the President of the Board of Agriculture, argued in favour of a plough policy designed to restore former arable land to the production of cereals. There was no industry in the country with a greater capacity for expansion than agriculture, and he was satisfied that a substantial increase in the production of home grown foodstuffs could be attained without detriment to the output of meat and milk.

1. Report on Home Grown Food Supplies Cd. 8095 1915 p. 4
2. Agricultural Policy Sub-Committee. Summaries of Evidence Cd. 9080 1918
in the Committee's first report, published in January 1917 -

"For its own safety and welfare the State wants more plough land, but it cannot ask the farmer to do that which might ruin him unless it assures him in advance against the operation of the same cause (viz. a fall in prices) that ruined his predecessor." ¹

Accordingly the Committee recommended guaranteed minimum prices for wheat and oats on much the same basis as Milner had done. However, the Report contained two other important points not previously considered. The first concerned the formation of district wage boards to fix minimum wages for farm workers and a standard working week. The second proposed control over the level of efficiency among farmers and landowners, and the allocation to agricultural departments of the power to dispossess those who were neglecting their land and either replace them or take over the management of the estate themselves.

The latter recommendation prompted considerable protest. Farmers might have recovered financially since the disasters of the Great Depression, but their confidence was not yet restored to the extent that they could contemplate a return to arable farming with equanimity. Few considered the measures suggested by the Selborne Committee to be of sufficient benefit when set against the penalty of dispossession for non-compliance with ill-defined standards of efficiency. Others were concerned with the more immediate questions of whether compensation would be available for the destruction of grassland, and who would supply the necessary labour and machinery.

Although in October 1916 the Asquith coalition began belated attempts to control the supply, distribution and consumption of basic commodities through Orders in Council under the Defence of the Realm Regulations, it is by no means certain that any of the Selborne Committee's recommendations would have been implemented had there not been a change of government. On December 7th 1916 David Lloyd-George became Prime Minister, pledged both to the successful

prosecution of the war and the direction of the civilian economy. It was his administration which possessed the political will to co-ordinate the disparate ideas and projects which would become the food production campaign. The speed with which decisions were taken caused much astonishment and some apprehension. Lord Balfour stated at one point that

"as nearly as I can reckon, we have had one revolution every half hour,"

while others were concerned that the government was taking advantage of wartime conditions to effect the sort of changes that would not have been accepted under normal circumstances.

On December 26th, Lord Devonport was appointed as Food Controller. The Ministry of Food was established in January 1917, while on the first of that month Rowland Prothero, who had already been appointed President of the Board of Agriculture, created a Food Production Department to organise increased domestic output. At first, Sir Thomas Middleton was made Director and A. D. Hall became Permanent Secretary, but in February Sir Arthur Lee was appointed Director-General and charged with the duty of administering government policy for the duration of the war. On January 10th 1917 an Order in Council gave the Board of Agriculture power to make orders bearing upon the better cultivation of agricultural land. The Board was empowered to take over any land which they considered was being inadequately cultivated, to commandeering any equipment or farm stock required for food production, control the use of the land and order the ploughing up of pasture, dispossess negligent farmers and prosecute those who refused to co-operate with them. In February the Cabinet agreed the

1. LLOYD-GEORGE op. cit. p. 1286
2. Regulation 2M under the Defence of the Realm Consolidation Act 1914
following guaranteed prices for wheat and oats for a period of six years
(subject to a review after four) -

<table>
<thead>
<tr>
<th>Year</th>
<th>Wheat (per quarter)</th>
<th>Oats</th>
</tr>
</thead>
<tbody>
<tr>
<td>1917</td>
<td>60/-</td>
<td>38/6</td>
</tr>
<tr>
<td>1918 and 1919</td>
<td>55/-</td>
<td>32/-</td>
</tr>
<tr>
<td>1920 - 1922</td>
<td>45/-</td>
<td>24/-</td>
</tr>
</tbody>
</table>

These minimum prices would involve a deficiency payment, if implemented, equal to the difference between the annual average market price and the guaranteed price and calculated on average yields rather than sales to reduce the risk of fraud. It was hoped that this would provide farmers with a sufficient incentive to undertake increased arable cultivation, without too great a use of compulsory powers, while avoiding the possibility that after the war the government would be committed to buying up crops at artificially high prices for an unspecified period of time. As part of a policy of guaranteed prices, the government also decided to secure a minimum wage of 25/- for agricultural labourers, together with wage boards empowered to agree supplements where necessary. Finally, in order that landlords might not take advantage of these guarantees to enrich themselves, it was agreed that there was to be no increase in rents.

This composite policy was announced to the House of Commons on February 23rd 1917, and on April 5th the legislation thus outlined by Lloyd-George was introduced into Parliament as the Corn Production Bill. Part I dealt with guaranteed prices for corn, part II with minimum wages and wage boards, part III with the prohibition of rent increases, and part IV with the powers of control and enforcement currently exercised under the Defence of the Realm Act. Although the Bill passed its second reading towards the end of the month by a majority of more than ten to one, a number of objections were raised during the course of the debate. Mr. Runciman (formerly President of the Board of Trade) attacked the guaranteed price as a protectionist measure that departed from the accepted theory of free trade, while others spoke out against the restrictions on freedom
of contract between employer and employee imposed by the creation of wage
boards. The whole idea of compulsory cultivation was regarded with suspicion,
and a heated argument developed between those who favoured the plough policy
and those who considered that the reduction in pasture would inevitably reduce
the production of meat and milk, and thereby offset any gains ensuing from an
increase in the arable acreage. Scientific investigation had shown that the
calorific value of grain was much higher if eaten direct rather than fed to
animals and eaten as meat, and leading agriculturists were agreed that four
times as much food could be obtained from a given piece of land under wheat
compared to pasture. But although it was not difficult to show this on paper,
to secure the same result in practice was quite another matter, and supporters
and critics alike waited on the first harvest results with some trepidation.

In addition to questions concerning the letter of the law, there was some
criticism of the spirit, from both inside and outside the government. Mr.
Walter Long, himself a member of the Lloyd-George administration, strongly
disapproved of the whole measure and attacked the haste with which it was being
rushed through Parliament. His view was set out in a letter to the Prime
Minister:

"The Board of Agriculture . . . have taken powers
under the Defence of the Realm Act for which there
is no precedent. They have taken power to take
control of a man's land away from him, to turn out
the tenant and to compel him to cultivate the land
in a manner entirely contrary to what he believes
to be in the best interests of food production. I
fully share the view that a wholly unfair advantage
has been taken of the military situation to pass
land legislation which would in quieter times be
absolutely impossible . . . If the policy is
pursued and sanctioned by Parliament, of entrusting
Local Committees, not even composed necessarily of
men elected in the locality, with compulsory powers
to be exercised against their neighbours, the door
is being opened wide to tyrannical action of the
most serious character."

Those landowners and farmers who shared such views did not have to look far
for evidence of the effect of government policy, for since February 1917 the
Board of Agriculture had been empowered to authorise the killing of pheasants

1. LLOYD-GEORGE op. cit. p. 1291
in areas where the landowners had failed to keep them down. In effect this was a breach of the Game Laws which had been so jealously guarded throughout the nineteenth century. However, in the first months of 1917 the national emergency provided sufficient justification for direct government action, while the degree of competence and integrity shown by the local committees could only become apparent with the passage of time. Nevertheless there was some logic in the implication that the policy established under wartime conditions was to be continued after the peace, for many of its component parts had already been outlined either in the Reports of Lord Milner and Lord Selborne (whose terms of reference required him to consider post war policy specifically), or in the writings of eminent agriculturists like A. D. Hall. ¹

The executive powers allotted to the Board of Agriculture under Regulation 2M of the Defence of the Realm Act were delegated to the County War Agricultural Committees, whose creation had been the only tangible result of the recommendations of the Milner Committee. These Committees represented landowners, farmers and labourers, and included others locally interested in food production. Existing officials of the County Council acted as clerks, and the Board of Agriculture was usually represented by a commissioner or inspector. In all rural districts, and in those urban areas where there was a considerable amount of agricultural land, sub-committees were constituted to assist the County Committee in the performance of its duties. These involved the organisation of agricultural labour supply, distribution of fertilisers, machinery and feeding stuffs, and the increase of food production chiefly through guidance in the selection of crops and the management of stock. Those chosen to sit on the sub-committees tended to be the owners of larger farms, because they were successful businessmen and were best able to spare the necessary time, largely because they employed others to work their land.

When the greater degree of compulsion provided by Regulation 2M came into effect, the County Committees found it necessary to establish Executive Committees

¹ See HALL A. D. Agriculture After the War London 1916
and accord them the authority to control the food production drive. These had originally from four to seven members nominated by the County Committee and augmented by such additional members as the Board of Agriculture might nominate. Each appointed its own Chairman and filled any vacancies that might occur from time to time. Beyond the requirement to keep the Food Production Department informed of its actions, the Agricultural Executive Committees were given a free hand in dealing with local questions - as this circular from the Department indicates:

"The powers that are placed in the hands of the County Executive Committees are very wide and far reaching, but Mr. Prothero is confident that he can rely on the Committees to exercise them with a single eye to the national interests and with a due regard to the urgent necessity of economy in public expenditure. Mr. Prothero feels that any conditions which would involve constant reference to the Board must be avoided in order that progress may be made with the least possible delay . . ." 1

One of the first tasks of the Executive Committees was to survey the land under their control and determine the degree to which production could be increased, particularly by the ploughing of grassland. The Committees were directed in the first instance to secure the voluntary co-operation of farmers in making the proposed changes, but if this were not possible an assessment would be made by another farmer and a local land valuer, and any recommendation enforced by the issue of a cultivation order. Claims for compensation arising from such action would be referred to the Defence of the Realm (Losses) Commission for settlement. In the scheduling of land for ploughing and subsequent oversight of the work, the District Sub-Committees played an important role. Much use was made by them of 'parish correspondents' who represented the final link between the Food Production Department and the farmers.

The results of the survey made in the spring of 1917 indicated that approximately 300,000 acres of land in England and Wales could be brought into

1. MIDDLETON op. cit. p. 169
cultivation immediately\(^1\), and by the end of the year 975,000 acres had been added to the arable area of 1916.\(^2\) The greatest effort, however, was concentrated on the preparations for the 1918 harvest, which was to prove the only full year in which the Board of Agriculture exercised complete control over the farming programme.

1. MARWICK op. cit. p. 268
2. LLOYD-GEORGE op. cit. p. 1301
CHAPTER TWO

THE QUESTION OF COMPULSION

I

All studies of the 1918 production campaign are agreed that it was an impressive success, built upon the hard work of the Executive Committees and the patriotic response of the farmers. The massive increase in acreage, coupled with above average crop yields, produced the greatest harvest for more than 60 years, and it was widely held that had the weather been better in the early summer and during September the results would have been even more spectacular. ¹ For the Agricultural Executive Committees, and those whom they had employed to assist them in their work, no praise was too high. In Thomas Middleton's words

"they were not responsible for the policy and they were given a most difficult and in many ways a distasteful task." ²

Thus the outcome spoke volumes for their diligence and thoroughness, and made ridiculous the apprehension that had greeted their creation. Without question, the food production campaign was expensive, costing an estimated £8 million ³ - but in Lloyd-George's words

"without the extra millions of tons of home grown food which it secured the nation would have gone hungry in 1918." ⁴

In agricultural histories of this period much is made of the infrequency with which the local Executive Committees were required to use their powers of compulsion under Regulation 2M. According to the Prime Minister,

1. A more detailed examination of the campaign's success appears in Chapter Five.
2. MIDDLETON op. cit. p. 233
3. MIDDLETON op. cit. p. 301
4. LLOYD-GEORGE op. cit. p. 1322
"these powers were primarily designed for use against recalcitrants. Most progress depended upon the enlistment of public goodwill." 1

These sentiments were echoed by Sir Arthur Lee in a letter to the County Agricultural Committees, which pointed out that it was important to secure as much as possible of the programme by agreement and as little as possible by compulsion. 2 Lord Ernle stated that

"Patriotism was throughout the strong incentive to the efforts of farmers," 3 and after the war, Thomas Middleton stated that less than one third of one percent of the 100,000 cultivation orders which the Committees had served upon occupiers of land had been disregarded. 4 Although he also pointed out that no small pressure had been required to secure action in a substantial number of cases, it was his initial calculation that influenced later writers in their attitude to the use of force. Mancur Olson quantified Middleton's original estimate more specifically, noting only 254 prosecutions for default with 236 convictions, and the forcible termination of 317 tenancies in a country comprising about 400,000 agricultural holdings. 5 Edith Whetham asserts that

"few of these compulsory orders were ever opposed by their recipients"

and that

"the food production campaign was primarily an exercise in self government by the farming community based on the persuasion and experience of the respected farmers, estate agents and landowners who composed the county committees." 6

1. LLOYD-GEORGE op. cit. p. 1282
2. Ibid. p. 1308
3. ERNLE, LORD. The Land and Its People. London 1925 p. 100
4. MIDDLETON op. cit. p. 278
5. OLSON op. cit. p. 98
This assessment is repeated in 'The Agrarian History of England and Wales 1914 - 1939' in the following terms:

"The vast majority of cropping orders were loyally carried out, with only minor and agreed amendments in a relatively few cases... Powers to take possession of land were used sparingly and only as a last resort." 1

As indicated earlier, there were some 400,000 agricultural holdings in England and Wales at the outbreak of the war, yet only just over 100,000 cultivation orders were issued during the course of the food production campaign. Therefore approximately three quarters of the nation's farms received no instructions to increase tillage, and the bulk of the additional arable land was created from the remaining quarter. The cultivation orders were issued as a matter of course to all farmers, irrespective of whether or not they were willing to accept the instructions of the Agricultural Executive Committees. This was done "to give tenant farmers protection from any post war claims for breach of their leases, which very often forbade the ploughing of established grass", 2

and evidence of this automatic issue can be found in the records of the Worcestershire Executive Committee. 3

There are a number of explanations for this concentration on only one quarter of the country's farms. A certain proportion of the remainder would be farms where arable farming was not possible - for example on hill farms in the northern counties; or where it was already the leading activity and there was little chance of increasing the acreage; or it may have been that some areas did not have any suitable land left for ploughing following the voluntary action of farmers between 1914 and 1917. It is also reasonable to assume that

1. WHETHAM op. cit. p. 98
2. WHETHAM loc. cit. p. 40
3. Details of the reactions of farmers in the parishes of Upton Snodsbury and Abberley show that both "willing and unwilling" farmers were served with orders.
the majority of the cultivation orders issued were served upon farmers in the predominantly pastoral regions of the west and north. In these areas few parishes possessed either the horses and implements, or the knowledge born of experience, necessary to the successful large scale cultivation of arable land. Equally, judging from the surviving records, it was the farmers of these regions who most resented the compulsory cultivation of grassland against what they considered to be their better judgement, and their Executive Committees who faced the hardest task in achieving the targets set by the Food Production Department.

Having thus established the fact of compulsion and the circumstances in which it would be reasonable to have used it, let us re-examine the common view of its frequency. Firstly, if cultivation orders were issued to all farmers requested to plough land it is inaccurate to base an assessment of the level of disobedience (and by implication the required degree of compulsion) on the percentage of the total number of orders ignored or contested. The actual number of recalcitrants within the 100,000 or more in receipt of such instructions is smaller than the total itself, which makes any percentage figure based on the number taken to court for non-compliance too low. Secondly, to base the incidence of compulsion on the percentage of orders that led to court action is completely misleading whatever that percentage may be, for the simple reason that Middleton suggested in 1923 - namely that compulsion could be successfully applied without recourse to the courts.

An examination of the records of the Worcester Executive Committee suggests that compulsion could be used in three ways. The first was through the prosecution of those who refused to comply with the orders of the Committee;

1. These areas include the counties of Cumberland, Durham, Northumberland, North Yorkshire, Cheshire, Herefordshire, Shropshire, Staffordshire, Warwickshire and Worcestershire together with Wales. In all cases grassland was more than double the arable acreage.
the second was by the application of pressure, often including the actual threat of prosecution; and the third was the fact that whatever the official reason for it, cultivation orders were issued automatically and carried the implied threat of prosecution, which in itself might have deterred many from disputing the Committee's instructions.

The imperative for the use of any one of these methods lay in a combination of three factors - the need to increase food production in line with government policy, the necessity to complete certain tasks according to the rhythm of the seasons, and the scale of opposition to the ploughing of grassland from the farmers concerned. In this respect, matters came to a head in November 1917 when it became clear that the programme drawn up in the spring was not proceeding as planned, and that the need for its complete implementation was increasingly urgent. This prompted the decision to order the ploughing of good quality pasture, where accumulated reserves of fertility would offset the shortage of phosphates and potash, allow some existing arable land to be fallowed or sown with root crops, and despite the increased risk of crop failure, produce a significant increase in corn supply. That many farmers objected to the scheduling of land in this category served only to underline the need for compulsion.

II

The Worcestershire War Agricultural Executive Committee was set up in February 1917 under the chairmanship of Colonel E. V. V. Wheeler. The Committee was charged with the task of securing an additional 40,000 acres for the 1918 harvest - although this was later reduced to 25,000. The volume of work involved required the organisation of a variety of Sub-Committees and also necessitated the use of the powers conferred upon the Board of Agriculture by the Defence of the Realm Regulations and delegated by them to the County Executives.
Owing to the "weeding" of Executive Committee records during the 1950s only a small number of well documented cases survive. For this reason, generalisations made from them must be qualified, despite the fact that they were reportedly retained as being representative samples. Nevertheless, the following case studies show how each method of compulsion was applied.  

The most comprehensive records cover the parishes of Abberley and Upton Snodsbury, and to a lesser extent several parishes in the Upton area. Seventeen farmers were approached in Abberley, and eleven in Upton Snodsbury. Their responses to the request for an increase in arable acreage were noted as "willing" or "unwilling", and in both areas some 50% expressed themselves willing to accede to the Committee's instructions before the official issue of a cultivation order. In a substantial number of the remaining cases the work was not undertaken until the order was made, carrying as it did the implied threat of prosecution. Objections were raised for a variety of reasons, but any objection was regarded as an indication that the farmer was unwilling to comply, and he was almost always invited to attend a specially convened objection meeting to state his point of view. Between August 16th and December 20th 1917, twenty such meetings were held at Rock, Bromsgrove, Tenbury, Martley, Inkberrow, Droitwich, Worcester, Pershore, Upton upon Severn, Tewkesbury and Kidderminster, and in Worcester alone twenty-two meetings were held in the first five months of 1918. The following table shows how rare it was for an objection to be upheld.  

<table>
<thead>
<tr>
<th>Location of Meeting and Date</th>
<th>No. of Objections Heard</th>
<th>No. of Objections Upheld</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bromsgrove 17.9.1917</td>
<td>35</td>
<td>5</td>
</tr>
<tr>
<td>Tenbury 13.9.1917</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Pershore 27.9.1917</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Upton 25.10.1917</td>
<td>50</td>
<td>5</td>
</tr>
<tr>
<td>Tewkesbury 29.10.1917</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Worcester 14.2.1918</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Worcester 15.2.1918</td>
<td>29</td>
<td>6</td>
</tr>
<tr>
<td>Worcester 1.3.1918</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>Worcester 16.5.1918</td>
<td>27</td>
<td>9</td>
</tr>
</tbody>
</table>

1. The records of the Worcestershire Agricultural Executive Committee appear in the Worcester Record Office under the following references: Bulk Accession No. 179 Reference No. 259.9.2 Parcel No. 1 - 310. In footnotes this is abbreviated to WRO. 179/259.9.2 followed by a description of the particular item.

2. WRO. 179/259.9.2 Parcel No. 310

3. WRO. 179/259.9.2 Parcel No. 45
Neither was it incumbent upon the Committee to give reasons for their decision, as a minute of October 20th 1917 confirms. The following are typical of cases in which objections were over-ruled.

Mr. J. Taylor of Pool House Farm, Abberley in the Sub-District of Mertley, was notified on July 20th 1917 that five acres of his 150 acre farm had been recommended for ploughing. Thirty-one acres was already being cultivated, but the remaining 119 were pasture. On July 30th, Mr. Taylor wrote to the Executive Committee informing them that he had no objection to breaking land in principle but that the area selected was of no value for corn growing because the ground was sandstone rock and plagued by rabbits. This was the reason why it had been originally laid down to grass. Despite this submission, a Cultivation of Lands Order 1917 (No. 3) dated March 15th 1917 was made by the Board of Agriculture and Fisheries. No further objection was heard. Similar results attended the case of Mr. Bradley, also a farmer at Abberley. He had been requested to plough 11½ acres of old turf under Schedule A of the survey for the 1918 harvest, and to hold a further 14 acres under Schedule B as a reserve. This land had been arable until 1898 when it was converted to grass. Notification of the Committee's intent was sent to Mr. Bradley on July 20th 1917, and his reply was received on August 7th. The letter expressed his opposition to the ploughing on the grounds that rabbits were a major problem and he had insufficient labour to increase the tillage. Moreover he had already broken six acres for oats and was willing to grow more wheat on suitable ground.

"I think if I do this as well as I passable can (he wrote) I shall be doing my share ... I am quite willing to do anything that is straight and just." 3

A further inspection of the land led to the substitution of those fields affected by game, but when a cultivation order was issued on December 10th no further protest was made, despite the continuing labour difficulty outlined in Mr. Bradley's original letter.

1. WRO. 179/259.9.2 Minute Book Vol. 1. Minute No. 872
2. WRO. 179/259.9.2 Parcel No. 310 Case No. 5 Parish of Abberley
3. WRO. Ibid. Case No. 14 Parish of Abberley.
Much less frequently used was the actual threat of prosecution, conveyed by the issue of a non-compliance letter. However, frequency could vary from place to place. In Upton Snodsbury, three of the seven cases in which recommendations were made for increased tillage required the threat of prosecution, while there were none in Abberley. Once again, non-compliance letters were issued to many farmers who had made requests for special consideration. The tenant of Court Farm, Upton Snodsbury, was left with only a boy of 14 to work for him following the loss of his son to the army. He had broken one field voluntarily and his farm was already two-thirds arable, and yet the Committee refused to reverse its decision. Only in the case of Mr. Harris of Dayes Farm, Welland did the Committee withdraw its instructions unconditionally - on the grounds that he was ninety-two years of age and physically incapable! However, there were also cases where the threat of prosecution was clearly valid, and where the farmer was hounded relentlessly until the Committee achieved a satisfactory response.

Mr. Frank Atkins farmed 165 acres of pasture at Cowsden Bank Farm, Upton Snodsbury, on behalf of Lord Coventry. Thirty nine acres was strongly recommended for ploughing under Schedule A, and a further sixteen acres listed under Schedule B was to be held in reserve as a result of the 1917 survey. It was recognised by the Committee that steam tackle would be required to plough the area suggested as the occupier possessed no heavy horses or tillage implements, but the prospects were good as the thirty-nine acres under Schedule A had previously been fertile corn land. Notification was sent to both owner and occupier on September 24th 1917. Lord Coventry's land agent, Mr. John Hill, replied that it would be impossible for Atkins to break up the land required, particularly in view of the difficulty in acquiring labour, and on October 15th a letter was received from the occupier himself. In this, Mr. Atkins pointed out that the pasture scheduled for ploughing was good quality grassland which had

1. WRO. Ibid. Case No. M4 Parish of Upton Snodsbury
2. WRO. 179/259.9.2 Parcel No. 45 Sub-District of Upton
3. WRO. 179/259.9.2 Parcel No. 310 Case No. M7 Upton Snodsbury.
cost him 30/- per acre to lay, and for which he hoped there would be some compensation. He emphasised the shortage of labour and implements, the difficulty of clearing grass in readiness for corn crops, and the fact that other farmers with holdings of a similar size had been asked to plough only sixteen acres while he was being asked to plough nearly forty. Consequently he offered to prepare some land for the 1919 harvest, or to allow the Committee to take over the whole area and farm it themselves. The Executive Committee instructed Mr. Atkins to take his case to an objection meeting to be held at Pershore, but in a letter received on December 13th he stated that he would not be able to attend. Instead, a revised offer was put to the Committee - one field of thirteen acres would be ploughed immediately, ten acres more would be made ready for spring, but the third field of sixteen acres would not be broken up under any circumstances.

"It is a good field and cut 35 cwt. of hay to the acre last year." 1

The Committee's response was not quite what Mr. Atkins had hoped for. Following the Pershore objection meeting he was informed on December 22nd that two fields had to be planted with corn at once and the third "ploughed by May 1st and fallowed for wheat for next year." A cultivation order to this effect was issued on January 2nd 1918.

There then followed a series of claims and counter claims concerning the progress of the ploughing. The Pershore Sub-District Committee frequently reported that Mr. Atkins had either not started at all, or was making little attempt to complete the work as quickly as possible. As early as January 7th, they were recommending that proceedings be taken, and a week later he was warned of this possibility. Despite subsequent objections to having been treated in this way, the threat of legal action had a measurable effect, for on January 23rd 1918 the Pershore Sub-Committee reported that ploughing was under way and one field was nearly completed. However, on February 28th (the date by which

1. WRO. Ibid. Letter of December 13th 1917
the order issued under Regulation 2M was supposed to have been complied with, the Pershore Sub-Committee reported that a ten and a half acre field had still not been broken up. Within a few days, steam tackle was on the farm and ploughing had begun - but once again, as soon as the threat of prosecution had receded progress slowed dramatically. On June 1st 1918 this second field was only partly ploughed and the Pershore Sub-Committee was requested to submit a detailed account of the situation at that time. This showed that two fields had been ploughed but that the third field was untouched. On June 18th a letter was sent from the County Executive Committee informing Atkins that if the report proved accurate he had rendered himself liable to prosecution. Atkins responded that the work was all done except for one and a half acres at the top of the field which was too wet to plough, but further investigation revealed that the land had been ploughed but not planted. By this time it was August, and largely because it was too late in the year for a prosecution to have added anything to the harvest of 1918, it was resolved that steps be taken to see that the land was planted that autumn. A letter was then sent to Atkins reminding him of his liability to prosecution but stating that no action would be taken if fresh instructions were followed in full. This undertaking was given, thus closing the correspondence after a period of almost twelve months.

One might argue that in this case the Executive Committee were remarkably lenient, having been given more than enough cause to proceed with a prosecution, but this only underlines the belief that compulsion was attempted by means other than recourse to the courts. Such an approach would certainly have been logical, for if farmers were to be convinced that the Executive Committee was worthy of confidence and respect its actions had to be seen as just rather than simply dictatorial.

Such cases nevertheless illustrate the complex and time consuming administrative detail involved in the implementation of the food production campaign. Prosecutions were undertaken only when all other methods had failed and when circumstances were judged to guarantee success. Thus Mr. T. S. Long
of Butsmorton Court in the parish of Berrow was fined £25 for failing to plough seven acres of land \(^1\), as were George Wright of Holly Hill Farm, Frankley \(^2\), Mr. A. Blakeway of Chaddesley \(^3\), and Mr. Waldron of Arley \(^4\). Some prosecutions led to dispossession rather than a fine, a case in point being that of Mr. Instone, tenant of Villa Farm, Belbroughton. \(^5\) Steps were taken to inspect this property with a view to its being taken over by the Committee in June 1917, and notice to leave was served on Mr. Instone on July 21st. This he refused to obey, and the Committee subsequently informed the Food Production Department of its intention to remove him, by force if necessary, and install their own agent pending more permanent arrangements. A minute of July 28th suggests that the Food Production Department was not wholly in favour of such a scheme, but on the motion of the Executive Committee chairman,

"the Organising Secretary was directed to reply that in view of the reports of Mr. Wardale King, and Mr. E. W. Hill and Mr. Measham the Committee do not feel justified in withdrawing from the position they have taken up in this matter, and that unless the Department send them instructions to the contrary they propose to take possession on the expiration of the order determining the current tenancy . . . (Furthermore) the Organising Secretary was directed to affix a notice, after entry, in some prominent position on the land to the effect that possession has been taken under Regulation 2M of the Defence of the Realm Regulations and stating the effect of Regulation 2N."

Further correspondence between the Committee and the Food Production Department was reported on August 18th, and on August 31st Mr. Instone was charged at Stourbridge Petty Sessions with remaining in possession of land that had been taken over by the Executive Committee. He was convicted and sentenced to be fined £20 or 41 days in prison. Other cases in which land was taken over by

1. WRO. Ibid. Minute of the Upton Executive Sub-Committee
2. WRO. 179/259.9.2 WAEC Minute Book Vol. 1 Minute No. 836
3. WRO. 179/259.9.2 WAEC Minute Book Vol. 2 Minute No. 1349
4. WRO. Ibid. Minute No. 1408
5. WRO. 179/259.9.2 WAEC Minute Book Vol. 1 Minute Nos. 531/651/662/698/733
6. WRO. Ibid. Minute No. 662
the Committee included Lower Hill Farm, Frankley, Church Farm and Blackfields Farm in Cotheridge. This land was subsequently rented to tenants on yearly leases, either as a whole unit or as individual fields. Records of eighteen such leases remain in the Worcester Record Office, and some included the offer of a refund of the rent paid if the land was left "clean and in good heart and condition." An official report on the management of farms taken over by the Agricultural Executive Committees made the following comment on the results achieved in Worcestershire:

"Considering what must have been the state of the farm when taken over by the Committee, and the character of the land, the work was well forward, and the management appears to be sound and energetic. There can be no doubt that the farm is being rapidly improved, and that the proposals for dealing with it are on the right lines."

Prosecution or dispossession was by no means the most frequent way in which compliance was obtained, but the evidence of Worcester suggests that the number of prosecutions represents the tip of the iceberg - the visible sign of opposition and discontent which found expression in a variety of ways and required a variety of means to overcome it. Middleton's view that 'no small pressure was required' in a substantial number of cases was much closer to the truth than even he seems to have appreciated. Certainly contemporary claims on behalf of the patriotism of farmers must be viewed with suspicion, while Edith Whetham's more recent assessments seem equally exaggerated. In Worcestershire at least compulsory orders were frequently opposed or disputed, and while they might ultimately have been 'loyally carried out', this loyalty was prompted not by a recognition of the common good, but by the force of law. The number of amendments to these orders may have been few in number, but this was not because they were not challenged. It is rather because the vast majority of objections were over-ruled by the Executive Committee. However, even if we

1. WRO. ibid. Min. Nos. 995, 1171. WAEC Minute Book Vol. 2 Min. No. 1424
accept the premise that Worcestershire is representative of the region most affected by the demands for increased food production, the case for a re-assessment of the incidence of compulsion nationally becomes stronger if similar evidence is found to exist elsewhere.

III

The area of land to be ploughed in Bedfordshire was originally 22,000 acres, and in neighbouring Huntingdonshire 25,000 acres. Given that these two counties were predominantly arable, one might expect there to have been less complaint about or resistance to the conversion of pasture, but the evidence from these areas suggests that this was by no means the case.

Early in May 1917, farmers in Huntingdonshire were invited to inform the Executive Committee of the amount of pasture they would be prepared to plough in the interests of increased food production. Their responses were collated and presented to the Committee in tabular form, parish by parish. The results showed that on 815 farms, the total area of pasture was estimated at 74,482 acres, of which the farmers were prepared to plough voluntarily 3,044.5 - or less than 5%. At this time, the official view of the Food Production Department was that "an appeal to the patriotism of all classes of agriculturists will produce such a satisfactory response that resort to compulsory powers . . . will only be necessary in comparatively few instances," and similar sentiments were expressed in the Report of the Executive Committee presented on June 20th 1917, when the aforementioned response from the farmers was said to show "that with further information a large number of the Occupiers of Land in the County would be willing to render your Committee with valuable assistance in their efforts to bring under cultivation an increased area of land."

1. This table is reproduced at the end of this chapter.
However, ten days later the Executive Officer reported that only 10,000 acres had been scheduled for ploughing - a total which included the 3,500 acres thus far volunteered, but also contained some 2,000 acres which were considered unsuitable for immediate cultivation. Thus, those farmers who had expressed themselves unwilling to make a contribution to the campaign were referred to the Executive Officer for further action. Their farms were then inspected and land scheduled for ploughing. The need to ensure that this work was carried out satisfactorily and thereby to move closer to the target figure of 25,000 acres led to the use of compulsion in ways previously identified in Worcestershire, as the following examples demonstrate.

In April 1917, the Executive Committee gave notice of what was to come when this letter, a clear case of compulsion by threat, was sent to Mr. Redhead of Stanground.

"From a recent inspection of your farm at Stanground, consisting of about 106 acres, made by the Huntingdonshire War Agricultural Committee Executive Officer, it would appear that there are three fields containing in aggregate about 50 acres which have been allowed to go down to grass and therefore not producing anything near what they should do for food production.

I am directed by my Committee to ask you for an undertaking that these lands will be immediately put into cultivation rather than necessitate my Committee, by the powers conferred upon them under the Cultivation of Lands Order 1917, taking possession thereof and cultivating it themselves. I am sure it would be your wish to do all in your power to assist in the production of food which is so essential at this critical period."

Compulsion simply by the issue of an official order is also recorded. A Mr. Bromhead of Alconbury appeared before the Committee in August 1917 to protest against the issue of an instruction to break up about fifteen acres of grassland on his farm. His objection was over-ruled and confirmation of the original instruction issued under the Defence of the Realm Regulations. In other cases

1. HRO. WAEC Minute Book Vol. 1 p. 217 - 218
2. HRO. Huntingdon WAEC Letter Book Vol. 1 14th April 1917
3. HRO. Huntingdon WAEC Minute Book Vol. 2 p. 2
land was taken over and worked by the Committee or its agents - for example some 200 acres of glebe land at Houghton and Wyton which was largely derelict and incapable of cultivation by its tenants, and Wood Farm at Buckden. Finally, some farmers were prosecuted. Mr. C. Watson of Somersham was fined £5 for non-compliance with an order of January 26th 1918.

In general, there seem to have been fewer cases in which compulsion was used than there were in Worcestershire, but this can be explained partly by the fact that a smaller acreage was being dealt with, and by the opinion of the Committee that whatever the attitude of farmers it would be difficult to meet the target figure of 25,000 acres without seriously diminishing the output of meat and milk from the county. This made them reluctant to schedule first class pasture for ploughing, thereby reducing the risk of opposition and the subsequent need for compulsion.

Similar considerations were manifest in Bedfordshire. Large numbers of objections to cultivation orders were heard at meetings in the Shire Hall between December 1917 and March 1918. The point was often made that the land chosen by the Executive Committee was more valuable as pasture for the husbandry of sheep and cattle, and offers to substitute alternative fields were sometimes accepted on these grounds. However, far more frequent in this county were complaints that the land was not suitable for arable farming, or that supplies of machinery and labour were insufficient, while some farmers argued that they already had as much arable land as they could manage. To some extent the members of the Executive Committee accepted the validity of these protests. In November 1917, the following resolution was passed regarding the issue of orders to plough -

2. HRO. Huntingdon WAEC Minute Book Vol. 3 January 26th 1918
3. HRO. Report of the Huntingdon WAEC June 1918
4. Bedford Record Office. WAO 10/1/2 Minutes of Objections
"Resolved that the Board of Agriculture be informed that the Orders have been issued, but that unless arrangements are made for an increased supply of competent labour and machinery at once, it will be impossible for occupiers of land to comply with these Orders and this Committee therefore feel that they will be in a difficult position with regard to enforcing them." 1

On the other hand, this same resolution suggests that the Committee believed the need for enforcement would arise, and infers that voluntary action alone would not be sufficient. A clearer picture emerges from the Report of the War Agricultural Executive Committee to the County Agricultural Committee dated February 22nd 1918.

"625 Orders have been served under the Cultivation of Lands Order, dealing with approximately 12,200 acres of land to be broken up. In some cases the Orders of the Executive Committee have not been carried out and prosecutions are pending. The Committee will be interested to know that an opportunity has been given to all persons who considered themselves aggrieved by the Orders served upon them directing them to break up land, to appear before the Executive Committee to state their grievances, which thereupon received most careful consideration at their hands." 2

Leaving aside the reference to prosecutions, it is significant that the area of land mentioned is some 10,000 acres short of the quota allotted to Bedfordshire, and even though it rose to 16,120 later, only 11,373 acres of this was for the 1918 harvest. Even allowing for the attitude of the Committee itself to the original task, this suggests a measure of reluctance and tardiness on the part of the farming community. Evidence of this and of the Committee's response to it can be found in the following cases.

Mr. Howard Spensley of Westoning Manor, Ampthill, farmed 100 acres of pasture and kept twenty-eight head of cattle. When asked to plough fifteen acres for arable use, he refused on the grounds that he had no machinery and that the grass in question had been laid down under "professional advice" because the

1. BRO. WAM. Minute Book 30/8/17 - 21/2/18 p. 41
2. BRO. Report of Beds. WAEC to Beds. CAC p. 3 22nd February 1918
land was not suited to anything else. The Committee's agents were of the
opinion that the land was well drained and had grown corn in the past, and that
in reality Mr. Spensley was quite capable of ploughing more than the area in
dispute. Indeed the local Organiser went as far as to state that

"if this case is allowed, every other appeal
in his area should also be allowed and nothing
can be done with other people unless this
Order is strongly enforced."

Consequently an order was issued on January 21st 1918 requiring that at least
twenty acres be broken before the end of February.

Mr. G. E. Sheriff of Lewsey Farm, Luton objected to an order to plough
twenty acres of land on a farm which already boasted 296 acres of arable together
with 42 acres of grass and 54 acres of bents and clover. His protest was
dismissed along with the majority of others brought before the Executive
Committee. The following table shows the number of objections upheld or refused
at meetings with farmers between December 13th 1917 and February 1st 1918.

<table>
<thead>
<tr>
<th>Date</th>
<th>Objections Upheld</th>
<th>Objections Refused</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 13th</td>
<td>4</td>
<td>21</td>
</tr>
<tr>
<td>December 14th</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>December 20th</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>January 3rd</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>January 21st</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>February 1st</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td><strong>10</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>

While there were instances in which alterations were made to the dates by
which work was to be done, alternative fields substituted or scheduled, and some
cases postponed for further consideration, the number of objections which
resulted in no further action being taken in the interests of food production
was small. Just as in Worcester, some of the objections seem to have been
perfectly reasonable. A Stagsden farmer argued that he would have to reduce his
livestock if he were ordered to plough more than the six acres he had already
contributed, while Mr. Attwood of Toddington was one of those who claimed that

1. BRO. WAO 10/2 Minutes of Objections
2. BRO. WAO 10/1/2 Minutes of Objections
3. BRO. ibid.
his land was not suited to corn and was necessary for livestock. However, only those objections which suggested an unprofitable return in terms of crops were upheld. Mr. W. Ball of Pavenham for example argued not only that he would be left with insufficient pasture, but also that the ground had produced poor crops in the past. He pointed out that

"when the amount of ground that would not 'crop' is taken into consideration, I cannot see that small field will be of any great value to the country as a corn producer." 2

His case was accepted, and the order to plough was withdrawn.

Clearly therefore the ability to compel farmers to undertake the breaking of grassland was vital to the progress of the food production campaign. Evidence to this effect has been shown to exist in the surviving records, and added strength is given to the argument by the virtual impossibility of scheduling land for ploughing in 1918 once a right of appeal and arbitration had been allowed against the orders of the Executive Committees. This issue will be discussed more fully in a later consideration of the campaign's overall success.

1. BRO. ibid.
2. BRO. ibid.
<table>
<thead>
<tr>
<th>PARISH</th>
<th>NO. OF FARMS</th>
<th>TOTAL ARABLE LAND (ESTIMATED)</th>
<th>TOTAL PASTURE (ESTIMATED)</th>
<th>PASTURE OFFERED TO BE PLOUGHED UP (ACRES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alconbury</td>
<td>7</td>
<td>1497</td>
<td>1217</td>
<td>182</td>
</tr>
<tr>
<td>Alconbury Weston</td>
<td>10</td>
<td>1028</td>
<td>800</td>
<td>55</td>
</tr>
<tr>
<td>Buckworth</td>
<td>4</td>
<td>1111</td>
<td>835</td>
<td>88</td>
</tr>
<tr>
<td>Coppingford</td>
<td>2</td>
<td>327</td>
<td>349</td>
<td>-</td>
</tr>
<tr>
<td>Hamerton</td>
<td>7</td>
<td>1188</td>
<td>524</td>
<td>24</td>
</tr>
<tr>
<td>Upton</td>
<td>5</td>
<td>671</td>
<td>403</td>
<td>42</td>
</tr>
<tr>
<td>Buckden</td>
<td>8</td>
<td>1889</td>
<td>949</td>
<td>8</td>
</tr>
<tr>
<td>Diddington</td>
<td>2</td>
<td>572</td>
<td>355</td>
<td>-</td>
</tr>
<tr>
<td>Grafham</td>
<td>7</td>
<td>982</td>
<td>1245</td>
<td>-</td>
</tr>
<tr>
<td>Offord Darcy</td>
<td>2</td>
<td>799</td>
<td>262</td>
<td>90</td>
</tr>
<tr>
<td>Offord Cluny</td>
<td>5</td>
<td>678</td>
<td>397</td>
<td>35</td>
</tr>
<tr>
<td>Southoe</td>
<td>2</td>
<td>819</td>
<td>321</td>
<td>-</td>
</tr>
<tr>
<td>Alwalton</td>
<td>4</td>
<td>396</td>
<td>360</td>
<td>27</td>
</tr>
<tr>
<td>Chesterton</td>
<td>3</td>
<td>392</td>
<td>603</td>
<td>-</td>
</tr>
<tr>
<td>Elton</td>
<td>16</td>
<td>1052</td>
<td>2101</td>
<td>132</td>
</tr>
<tr>
<td>Haddon</td>
<td>2</td>
<td>436</td>
<td>530</td>
<td>941</td>
</tr>
<tr>
<td>Merborne</td>
<td>2</td>
<td>412</td>
<td>707</td>
<td>78½</td>
</tr>
<tr>
<td>Stibbington &amp; Sibson</td>
<td>7</td>
<td>1045</td>
<td>360</td>
<td>5</td>
</tr>
<tr>
<td>Water Newton</td>
<td>2</td>
<td>525</td>
<td>323</td>
<td>-</td>
</tr>
<tr>
<td>Farcet</td>
<td>18</td>
<td>2573</td>
<td>348</td>
<td>25</td>
</tr>
<tr>
<td>Fletton</td>
<td>2</td>
<td>78</td>
<td>90</td>
<td>-</td>
</tr>
<tr>
<td>Orton Longville</td>
<td>7</td>
<td>894</td>
<td>1135</td>
<td>40</td>
</tr>
<tr>
<td>Orton Waterville</td>
<td>7</td>
<td>694</td>
<td>339</td>
<td>-</td>
</tr>
<tr>
<td>Stanground</td>
<td>10</td>
<td>905</td>
<td>800</td>
<td>26</td>
</tr>
<tr>
<td>Woodston</td>
<td>4</td>
<td>196</td>
<td>365</td>
<td>-</td>
</tr>
<tr>
<td>PARISH</td>
<td>NO. OF FARMS</td>
<td>TOTAL ARABLE LAND (ESTIMATED)</td>
<td>TOTAL PASTURE (ESTIMATED)</td>
<td>PASTURE OFFERED TO BE PLOUGHED UP (ACRES)</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
<td>-------------------------------</td>
<td>---------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Abbotsley</td>
<td>8</td>
<td>1490</td>
<td>435</td>
<td>15½</td>
</tr>
<tr>
<td>Gt. Gransden</td>
<td>10</td>
<td>2094</td>
<td>1002</td>
<td>-</td>
</tr>
<tr>
<td>Tetworth</td>
<td>6</td>
<td>1297</td>
<td>377</td>
<td>-</td>
</tr>
<tr>
<td>Waresley</td>
<td>5</td>
<td>614</td>
<td>788</td>
<td>10½</td>
</tr>
<tr>
<td>Abbots Ripton</td>
<td>12</td>
<td>1568</td>
<td>1280</td>
<td>48</td>
</tr>
<tr>
<td>Wennington</td>
<td>1</td>
<td>200</td>
<td>150</td>
<td>-</td>
</tr>
<tr>
<td>Brampton</td>
<td>6</td>
<td>911</td>
<td>809</td>
<td>35</td>
</tr>
<tr>
<td>Godmanchester</td>
<td>17</td>
<td>2431</td>
<td>1337</td>
<td>-</td>
</tr>
<tr>
<td>Gt. Stukeley</td>
<td>4</td>
<td>901</td>
<td>564</td>
<td>55</td>
</tr>
<tr>
<td>Hartford</td>
<td>5</td>
<td>1273</td>
<td>372</td>
<td>29</td>
</tr>
<tr>
<td>Huntingdon</td>
<td>1</td>
<td>116</td>
<td>200</td>
<td>15</td>
</tr>
<tr>
<td>Kings Ripton</td>
<td>6</td>
<td>826</td>
<td>244</td>
<td>28</td>
</tr>
<tr>
<td>Little Stukeley</td>
<td>7</td>
<td>1076</td>
<td>574</td>
<td>37</td>
</tr>
<tr>
<td>Bythorn</td>
<td>4</td>
<td>578</td>
<td>824</td>
<td>10</td>
</tr>
<tr>
<td>Catworth</td>
<td>10</td>
<td>1388</td>
<td>1226</td>
<td>96</td>
</tr>
<tr>
<td>Covington</td>
<td>5</td>
<td>731</td>
<td>624</td>
<td>25</td>
</tr>
<tr>
<td>Gt. Staughton</td>
<td>32</td>
<td>2952</td>
<td>3164</td>
<td>14</td>
</tr>
<tr>
<td>Keyston</td>
<td>11</td>
<td>1103</td>
<td>1621</td>
<td>184½</td>
</tr>
<tr>
<td>Kimbolton</td>
<td>11</td>
<td>1537</td>
<td>2406</td>
<td>46</td>
</tr>
<tr>
<td>Molesworth</td>
<td>5</td>
<td>726</td>
<td>925</td>
<td>110</td>
</tr>
<tr>
<td>Tilbrook</td>
<td>7</td>
<td>953</td>
<td>772</td>
<td>-</td>
</tr>
<tr>
<td>Bury</td>
<td>3</td>
<td>881</td>
<td>413</td>
<td>-</td>
</tr>
<tr>
<td>Gt. Raveley</td>
<td>5</td>
<td>1582</td>
<td>350</td>
<td>-</td>
</tr>
<tr>
<td>Little Raveley</td>
<td>4</td>
<td>466</td>
<td>161</td>
<td>-</td>
</tr>
<tr>
<td>Ramsey</td>
<td>53</td>
<td>2327</td>
<td>1014</td>
<td>32</td>
</tr>
<tr>
<td>Upwood</td>
<td>5</td>
<td>1223</td>
<td>714</td>
<td>-</td>
</tr>
<tr>
<td>Woodwalton</td>
<td>7</td>
<td>1357</td>
<td>1158</td>
<td>20</td>
</tr>
<tr>
<td>Hemingford Grey</td>
<td>9</td>
<td>814</td>
<td>440</td>
<td>-</td>
</tr>
<tr>
<td>Fenstanton</td>
<td>10</td>
<td>1207</td>
<td>814</td>
<td>-</td>
</tr>
<tr>
<td>Hemingford Abbots</td>
<td>11</td>
<td>1490</td>
<td>691</td>
<td>81</td>
</tr>
<tr>
<td>Hilton</td>
<td>8</td>
<td>1097</td>
<td>370</td>
<td>-</td>
</tr>
<tr>
<td>PARISH</td>
<td>NO. OF FARMS</td>
<td>TOTAL ARABLE LAND (ESTIMATED)</td>
<td>TOTAL PASTURE (ESTIMATED)</td>
<td>PASTURE OFFERED TO BE PLOUGHED UP (ACRES)</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------</td>
<td>-------------------------------</td>
<td>--------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Holywell &amp; Needingworth</td>
<td>12</td>
<td>1197</td>
<td>993</td>
<td>31</td>
</tr>
<tr>
<td>Houghton</td>
<td>3</td>
<td>660</td>
<td>214</td>
<td>-</td>
</tr>
<tr>
<td>St. Ives</td>
<td>13</td>
<td>956</td>
<td>1336</td>
<td>66</td>
</tr>
<tr>
<td>Wyton</td>
<td>7</td>
<td>878</td>
<td>458</td>
<td>2</td>
</tr>
<tr>
<td>Eynesbury</td>
<td>12</td>
<td>2058</td>
<td>756</td>
<td>54</td>
</tr>
<tr>
<td>Gt. Paxton</td>
<td>6</td>
<td>754</td>
<td>330</td>
<td>14</td>
</tr>
<tr>
<td>Hail Weston</td>
<td>6</td>
<td>341</td>
<td>660</td>
<td>-</td>
</tr>
<tr>
<td>Little Paxton</td>
<td>5</td>
<td>780</td>
<td>411</td>
<td>-</td>
</tr>
<tr>
<td>St. Neots</td>
<td>7</td>
<td>2043</td>
<td>778</td>
<td>93</td>
</tr>
<tr>
<td>Toseland</td>
<td>4</td>
<td>659</td>
<td>385</td>
<td>-</td>
</tr>
<tr>
<td>Yelling</td>
<td>5</td>
<td>1275</td>
<td>320</td>
<td>-</td>
</tr>
<tr>
<td>Conington</td>
<td>7</td>
<td>1315</td>
<td>1189</td>
<td>14</td>
</tr>
<tr>
<td>Glatten</td>
<td>5</td>
<td>737</td>
<td>1085</td>
<td>-</td>
</tr>
<tr>
<td>Gt. Gidding</td>
<td>14</td>
<td>734</td>
<td>1170</td>
<td>207 ½</td>
</tr>
<tr>
<td>Little Gidding</td>
<td>1</td>
<td>380</td>
<td>300</td>
<td>-</td>
</tr>
<tr>
<td>Sawtry</td>
<td>20</td>
<td>2423</td>
<td>2605</td>
<td>200</td>
</tr>
<tr>
<td>Steeple Gidding</td>
<td>3</td>
<td>537</td>
<td>395</td>
<td>24</td>
</tr>
<tr>
<td>Winwick</td>
<td>8</td>
<td>525</td>
<td>958</td>
<td>76 ½</td>
</tr>
<tr>
<td>Bluntisham</td>
<td>10</td>
<td>973</td>
<td>872</td>
<td>38</td>
</tr>
<tr>
<td>Colne</td>
<td>12</td>
<td>663</td>
<td>430</td>
<td>10</td>
</tr>
<tr>
<td>Earith</td>
<td>9</td>
<td>786</td>
<td>650</td>
<td>6</td>
</tr>
<tr>
<td>Pidley</td>
<td>18</td>
<td>1942</td>
<td>1444</td>
<td>23</td>
</tr>
<tr>
<td>Somersham</td>
<td>25</td>
<td>2365</td>
<td>1262</td>
<td>25</td>
</tr>
<tr>
<td>Barham</td>
<td>4</td>
<td>346</td>
<td>347</td>
<td>20</td>
</tr>
<tr>
<td>Brington</td>
<td>4</td>
<td>389</td>
<td>382</td>
<td>12</td>
</tr>
<tr>
<td>Easton</td>
<td>5</td>
<td>381</td>
<td>551</td>
<td>7</td>
</tr>
<tr>
<td>Ellington</td>
<td>4</td>
<td>698</td>
<td>1053</td>
<td>28</td>
</tr>
<tr>
<td>Leighton</td>
<td>6</td>
<td>1416</td>
<td>1122</td>
<td>20</td>
</tr>
<tr>
<td>Old Weston</td>
<td>11</td>
<td>1018</td>
<td>908</td>
<td>6</td>
</tr>
<tr>
<td>Spaldwick</td>
<td>7</td>
<td>771</td>
<td>1177</td>
<td>27</td>
</tr>
<tr>
<td>Stow</td>
<td>4</td>
<td>461</td>
<td>294</td>
<td>33</td>
</tr>
<tr>
<td>PARISH</td>
<td>NO. OF FARMS</td>
<td>TOTAL ARABLE LAND (ESTIMATED)</td>
<td>TOTAL PASTURE (ESTIMATED)</td>
<td>PASTURE OFFERED TO BE PLoughED UP (ACRES)</td>
</tr>
<tr>
<td>------------</td>
<td>--------------</td>
<td>-------------------------------</td>
<td>--------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Woolley</td>
<td>1</td>
<td>500</td>
<td>430</td>
<td>-</td>
</tr>
<tr>
<td>Caldecot</td>
<td>2</td>
<td>201</td>
<td>268</td>
<td>-</td>
</tr>
<tr>
<td>Denton</td>
<td>3</td>
<td>317</td>
<td>481</td>
<td>10</td>
</tr>
<tr>
<td>Folksworth</td>
<td>5</td>
<td>364</td>
<td>512</td>
<td>-</td>
</tr>
<tr>
<td>Holme</td>
<td>14</td>
<td>2947</td>
<td>773</td>
<td>-</td>
</tr>
<tr>
<td>Stilton</td>
<td>7</td>
<td>561</td>
<td>623</td>
<td>-</td>
</tr>
<tr>
<td>Washingley</td>
<td>4</td>
<td>539</td>
<td>720</td>
<td>30</td>
</tr>
<tr>
<td>Yaxley</td>
<td>23</td>
<td>2309</td>
<td>1343</td>
<td>19</td>
</tr>
<tr>
<td>Broughton</td>
<td>11</td>
<td>1608</td>
<td>574</td>
<td>16</td>
</tr>
<tr>
<td>Old Hurst</td>
<td>8</td>
<td>1300</td>
<td>358</td>
<td>-</td>
</tr>
<tr>
<td>Warboys</td>
<td>28</td>
<td>4544</td>
<td>789</td>
<td>8</td>
</tr>
<tr>
<td>Wistow</td>
<td>9</td>
<td>1726</td>
<td>631</td>
<td>20</td>
</tr>
<tr>
<td>Woodhurst</td>
<td>10</td>
<td>1292</td>
<td>608</td>
<td>61½</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>815</strong></td>
<td><strong>108,043</strong></td>
<td><strong>74,482</strong></td>
<td><strong>3,044½</strong></td>
</tr>
</tbody>
</table>
CHAPTER THREE

THE SUPPLY OF LABOUR TO AGRICULTURE

I

During the First World War the British economy experienced periods of serious labour shortage. Although these shortages varied in intensity from one industry to another and from year to year, agriculture is generally assumed to have fared particularly badly owing to the large scale recruitment of farm workers. Enlisting in the local regiment had been a means of escape from the insularity of rural life for generations, while the military authorities were well aware that the rural young made promising material for the Army, being largely fitter and healthier than their urban counterparts. Consequently, estimates of the number of farm workers lost to the forces have been uniformly high. Lord Ernle expressed it as

"one third of the skilled men" ¹

or

"250,000 of the pre-war rural population of England and Wales," ²

and Thomas Middleton settled on a figure of 273,000 by April 1918. ³ Similar numbers are given by K. A. H. Murray in his introduction to the history of agriculture in the Second World War, ⁴ while more recently Edith Whetham has noted that

"about 15% of the men employed in agriculture in June 1914 had left by July 1915, representing rather more than 150,000 men in Britain, self-selected from the young and fit. Later calculations suggest that about 300,000 agricultural workers in England and Wales joined the services in the four years of war, compared with a total of about 1½ million men engaged as employers or employees in agriculture in 1911." ⁵

2. ERNLE, LORD The Land and Its People p. 104
3. MIDDLETON op. cit. p. 266
5. WHETHAM op. cit. p. 71
However, new light has been shed on the question of agricultural labour supply by the work of Dr. P. E. Dewey. He suggests that the official view upon which these assessments were based is almost certainly a gross over-estimate. He argues that the surveys conducted by the Board of Trade, which represented the only serious attempt to monitor the loss of men from agriculture, were based upon an unrepresentative sample of farmers and made no allowance for the immunity of some people from recruitment or conscription. Moreover, the percentage loss which these surveys suggested was applied by the Board of Agriculture and others to the entire male labour force, including the farmers who had been explicitly excluded from the original enquiries. Evidence to this effect exists in a memorandum from the Board to the Manpower Distribution Board of the National Service Ministry, which states that by July 1916, 28.2% of the pre-war work force (totalling 280,000 men) had been lost, and suggests that when reservists and those who had left to work in munitions or other industries were taken into account the number was as high as 350,000. Some authorities were said to support the view that withdrawals were as high as 40% but all were agreed that 280,000 represented the minimum loss. Similar figures were quoted at Cabinet level and were clearly the basis of decisions on labour policy.

In an attempt to achieve a more precise understanding, Dewey constructs an index of 'conventional labour', using the results of the Board of Trade surveys but making adjustments to counter their inaccuracy.

<table>
<thead>
<tr>
<th>Year</th>
<th>Thousands of man units per annum</th>
<th>As %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1908</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td>1915</td>
<td>1,318</td>
<td>93</td>
</tr>
<tr>
<td>1916</td>
<td>1,231</td>
<td>91</td>
</tr>
<tr>
<td>1917</td>
<td>1,195</td>
<td>89</td>
</tr>
<tr>
<td>1918</td>
<td>1,173</td>
<td>89</td>
</tr>
</tbody>
</table>

3. Public Record Office. NATS 1/53 25th September 1916
4. DEWEY Agricultural Labour Supply ... loc. cit. p. 104
This shows that the greatest decline was no more than 11%. When the question of 'replacement labour' is considered the decline is even less marked. 1

<table>
<thead>
<tr>
<th></th>
<th>Pre-War</th>
<th>1915</th>
<th>1916</th>
<th>1917</th>
<th>1918</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional</td>
<td>1,318</td>
<td>1,231</td>
<td>1,195</td>
<td>1,173</td>
<td>1,172</td>
</tr>
<tr>
<td>Replacement</td>
<td>0</td>
<td>15</td>
<td>30</td>
<td>86</td>
<td>114</td>
</tr>
<tr>
<td>Totals</td>
<td>1,318</td>
<td>1,246</td>
<td>1,225</td>
<td>1,259</td>
<td>1,286</td>
</tr>
<tr>
<td>As %</td>
<td>100</td>
<td>94</td>
<td>93</td>
<td>95</td>
<td>97</td>
</tr>
</tbody>
</table>

The worst year (1916) shows only 7% difference compared to the pre-war position, and thereafter the situation improves steadily. Dewey claims that his figures are a more accurate indication of changes in labour supply because they are based on a unit of measurement which reflects total available effort. 2 The Board of Trade simply counted heads, and made no allowance for the relative efficiencies of different types of farm labour. In order to corroborate his initial findings, Dewey goes on to consider the relationship between output and labour productivity. A decline in output, or its maintenance by way of increased productivity per head would suggest a significant shortage of manpower. However, he concludes that despite the fact that its value dropped by 11% in 1918

"output did not fall substantially during the war." 3

This was the result of a change in the product mix towards crops of relatively low pre-war values rather than the consequence of an inadequate labour supply. 4

As for productivity, he argues that

"the labour force was not called upon to increase substantially its productivity per head since it managed to produce amount of physical output in war time as it had done in peace." 5

1. Dewey. Ibid.
2. This is a rating of relative efficiencies in agriculture employed by the Board of Agriculture in the 1908 Census of Production in which:
   Male over 20 = 1 unit, Female over 20 = 0.8, Male under 20 = 0.6,
   Female under 20 = 0.5
3. DEWEY. Agricultural Labour Supply . . . loc. cit. p. 106
4. DEWEY. Ibid. p. 105
5. DEWEY. Ibid. p. 109
However, as with the question of compulsion, little use has been made of local records as a source of information on the labour problem in different parts of the country, or on the deployment and effectiveness of the various categories of replacement labour that became available.

'Controlled labour', supplied by the government in the form of soldiers, prisoners of war, and the Women's Land Army represented slightly more than 50% of all replacements, but was not available on an organised basis before 1916. The remainder was an assortment of schoolboys, village women and other volunteers. Although they began to appear on the land in large numbers during 1917, their contribution to the food production campaign was particularly important in 1918, when the battle for a bumper harvest was at its height, and renewed calls for recruits threatened the success of the whole venture. In the spring of that year the German offensive led to an urgent plea for reinforcements, and the War Cabinet decided that 30,000 Grade 1 men between the ages of 18 and 31 would have to be withdrawn from agriculture for military service before June 30th. To many farmers the government seemed to be increasing the amount of work to be done while at the same time denying them the means to do it.

Responsibility for the selection of the recruits was devolved upon the Agricultural Executive Committees, who assumed control over the whole agricultural labour force together with its allied trades. The quota for Worcestershire was fixed at 750, and at a meeting held on May 22nd 1918 the Labour Officer was requested to notify all the committees that in future, Exemption Certificates would only be granted under "very exceptional circumstances." However, by mid-June only 245 men had been posted to the colours, with no more than a further 182 likely to join them. Consequently it was resolved that all exemptions held by young men between the ages of 18 and 24 were to be cancelled at once, the only exceptions being where the worker affected was a tenant farmer or the only son of a widowed mother. The Committee also placed on record its opinion that any further withdrawal of men would have disastrous consequences, and it soon

1. WRO 179/259.9.2 Parcel No. 16 Labour Sub-Committee Report 25/5/18
2. WRO Ibid. Labour Sub-Committee Report 19/6/18
became clear that this was not an isolated view. In the event it proved
impossible to find 30,000 men who were Grade 1 fit and could be spared.
Nonetheless, 22,654 men were called up\textsuperscript{1} and their absence had to be covered
in the same way as that of their predecessors had been.

II

Soldiers ultimately formed the largest category of replacement labour.
They were working on the land as early as the summer of 1915, but the number
available did not increase markedly until the spring of 1917. Special
agricultural companies were formed and farmers could make application to the
camp commandant for soldier labour. Attempts were made to select men with some
agricultural experience, particularly of ploughing, but their availability
clearly depended upon the co-operation of the military authorities and the
conflicting demands of the war itself. Thus there was no guarantee that soldiers
could be supplied at the right times, in sufficient numbers, or for long enough,
while there was every likelihood that many of them would be ignorant of even
basic agricultural practices. For example, by September 1917, the Army had
agreed to release 50,000 skilled men for farm work, but largely owing to the
Passchendaele campaign only half this number was supplied.\textsuperscript{2}

The weekly reports submitted to the Worcestershire Executive Committee
by its Labour Sub-Committee mention only two instances of skilled men being
assigned specifically for work in that county. On August 11th 1917 it was
reported that a number of soldiers experienced with horses were being placed
at the Committee's disposal for use as carters or waggoners so that men
experienced in ploughing could be released from such work. The number of
ploughmen likely to be released by the Army was not expected to meet requirements\textsuperscript{3}

\textsuperscript{1} PRO MAF 42/8 9396 Report of the Food Production Department 1918 p. 5
\textsuperscript{2} WHETHAM op. cit. p. 104
\textsuperscript{3} WRO 179/259.9.2 Labour Sub-Committee Report 11/8/17
and although the Food Production Department established courses in tractor and
horse ploughing which eventually trained more than 8,000 soldiers, \(^1\) a report
of October 23rd 1918 indicated that only 45 ploughmen were being released by
the Army on a two month 'agricultural furlough' to help prepare for the next
harvest. \(^2\)

The views of the farmers in Worcestershire often reflected their
dissatisfaction with the soldiers they were sent.

"The opinions expressed varied a good deal,
but the general view was unfavourable ... Some men of course are naturally handy and
quickly learn to make themselves useful
even without previous training; but the
general run of men are no use as agricultural
labourers unless their previous experience
in civil life has enabled them to learn
something about work on the land ... Some (farmers) believe that the men sent
them are those who are no use as soldiers
or in any other capacity." \(^3\)

The Executive Committee also received complaints relating both to the
quality of the soldiers' work and the terms upon which they were employed.
On August 25th 1917 for example complaints were recorded regarding the
unsuitability of the men supplied to help with the corn harvest, and there are
also cases listed of farmers refusing altogether to accept the labour provided
for them. \(^4\) Although it was apparently felt more keenly in other counties,
there is evidence that financial considerations played some part in shaping
the opinion of Worcestershire farmers. \(^5\) A minute of June 23rd 1917 in the
records of the full Executive states that:

"The Committee protest against the circular
letter issued by the Food Production Department
fixing the wages of soldiers at 5/- per day for
hay harvest and 6/- per day for corn harvest and
6d an hour overtime. It should be pointed out
that the men are unskilled and have to be taught.
If this wage is insisted upon the Committee feel
sure that farmers in this county cannot be
induced to employ them. \(^6\)

1. PRO Report of the Food Production Department 1918 loc. cit. p.5
2. WRO 179/259.9.2 Labour Sub-Committee Report 23/10/18
3. AGRICULTURAL WAGES BOARD Wages and Conditions of Employment in Agriculture
4. WRO 179/259.9.2 Parcel No. 16 Labour Sub-Committee Report 25/8/17 and others
5. AGRICULTURAL WAGES BOARD op. cit. p. 373 para. 7 and p. 93 para. 7
6. WRO. 179/259.9.2 WAEC Minute Book Vol. 1 Minute No. 528
Although the Committee's fear proved false, it is clear that farmers were concerned to achieve value for money, while there was no denying that the conditions upon which soldiers were supplied were increasingly demanding. Army Council Instruction No. 322 laid down that

"i) in all cases farmers should be required to provide board and lodging for soldiers employed on agriculture and to pay for their services at the local "living-in" rate, with a minimum of 10/- a week.

ii) in cases when soldiers fall ill or are injured while out on agricultural work, the farmer will be held responsible for the pay and maintenance of the man for the first three days of his illness; for any subsequent period of illness the responsibility rests with the military authorities.

iii) soldiers will not be entitled to the benefits of the Workmen's Compensation Act, but the farmer will be liable to pay to Army funds in case of injury etc. any sum or sums which would have been payable under the Act if the soldier had been a civilian. He will accordingly be required to insure for soldier labour on the same lines as for civilians." 1

A letter of protest was sent to the Food Production Department concerning these arrangements. An instruction to increase the minimum rate of pay for soldiers 'living-in' to 12/6 in September 1918 caused similar uproar. Such demands were in marked contrast to the wage of 4/- a day, or 2/6 if board and lodging were supplied, stipulated in 1916 when the only additional expense arose if the soldier required transport from the nearest railway station. 2

Nevertheless, the demand for soldier labour was frequently greater than the supply, 3 and there were farmers whose personal experience of soldiers at work prompted them to record their appreciation. In September 1917, Mr. W. T. Hancock of Astwood Bank wrote that he was:

1. WRO 179/259.9.2 Parcel No. 16 Report of Labour Sub-Committee 6th April 1918
2. WRO ibid. Report of Labour Sub-Committee 25th September 1918 and MIDDLETON op. cit. p. 139
3. A Worcestershire Labour Sub-Committee Report dated 14th August 1917 shows 6 men available and 200 applications outstanding.
"more than satisfied with the soldier sent. He has already ploughed up to 10 acres of old turf besides cutting about 40 acres with the self-binder. If all the men sent out were so practical and willing, the farmers would have no reason to grumble." 1

Indeed, once the Army adopted a more careful selection procedure the complaints do seem to have become less frequent, the records for Worcestershire indicating a greater number in 1917 than in 1918. However, it is less easy to resolve the question of how efficient these soldiers were in comparison to the men they were replacing. The Agricultural Wages Board argued that since they were drawn from the young adult male population soldiers were in all probability at least as physically fit as civilian labourers, and therefore capable of the same degree of efficiency. 2 Dewey suggests that where information is available it tends to support this view.

"In Kesteven (Lincolnshire) in January 1918 only 109 out of 957 soldiers were classed as unskilled (usually taken to indicate men without responsibility for animals) - a ratio of 11% which compares well with the 56% revealed by the 1911 Census of Population." 3

On the other hand a neighbouring division of the same county (Lindsey) was described in the Agricultural Wages Board survey by the same reporter who covered Kesteven as having soldiers who were "for the most part quite unskilled in agriculture." 4

It must also be remembered that the composition of the soldier labour force frequently changed. Those men considered Grade I fit were withdrawn from the land whenever the situation required, and replaced by "low grade men" 5 less able to perform the tasks demanded of them, irrespective of whether or not they were skilled, while a certain number of those already on the land were there because they were considered unfit for active service.

1. WRO 179/259.9.2 Report of Labour Sub-Committee 8th September 1917
3. DEWEY Government Provision of Labour . . . loc. cit. p. 112
4. AGRICULTURAL WAGES BOARD Wages and Conditions . . . Vol. II op. cit. p. 204 para. 25b
5. WRO. 179/259.9.2 Parcel No. 16 Report of Labour Sub-Committee 11th Sept. 1918
However, there is no doubt at all that soldier labour represented an ever-increasing proportion of the replacement supply. By the middle of 1917 40,000 men were at work on farms in England and Wales and although numbers are said to have declined in the autumn, they had risen again to 41,000 in January 1918 and stood at 72,247 by the end of the year. At the peak of the 1918 harvest there were probably as many as 80,000 soldiers employed in agriculture. Similar trends are reflected in the statistics for Worcestershire. The majority of the soldiers used were drawn from the 424th Agricultural Battalion, under the control of Southern Area Command and stationed at Norton Barracks. The following table is based on information contained in the weekly reports of the Labour Sub-Committee.

### SOLDIER LABOUR IN WORCESTERSHIRE JULY 1917 - APRIL 1919

<table>
<thead>
<tr>
<th>Date - No. of Men</th>
<th>Date - No. of Men</th>
<th>Date - No. of Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.7.17 193</td>
<td>5.1.18 677</td>
<td>8.6.18 1045</td>
</tr>
<tr>
<td>11.8.17 303</td>
<td>12.1.18 719</td>
<td>19.6.18 1015</td>
</tr>
<tr>
<td>18.8.17 347</td>
<td>19.1.18 717</td>
<td>26.6.18 1059</td>
</tr>
<tr>
<td>25.8.17 355</td>
<td>26.1.18 723</td>
<td>6.7.18 1061</td>
</tr>
<tr>
<td>1.9.17 458</td>
<td>2.2.18 737</td>
<td>17.7.18 1084</td>
</tr>
<tr>
<td>8.9.17 516</td>
<td>9.2.18 749</td>
<td>3.8.18 1071</td>
</tr>
<tr>
<td>15.9.17 530</td>
<td>16.2.18 747</td>
<td>14.8.18 1090</td>
</tr>
<tr>
<td>22.9.17 540</td>
<td>23.2.18 757</td>
<td>1.9.18 1094</td>
</tr>
<tr>
<td>29.9.17 573</td>
<td>2.3.18 775</td>
<td>11.9.18 1095</td>
</tr>
<tr>
<td>6.10.17 545</td>
<td>9.3.18 800</td>
<td>25.9.18 1068</td>
</tr>
<tr>
<td>13.10.17 620</td>
<td>16.3.18 900</td>
<td>12.10.18 1073</td>
</tr>
<tr>
<td>20.10.17 643</td>
<td>23.3.18 908</td>
<td>23.10.18 1067</td>
</tr>
<tr>
<td>27.10.17 655</td>
<td>30.3.18 932</td>
<td>6.11.18 1144</td>
</tr>
<tr>
<td>3.11.17 669</td>
<td>6.4.18 951</td>
<td>20.11.18 1142</td>
</tr>
<tr>
<td>10.11.17 657</td>
<td>13.4.18 958</td>
<td>9.12.18 1146</td>
</tr>
<tr>
<td>14.11.17 640</td>
<td>20.4.18 951</td>
<td>30.12.18 1160</td>
</tr>
<tr>
<td>21.11.17 617</td>
<td>27.4.18 991</td>
<td>10.2.19 815</td>
</tr>
<tr>
<td>1.12.17 613</td>
<td>4.5.18 988</td>
<td>10.3.19 556</td>
</tr>
<tr>
<td>8.12.17 603</td>
<td>15.5.18 1003</td>
<td>14.4.19 433</td>
</tr>
<tr>
<td>22.12.17 668</td>
<td>25.5.18 1027</td>
<td></td>
</tr>
</tbody>
</table>

1. MIDDLETON op. cit. p. 185 - 186
2. PRO. Report of the Food Production Department 1918 loc. cit. p. 6
These figures clearly illustrate the steady increase in the number of soldiers employed during 1918, together with the rapid influx for the 1917 harvest and the equally rapid exodus in the early months of 1919 when the campaign was being wound up.

But how accurate is Dewey's assessment of the contribution of soldier labour? He rates the man-unit value of those employed in 1918 at 45,000. This total was calculated by listing all references to the size of the soldier labour force and calculating the average, but the number of references used is not known. However, the Food Production Department Report for 1918 gives the number of soldiers at work on the land in January and December 1918 as 41,361 and 72,247 respectively. Other sources give the figure for April as 51,500 and for June 57,952. Taken together these would produce an average of 55,765 - a difference of some 10,000 units compared to Dewey's estimate. Admittedly, four separate totals are not necessarily representative of the whole year and trends between these dates must therefore be a matter of some speculation, but the pattern evident in Worcestershire indicates steady and uninterrupted increase during 1918. If this was repeated at national level, a starting point close to 40,000 would suggest an annual average of 45,000 to be much too low.

II

Prisoners of war represented a second major source of replacement labour, although they were not used in large numbers until the last year of the war. In January 1918 agriculture employed only 5,934 prisoners, but by June the total had risen to its maximum level of 60% of the available work force and this was maintained for the rest of the year. At the same time, a change took place

1. PRO. Report of the Food Production Department 1918 loc. cit. p. 5
2. PRO. MAF 42/8 40171 D. Report of the Food Production Department February 1917 - June 1918 p. 8
3. PRO. Report of the Food Production Department for 1918. loc. cit. In December 1918 the number employed is 30,405. Dewey quotes figures of 25,000 out of 42,000 and 30,000 out of 50,000 as the basis for his 60% total of prisoners working on farms.

DEWEY. Government Provision . . . loc. cit. p. 113
in the organisation and accommodation of these men. Before 1918 they had been held in large camps, chiefly in urban areas, but if they were to be of any use to farmers they had to be transferred to the countryside and distributed much farther afield. By October 1918 there were about 330 of these smaller camps.

Farmers who wished to use prisoners of war could make application to the local Agricultural Executive Committee, provided that suitable arrangements for their supervision could be made. ¹ This was generally provided by British soldiers, but other personnel were also used, and eventually the War Office was persuaded to allow farmers to accommodate three prisoners on their own premises without a guard of any sort. ²

Considerable variations seem to have existed in the geographical distribution of prisoners. In Worcestershire, the number of prisoners employed in agriculture rose from 380 in August 1917 to 1119 by June 1918. ³ The special camps in which they were housed were originally under canvas, but these were later replaced by wooden huts or by large houses converted by the Executive Committee. The initiative for these changes often came from the farmers themselves, who give every indication in this county of having valued these employees highly, submitting to the Agricultural Executive Committee frequent requests for their services. This may well have had something to do with the fact that prisoner labour was cheap, but it does seem clear that contact with the enemy on a personal basis overcame the hostility born of propaganda just as surely in the English shires as it is said to have done on the Western Front. The investigators' report submitted to the Agricultural Wages Board in April 1918 stated that

"prisoner labour is decidedly popular with farmers and will increase as the exigencies of war take away more of the native labour,"

while one of the farmers interviewed suggested that

1. DEWEY  Ibid.
2. PRO. Report of the Food Production Department for 1918. loc. cit. p. 6
3. WRO. 179/259.9.2 Report of the Labour Sub-Committee 8th June 1918
"prisoners employed in the Martley district last autumn had saved the situation. The dearth of labour was so great that he would have lost much if they had not been available." ¹

The men were described as quiet and well behaved, never gave trouble, and did not try to escape. Similar arrangements and observations were made in other counties. In Bedfordshire, gangs of 40 men were located in five separate centres - at Ampthill, Turvey, Leighton Buzzard, Tempsford, and Kimbotten - and available to farmers within a five mile radius. ² Each centre was supplied with the necessary equipment by the Board of Agriculture. The centre at Turvey was in possession of 30 horses, 12 ploughs, 5 rollers, 5 harrows, 3 cultivators, 5 binders, 2 lorries and a cart. According to the records of the Executive Committee the farmers generally seem to have been well satisfied with the work done by German prisoners, and it was suggested at one stage that a formal letter might be addressed to the Food Production Department thanking them for placing these men at their disposal. The Committee members in Huntingdon were equally pleased, expressing their sentiments as early as April 1917 in a letter to the Under Secretary of State for War.

"I am directed by the Huntingdonshire County War Agricultural Executive Committee to inform you that the work performed by the 75 German Prisoners of War in agricultural work now located in this county has given entire satisfaction to farmers and others who have and are employing them." ⁴

The letter closed with a request for more prisoners of war to be allocated to the county as soon as possible.

Nevertheless, the military authorities maintained strict rules governing the conduct of prisoners and the treatment they should receive from their employers, and formal requests for the relaxation of these controls - particularly on the movement of prisoners - were generally rejected, no matter what deals

1. AGRICULTURAL WAGES BOARD. Wages and Conditions . . . Vol. II op. cit. p. 373 para. 8
2. BRO. WAR 4 Reports to the War Agricultural Committee
3. BRO. Ibid.
4. HRO. Huntingdon WAEC Letter Book Vol. 1 p. 150
the War Office may have sanctioned. Prisoners were not allowed to work with women, and warnings were issued by the Food Production Department concerning the supply of alcohol, food and cigarettes, with the result that on April 20th 1918 the Worcestershire Executive Committee resolved that any farmer or other employer supplying these items should not be allocated prisoner labour at all. Furthermore, on October 12th 1918 it was reported by the Droitwich Sub-Committee that Mr. Oliver of New House Farm, Elmley Lovett, had allowed German prisoners to take cattle to Kidderminster market

"apparently without escort of any kind." 1 - a crime which drew a stinging rebuke from the Executive Committee and the threat that the prisoners would be immediately sent elsewhere if such conduct was repeated.

However, in spite of their popularity, a number of questions have been raised concerning the efficiency of prisoners of war. An official inquiry into the employment of prisoners, held in the summer of 1918, expressed the view that POWs were generally very inefficient, chiefly because they worked so slowly. There was no doubt that they worked hard. In Bedfordshire the usual regime was a twelve hour day with one hour off for lunch, which produced an average working week of about 60 hours depending on the work that was being done. 2 In Worcestershire, it was recorded that for the week ending March 30th 1918, 875 prisoners had worked a total of 37,538 hours at an average of 42.9 hours per head per week, or seven hours per day. 3 Nonetheless, it has been suggested that for a variety of reasons their productivity was low. It could hardly be expected for instance that prisoners would work with any great zeal for the benefit of their captors, even though the report of the Prisoner of War Employment Committee found no direct evidence of malice. 4 Great emphasis was also attached to the nutrition and supervision of the men. In July 1918 farmers

1. WRO. 179/259.9.2 Parcel No. 16 Report of the Labour Sub-Committee
2. BRO. WAV 13 POW Camp Weekly Time Sheets, esp. Turvey
3. WRO. 179/259.9.2 Parcel No. 16 Report of the Labour Sub-Committee 30/3/18
4. PRO. Ministry of National Service - Prisoner Labour Inquiry: Draft Interim Report
were obliged to provide a midday meal, and it was also recommended that in
those camps which had a canteen, prisoners should be allowed to buy limited
quantities of extra unrationed food on the production of a coupon which would
be granted as a reward for good work. It was believed that this system would
provide a greater incentive to work than the payment of wages, but there is no
evidence that it was ever introduced. 1

Before July 1918, prisoners had had nothing more than meagre camp rations
to sustain them unless farmers chose to allow them a drink of tea, coffee, cocoa
or milk. This was not regarded as sufficient to enable them to cope with heavy
manual work. As to the supervision of the prisoners, the majority of guards
took the view that they had nothing to do with the work at all, and that so long
as they took the prisoners out and brought them back at the proper times they
had done all that was required of them. According to War Office instructions,
the guards were not expected to interfere in the technical details, but they
were supposed to ensure that the prisoners did not slack and to report them if
they did. On the other hand it could be argued that if the guards were not
familiar with at least basic skills it was very difficult to assess the quality
of the prisoners' work. Consequently it was relatively easy for them to work at
their own pace. 2

On the face of it, this produces a combination of low productivity and
considerable popularity which can only be explained by a uniformly lower standard
of work among other groups of replacement workers, or by a readiness to hire
prisoner labour on account of its relatively low cost. There is little evidence
of the former, and it is therefore the question of cost that holds the key to
the eagerness with which prisoners of war were accepted. According to Dewey,
the War Office charged farmers at rates comparable to those of civilian labourers,
a practice which led prisoners to be the least cost effective of all types of
labour imported into agriculture. 3 However, the evidence from Worcestershire
suggests that rates of pay remained low for much of 1918 and were raised only

1. PRO. Ministry of National Service - ibid
2. PRO. Ministry of National Service. Prisoner Labour Inquiry: Interim and
First Report
3. DEWEY Government Provision of Labour . . . loc. cit p. 114
in the face of considerable opposition.

Detailed information on the number of hours worked by individual prisoners in the county is not available, but fragments of evidence suggest an average for early 1918 of between 34 and 38 hours a week. ¹ A directive issued to the County Committees at the beginning of February stated that prisoners should be paid at a minimum rate of 5d. per hour as it was considered undesirable for them to be paid at lower rates than those current in the districts where they were employed. ² This was at the instigation of the War Office, but it was not welcomed by the County Executive who believed that it would prejudice the employment of German prisoners, even though the average weekly wage based on the above figures for hours worked amounted to between 14/- and 16/- ³, significantly less than a Land Army girl, a soldier, or a full-time labourer. Greater consternation arose after a directive in August 1918 that prisoners should work 54 hours per week and be paid at the district rate,⁴ while a letter received from the Pershore District Committee later in the month expressed alarm at reports that prisoners engaged in harvest work or potato lifting were to be paid 6/- a day with 8½d. per hour overtime. ⁵ Their protest was supported by the Executive Committee and forwarded to the Food Production Department, for these rates would have raised the weekly wage to 36/-, a figure commensurate with the amount paid to civilian labourers at that time of year. ⁶

Thus for as long as they were able, the Worcestershire Executive, and the farmers for whom they spoke, resisted pressure to employ prisoners on anything but their own terms. By the time the higher rates were implemented the urgent

1. WRO. 179/259.9.2 Parcel No. 16 Labour Report - 23/2/18. 825 prisoners working 28,299 hours at an average of 34.4 hours. Labour Report - 8/6/18 1119 prisoners working 43,274 hours at an average of 38.6 hours.
2. WRO. Ibid. Report of the Labour Sub-Committee 2/2/18
3. 34.3 or 38.6 multiplied by 5d.
4. WRO. 179/259.9.2 Parcel No. 16 Report of the Labour Sub-Committee 3/8/18
5. WRO. Ibid. Report of the Labour Sub-Committee 14/8/18
need for extra hands to gather in the harvest and the later prospect of the return of demobilised soldiers rendered the cost acceptable. Indeed, it was resolved in November 1918 that prisoners of war who were working on the land should not be withdrawn until the return of men in the British Army who were engaged in agriculture in the county before the war. ¹ On balance therefore it seems that for much of the time that they were in use, the cheapness and consequent popularity of prisoners, coupled with the standard of work done - however slowly - offset their relatively low productivity.

The number of prisoners employed in all parts of the country by the end of the war was, as previously indicated, 30,405. ² However, as with other categories of replacement labour, it is less easy to establish the rate of increase in the preceding twelve months and the average number employed during 1918. Apart from the figures given in the Report of the Food Production Department, three other totals exist to indicate the number of prisoners at work on separate dates in that year. On May 20th there were 9,783, by the end of June the figure had risen to 10,652 and on September 10th it stood at 25,213. ³ In addition to those 'at work' a further 9,134 and 9,505 in May and June respectively were allocated and available for employment, which together with the fact that numerous camps had been established in February and March 1918 points to a significant number of prisoners being employed in agricultural work for perhaps two thirds of the year. Dewey rates their unit value at an average of 14,000 - but the beginning and end of year totals added to those given above produce an average of 16,377. Once again, lack of frequent and detailed information leaves a good deal to chance - but equally there is again some ground for doubting the accuracy of Dewey's figures.

1. WRO. 179/259.9.2 WAEC Minute Book Vol. II Minute No. 1781 23/11/18
2. See footnote 3 p. 54
3. PRO. Report of the Food Production Department - Feb. 1917 to June 1918 loc. cit. p. 8 and NATS 1/132
The First World War did much to change the status of women in Britain. Between 1914 and 1918 they were used widely as replacements for men called to arms, and in this respect agriculture was no exception.

According to the report of the Agricultural Wages Board

"In the majority of counties the employment of village women has very largely increased since the war... The percentage of increase of regular female labour in the country in the spring of 1918 was about 11% over that of 1917, while that figure was 33% above the pre-war 1914 figure. In Essex, everywhere local women are doing more than formerly. In Cheshire it is estimated that of the total supply of labour in agriculture, one third is now female." 1

By the end of the war, the Food Production Department had quantified the increase as being from 90,000 in 1914 to 300,000 by the end of September 1918, and these figures were adopted later by both Lloyd-George and T. H. Middleton. 2 However, estimates of this variety are by no means reliable.

Firstly, the size of the pre-war female labour force varies considerably from one source to another. The Report on the Agricultural Output of Great Britain for 1907 stated that there were 244,000 (or 212,000 excluding those temporarily employed), while the 1911 Census suggests a total number of 73,000 (exclusive of farmers, graziers and other employers). The Census Report attempts to explain this difference in the following terms:-

"Farmers' wives are not included (in the census) as assisting the farmer, but there is no doubt that in the returns made to the board they are in many cases counted among the members of the family employed. It may be assumed also that many females who work more or less in the fields would hesitate to return themselves as employed in farm work. The farmer however had no motive for hesitation in stating in his returns to the

1. AGRICULTURAL WAGES BOARD Wages and Conditions... Vol. I op. cit p. 53
2. LLOYD-GEORGE op. cit. p. 1300 MIDDLETON op. cit. p. 144
Board the total number of women he employs, and there may perhaps be a tendency on his part to include, as employed on the farm, servants whose duties are partially or even mainly of a domestic nature. "

Secondly, although evidence collected by investigators working on behalf of the Agricultural Wages Board indicates that the number of women who were employed on farms at certain times of the year was much greater than the number returned as employed in agriculture under the 1911 Census, the majority are classified as "part-time" rather than "full-time" workers. The following table compiled from the reports submitted to the Agricultural Wages Board in 1918 illustrates the composition of the female labour force in a selection of counties:

<table>
<thead>
<tr>
<th>County</th>
<th>No. of Part-Time Workers</th>
<th>No. of Full-Time Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge</td>
<td>1,946</td>
<td>587</td>
</tr>
<tr>
<td>Cheshire</td>
<td>2,350</td>
<td>477</td>
</tr>
<tr>
<td>Cornwall</td>
<td>7,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Devon</td>
<td>3,701</td>
<td>778</td>
</tr>
<tr>
<td>Lancashire</td>
<td>2,421</td>
<td>2,187</td>
</tr>
<tr>
<td>Lincolnshire (Kesteven)</td>
<td>1,433</td>
<td>786</td>
</tr>
<tr>
<td>Rutland</td>
<td>222</td>
<td>145</td>
</tr>
<tr>
<td>Shropshire</td>
<td>1,532</td>
<td>244</td>
</tr>
<tr>
<td>Somerset</td>
<td>2,000</td>
<td>900</td>
</tr>
<tr>
<td>Staffordshire</td>
<td>1,570</td>
<td>373</td>
</tr>
<tr>
<td>Surrey</td>
<td>1,553</td>
<td>639</td>
</tr>
<tr>
<td>Yorkshire (East Riding)</td>
<td>1,237</td>
<td>121</td>
</tr>
</tbody>
</table>

Sub-Totals : 26,965 8,237
Grand Total : 35,202

These figures produce percentages of 76.6% for part-time workers and 23.4% for full-time. It must be remembered that the way in which the investigators compiled the totals for each county was not uniform. Methods varied as much as the geographical distribution of female labour. Some of them are obviously estimates, while the time of year at which they were calculated varies from one county to another. There must also be some doubt about the reliability of surveys made by the Executive Committees as a source of information. For example,

1. GENERAL REGISTER OFFICE Report on the 1911 Census of Population Cd.6277 p.17
a report submitted by the Worcestershire Committee on November 10th 1917 indicated that there were 1056 women employed full-time on agricultural work and 1867 part-time. These figures were based upon a response from farmers of only 50%, which suggests that the true total was certainly higher, and the relative proportions unproven.

Indirect corroboration exists, however, in Dewey's article on the government provision of labour. He cites evidence to show that only a small proportion of the women allegedly at work on the land were actually so employed at any one time. In 1916 for example the Board of Agriculture reported that 140,000 women had registered for agricultural employment, but in August only 28,767 of them were found to be working. Consequently, Dr. Dewey concludes that

"on balance it seems not unreasonable to assume that four fifths of the women cited by the War Cabinet were part-timers." 2

However, major uncertainties remain. The assumption seems to be that those 28,767 represent the women who were employed full-time because they could be more easily counted than those employed on a more casual basis, but since this figure was compiled from returns submitted by only thirty of the sixty three Women's County Committees, it is not unreasonable to assume that the number actually working was greater than 28,767. 3 Moreover, in many counties there were women working who had not registered, thus making attempts to assess the size and character of this category of labour even more suspect. 4 As indicated earlier, Dewey's index of labour replacement in agriculture rates the contribution of village women in 1918 at no more than 30,000 man-units, and bases this calculation on Food Production Department and War Cabinet estimates of an average female labour force for that year of 190,000 - chiefly because despite their imperfections these remain the only national estimates available.

1. WRO. 179/259.9.2 Parcel No. 16 Report of the Labour Sub-Committee 10/11/17
2. DEWEY Government Provision . . . loc. cit. p. 117
3. PRO. MAF 59/1 File L29369
4. PRO. Ibid. In Norfolk, 2,841 women were registered and 3,037 were recorded as working
However, to convert a total of 190,000 people to one of 30,000 man-units can only be done in the following way:

1. 1/5 of the total are full-time workers.  
   (i.e. 38,000 rated at a unit-value of 0.8)

2. 4/5 of the total are part-time workers.  
   (i.e. 152,000 rated at a unit-value of 0.2  
   as female casual labour)

3. This produces a total of 60,800 man-units.

A final figure of 30,000 results only if it is assumed that no more than 50% of the total number actually worked at any given time. Since neither the accuracy of this assumption nor the suggested ratio of full-time to part-time workers can be proven, the question of the size of this category of replacement labour remains unresolved.

It is equally difficult to assess the value of village women. With the exception of Northumberland, women had not been regularly employed on the land in large numbers before the war, and while the relatives of farmers or their staff might possess some of the requisite skills, there is unlikely to have been a vast reservoir of experienced labour that could be rapidly and reliably deployed. In 1916 and 1917 it is not difficult to find examples among farmers of reluctance to employ women or of dissatisfaction with their work, even among those who had some skill - something which tends to suggest a strong measure of prejudice against the employment of women in general. For instance, as early as September 1916 Mr. G. M. Day, the Agricultural Organising Officer at the Worcester Labour Exchange, expressed the following opinions in a letter to the Food Production Department.

" There are still many skilled women on the books who, whilst they could not do everything on a farm, could be a most useful asset to the farmers ... I feel convinced that a great number of these, if they cannot get work shortly, will go as many others have done into Munitions ... The farmers, in spite of everything that we have tried to say or do, will not take a woman if they can get anything in the shape of a man. "

1. PRO. MAF 59/1 File L29047 September 14th 1916
Although these comments were made some months before the food production campaign increased the demand for labour, the reports of investigators acting on behalf of the Agricultural Wages Board and compiled during 1918 contain comparable evidence.

"In many instances, farmers regard women as being often unsatisfactory and expensive labour." 1 (Warwickshire)

"There was a complaint that women were expensive at 4d. an hour; they spent their time in talking and did less than the men" 2 (Gloucestershire)

"In one locality it was remarked that there was disinclination on the part of the village women to come out to work, due no doubt here, as elsewhere, either to the separation allowances they receive or to the increased earning capacity of the home." 3 (Cambridgeshire)

However the same source shows clearly that complaints of this nature declined in number as time passed, with the result that the Board of Agriculture considered the work of women to be on the whole satisfactory.

A similar pattern emerges from a study of the Women's Land Army. In July 1916 'Women's Industrial News' sought to dispel the popular belief that the employment of women in agriculture was widespread.

"Most of the press paragraphs referring to the replacement of men by women upon farms have been calculated to give an erroneous impression to the unknowing public. The demand for female labour in agriculture during 1915 was not very great and large numbers of girls who offered to take up such work failed to find employment." 4

Many men were of the opinion that there were many tasks for which women were not physically suited. To disprove this, contests were held in 1916 at Launceston and Truro in Cornwall at which women acquitted themselves well in the arts of horse harrowing, planting and dung spreading. In October 1917 the Worcestershire

1. AGRICULTURAL WAGES BOARD Wages and Conditions . . . Vol. II op. cit. p.354
2. Ibid. p. 23
3. Ibid. p. 27
4. MARWICK op. cit. p. 96
Executive Committee sent observers to a similar event at Metchley Park, Edgbaston, organised by the Midland Counties Women Farm Workers. The results of such experiments and the need for additional labour once the food production drive began resulted in the formation in January 1917 of a Women's Branch at the Board of Agriculture. In March it was transferred to the Food Production Department and became responsible for the recruitment and organisation of the Women's Land Army. This was to be

"a full-time, mobile, trained and disciplined force of women which would be available throughout the year." ¹

Recruits received one month's training, a uniform, and a minimum wage of 18/- a week. Standards were very high – only 7,000 out of the first 47,000 applicants were accepted², chiefly because the organisers were concerned that only women of 'high character' should be sent out to live alone on farms or in cottages without supervision.³ Thus the majority of those accepted were middle class, comparatively well-educated, and drawn largely from the towns. The rate of growth was slow. Estimates of the number of women at work in the autumn of 1918 vary from 16,000 to 25,000, with the records of the Agricultural Executive Committees indicating that the demand for Land Army girls always exceeded the supply.⁴ In early November 1917 there were 134 employed in Worcestershire, and by the autumn of 1918 the number had risen to 265. A report dated December 9th 1918 showed how these girls were deployed, there being at that time 196 working on farms, 14 in timber yards, 5 driving tractors, and 8 at instruction centres. Tractor driving was one of the first skills for which women in Worcestershire were selected⁵, but evidence also exists to the effect that Land Army girls were all too often trained as milk-maids when they would have been of greater value as field-hands.⁶

¹. DEWEY Government Provision . . . loc. cit. p. 115
². LLOYD-GEORGE op. cit. p. 1299
³. PRO. MAF 42/8 File No. 33867 'The Land Army and the Need for More Effective Control.'
⁴. DEWEY Government Provision . . . loc. cit. p. 115. Quotes 16,000 but notes that V. Sackville-West refers to a maximum enrolment of 23,000 in 1918 (The Women's Land Army 1944 p. 9) WHETHAM op. cit. p. 104 suggests 25,000
⁵. WRO. 179/259.9.2 Parcel No. 16 Report of the Labour Sub-Committee 25/8/17
⁶. WRO. Ibid. Report of the Labour Sub-Committee 20/11/18
In Bedfordshire a total of 550 Land Army girls were used during the two and a half years in which the scheme was operative. Of these 150 were trained in the county on twenty-five different farms. 1

The Land Army remained in existence until November 30th 1919, and was of particular value in bridging the gaps left by the gradual withdrawal and repatriation of prisoners during the first year of peace. In order to accommodate the girls adequately the Worcestershire Executive Committee passed the following resolution -

"that in cases where a favourable answer is likely to be received, application be made to the owners of premises at present occupied by German prisoners, asking whether when the German prisoners are eventually withdrawn, and subject to the premises not otherwise being required, they would have any objection to them being used for gangs of girls for work on the land, the girls to be under strict supervision." 2

However, despite its relatively high degree of technical expertise and the increased rate of recruitment during 1918, in numerical terms the Women's Land Army was the least effective force to be mobilised. By the end of the war, farmers had lost much of the original prejudice they had displayed towards women workers, and some expressed sorrow at the prospect of losing their Land Army girls as they were doing very useful work on the land. 3 But it was almost certainly the desire to placate the farming community and avoid the hostility that might have accompanied the rapid introduction of organised female labour that hindered the Women's Land Army's initial development, and ultimately stunted its growth. It is also difficult to escape the conclusion that cost was once again a significant factor. Dewey indicates that the relatively high wage paid to Land Army girls was an important aid to recruitment. 4 By the spring of 1918 it stood at 20/- a week, but although this was less than the wage paid to a

1. BRO. WWA 2 Summary of the Work of the Bedfordshire Women's War Agricultural Committee
2. WRO. 179/259.9.2 WAEC Minute Book Vol. II Minute No. 1780 23/11/18
3. WRO. 179/259.9.2 Parcel No. 16 Report of the Labour Sub-Committee 1/9/18
4. DEWEY Government Provision ... loc. cit. p. 115
skilled labourer, it was a good deal higher than some of the alternatives and may have acted as a disincentive to farmers, despite the relatively high level of cost efficiency.

V

Although soldiers, prisoners, and women constituted the major source of replacement labour, there were a number of other ways in which the work force could be increased. Indeed their variety and the frequency with which they were used underlines the extent and persistence of the labour problem, whatever its exact size.

In spite of the outcry that had greeted their use in 1914, school children were still encouraged to work on the land at every opportunity. Objections to their use came principally from union officials who feared that farmers would employ them at the expense of adult labourers. Legally there was nothing to prevent any education authority introducing a by-law that sanctioned the absence of children from school in time of national emergency. By the autumn of 1916, fifty-seven authorities had introduced such legislation. ¹ The number of boys and girls involved in these schemes were not recorded in detail, but it is generally believed that 15,000 children were employed in each of the years 1916 to 1918. ² However, it is quite certain that they were extremely cheap. A report of the Worcestershire Labour Sub-Committee for February 9th 1918 states that Mr. Woollcombe of the National Service Department attended their last meeting to give a brief outline of a scheme for the employment of boys in potato setting, fruit picking and harvesting. They were to work for not less than three weeks, while no boy under 16 years of age was to be employed without special permission from his headmaster. Boys under 14 years of age were not to be employed at all. Mr. Woollcombe went on to recommend that they be paid at

1. DEWEY Government Provision . . . loc. cit. p. 117-118
2. Ibid. p. 118
the rate of 4d. an hour, and that if bad weather prevented them from doing ordinary farm work they should be given something else to occupy them. A minimum working week of 36 hours was set, thereby enabling every boy to earn at least 12/- a week.

To help the Committee with the organisation of camps for these boys, the War Office expressed itself willing to supply camp equipment, rations, a quarter master, and a cook. From the farmer's point of view, the main attraction of such a scheme was that he was getting fit, young, and willing workers who although unskilled were well suited to the performance of simple tasks and cost significantly less than any of their adult counterparts. Thus in April 1918 the full Worcestershire Executive resolved

"that in view of the great shortage of agricultural labour, this Committee are of the opinion that Boys in Secondary Schools and Senior Boys in Public Schools should be released from attendance at school during the summer term on condition that they work on the land. Further resolved that in the opinion of this Committee, Girls should be exempted from attendance at Public Elementary Schools in order that they may be employed on the land upon the same terms and conditions as boys are now exempted in this county." 2

Apart from those children employed on a regular basis, a significant number assisted the farmers during school holidays or remained at home while their mothers went out to work.

Finally, in May 1918 the Government announced the formation of the War Agricultural Volunteers. This body comprised men under 45 of low category physical fitness, and men over 45 who might otherwise be liable to conscription. The official view was that by virtue of their age or medical category such men were more likely to be useful on farms than in the army. Many of those who volunteered were gardeners or had experience of farm work in their younger days. The Labour Officer in Worcestershire reported on June 19th 1918 that recruitment

1. WRO. 179/259.9.2 Parcel No. 16 Report of Labour Sub-Committee 9/2/18
2. WRO. 179/259.9.2 WAEC Minute Book Vol. II Minute No. 1434 27/4/18
had begun, but chiefly because of the late start that was made, at no time did the number employed nationally exceed 3,904.

This source apart, further attempts to augment the labour force were piecemeal and relatively insignificant. The following examples are all drawn from Worcestershire, but some have national parallels. In April 1918 the Committee was notified by the Secretary of the Birmingham Executive that a number of applications for permanent farm work from boys of about 16 had been received. They were described as 'strong and useful looking lads' and farmers in the county were invited to request their services. Permission was also sought from the Chief Constable and the County Surveyor for the release of men under their control, while in addition to a large number of applications from people willing to work on the land during their holidays, there was also a scheme under examination for the employment of Danish labourers.

Whatever the forms of replacement labour available, the demands of agriculture were not the only ones that had to be met. Women were employed in industry in substantial numbers and were particularly important in the production of munitions. Consequently, in certain parts of the country, mainly those where agriculture and industry were in close proximity, competition for replacement labour was keen. In Worcestershire, where the industrial conurbation of the West Midlands overlapped the county's northern border, the Executive Committee was moved to support a resolution drawn up by its Buckinghamshire counterpart requesting that

"the Federation of County War Agricultural Executive Committees be requested to ask the President of the Board of Agriculture to receive a deputation to protest against the competition for labour which is now taking place between various government departments, thereby causing the withdrawal of labour from agricultural industry essential to the production of food."

1. WRO. 179/259.9.2 Parcel No. 16 Report of the Labour Sub-Committee 19/6/18
2. PRO. Report of the Food Production Department loc. cit. p. 6
3. WRO. 179/259.9.2 Parcel No. 16 Report of the Labour Sub-Committee 13/4/18
4. WRO. Ibid. 23/3/18
5. WRO. Ibid. 25/5/18
6. WRO. Ibid. 25/5/18
7. WRO. 179/259.9.2 WAEC Minute Book Vol. II Minute No. 1270 9/3/18
A clear example of the effect of such competition was brought to the attention of the Committee in September 1917 when Mr. Vernon of Hanbury complained that a ploughboy was leaving him to work in a munitions factory, and that he had been persuaded to do so by the pay and security being offered. Other cases had already been noted, and while recognising that the boy was free to choose his employment, the Committee lamented the fact that farmers did not enjoy the same privileges of retaining their employees as munitions firms. Moreover, it was pointed out that this 'poaching' was contrary to an official order issued by the Ministry of Munitions. ¹

VI

This examination of the sources of replacement labour and of the existing evidence concerning the efficiency and size of each category suggests that we are still some way from a precise appreciation of the scale of recruitment and of the consequent shortage of men.

Dewey's observations on the dubious statistical methods of the Board of Trade and the subsequent tendency to base general estimates on unreliable data seem to be sound, but his own estimate of the numbers of prisoners, village women and soldiers at work in 1918 may itself be inaccurate. It is difficult to quantify the precise degree of error, particularly in view of the wide variation possible in the number of village women employed, but it could be in the order of 40 - 60,000 man-units. If this was the case it would make a very significant difference to any comparison between the total labour supply in 1918 and the pre-war position.

According to Dewey, the 1918 supply was equal to 97% of the pre-war total - 1,286,000 man-units compared to 1,318,000 in 1914. ² Allowing for the under-estimates detailed above, the 1918 total rises to approximately 1,320,000, a small percentage increase over 1914. This is not to say, however, that no labour

1. WRO. 179/259.9.2 Parcel No. 16 Report of the Labour Sub-Committee 8/9/17
2. DEWEY Agricultural Labour Supply . . . loc. cit. p. 104
shortage existed at all. It is clear from the frequency with which the County Committees were requested to supply additional labour, and the sources that they tapped to meet this demand, that a problem existed to the end of the war and beyond. The most likely explanation is that there was an increase in labour demand in the later stages of 1917 and throughout 1918. Dewey himself suggests an increase in labour demand of about 5%, basing his figures on the work of A. W. Ashby and J. L. Davies, and applying their work norms for various farm activities to the crop, grassland and livestock returns in the annual agricultural statistics for the war years. This would produce a man-unit requirement of 1,374,917 in 1918. Such an increase does not seem unrealistic, for by this time the food production drive was at its height. Large areas of land were being ploughed and returned to the more labour intensive business of crop production, and those areas where arable farming was not the main land use would need more additional labour than areas where it was. In fact, Dewey accepts that an estimated 5% increase in labour demand is by no means reliable, owing to the original calculations on work-norms being based on the needs of a relatively small sample of farms. Neither is it likely to be applicable nationally, for some areas might well have required an increase in manpower in excess of this figure, while others might not.

There was also some element of seasonal variation in labour demand, which makes annual averages based on relatively few figures additionally suspect. At critical moments every able-bodied man, woman and child was encouraged to help, not least during the harvest of 1918 when bad weather threatened to destroy the crops in the north, the west and the Midlands, thereby producing an additional demand for labour over and above the normal requirement. One might also suggest that demand varied from one skill to another, and not simply where the skills of agricultural labourers were concerned. There were numerous other men, who

2. DEWEY Agricultural Labour Supply ... loc. cit. p. 106
although not directly involved in farming the land, provided vital subsidiary services without which agriculture found it difficult to function efficiently. A survey made in the autumn of 1917 showed the effect of the war on blacksmiths and wheelwrights in Worcestershire. Seventeen smithies and ten wheelwrights shops had been forced to close, while eighteen smithies and four wheelwrights were understaffed. 1

The idea that such variations existed is not new. The reports submitted to the Agricultural Wages Board in 1918 cited several examples, not only of differences between counties, but between individual farms in the same county. 2 The loss of male workers from recruiting and migration in the Kesteven Division of Lincoln was estimated at about 32%, while in the Lindsey Division

"the great majority of farmers estimated that at least 50% of the men of military age had joined the colours, though in some cases 40% and in others 75% were the figures given." 3

The Executive Officer for the area believed that 75% was not an exaggeration, noting that on a random sample of 166 farms there were only 10 men aged between 24 and 31. 4 In Hertfordshire, a special enquiry indicated that at the beginning of 1918 the supply of male labour had declined by about 32%. In Northamptonshire, available labour in 1918 was 25% below the 1914 level, in Buckinghamshire it was 20% lower, but in Oxfordshire the loss was only 7%. These last three counties attempted to make some allowance in their surveys for the relative efficiencies and capabilities of men, women and boys - generally reckoning that three women were equal to two men, two boys as equal to one man. On the same basis, differences in labour supply were noted between farms in each county. In Northamptonshire, some farms reported an increase in manpower (on one farm by 10%, on another by 20%), while others were as much as 40 - 45% down. 5 However, the sampling procedures adopted by the investigators are not totally reliable.

1. WRO. 179/259.9.2 Parcel No. 16 Report of the Labour Sub-Committee 27/10/17
2. AGRICULTURAL WAGES BOARD Wages and Conditions Vol. I op. cit. p. 38 - 41
3. Ibid. p. 39
4. Ibid.
5. Ibid. p. 39 - 40
In some cases they are not explained at all, while in others figures are based either upon the already suspect Board of Trade estimates, or upon ratios of women to men and men to boys which are somewhat arbitrary and largely subjective. Thus, in reality, all that the existing data on regional variation presents is an indication of its existence rather than an accurate measurement of its extent.

However, by using the information contained in the records of individual County Executive Committees it is possible to offer a partial clarification of the problem, provided that the limitations of the exercise are recognised in advance and reflected in the care with which conclusions are drawn. From a positive viewpoint, local records provide a more detailed tally of certain categories of replacement labour than national ones, a point that is particularly important when annual averages are being calculated. There is also a greater degree of accuracy attached to them, because they are not based upon a random sample of farms in the way that the Board of Trade figures were. Instead they rely upon returns compiled from a head-count of the actual number of people employed. However, certain difficulties still have to be recognised. The index of relative efficiencies adopted by Dewey remains the basis for the calculation of man-unit values even though it does not allow for differences in the performance of workers, particularly where skilled male labourers were replaced by unskilled substitutes. Indeed considerable variations have been shown to exist between soldiers, prisoners and other male replacements, and even between members of the same category. Equality in units does not therefore mean equality in efficiency. Neither is it possible to make proper use of the different unit values accorded to people of different ages, because the necessary information does not exist. Nonetheless, it remains the only workable index available.

The following assessment will therefore examine the labour situation in Worcestershire for the year 1918, and seek to establish within certain limitations the scale of labour demand and shortage in an area undergoing considerable change as a result of the food production drive. The conclusions drawn will then be matched against existing estimates of labour supply in order to measure the
degree of corroboration or variation that they suggest.

According to the 1911 Census of Population the total number of people employed in agriculture in Worcestershire was 23,111, of whom 21,804 were men and 1,307 women. This source will provide the basis for comparison for two reasons - firstly because it is a more recent estimate than the 1908 Census of Production, and secondly because although it does not measure the scale of casual labour as well as the 1908 Census, casual labour was not a major factor in the composition of this county's workforce and can therefore be discounted. Although the 1911 Census provides details of the number of men and women employed from different age groups, all agricultural workers will be treated as aged 20 and above. Similar information is not available for any of the replacement categories, with the result that they will also (with the exception of children) be treated as adults. Some degree of error is inevitable under these circumstances, but the error would be greater if comparison was made between totals calculated according to different criteria.

Thus, using the Board of Trade index of relative efficiencies the pre-war labour force in Worcestershire totals 22,850 man-units. In 1918, the average numbers of replacements employed, and their equivalent unit values, are as follows:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>TOTAL NUMBER</th>
<th>MAN-UNIT VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soldiers</td>
<td>979</td>
<td>979</td>
</tr>
<tr>
<td>Prisoners of War</td>
<td>957</td>
<td>957</td>
</tr>
<tr>
<td>Women's Land Army</td>
<td>197</td>
<td>158</td>
</tr>
<tr>
<td>Village Women</td>
<td>3,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1,100 full-time)</td>
<td>1,025</td>
</tr>
<tr>
<td></td>
<td>(1,900 part-time)</td>
<td></td>
</tr>
<tr>
<td>Schoolchildren</td>
<td>654</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(544 boys)</td>
<td>410</td>
</tr>
<tr>
<td></td>
<td>(110 girls)</td>
<td></td>
</tr>
<tr>
<td>Totals:</td>
<td>5,787</td>
<td>3,529</td>
</tr>
</tbody>
</table>

The average numbers of soldiers and Land Army girls are based upon totals presented in the weekly reports of the County's Labour Sub-Committee and are therefore as accurate as it is possible to make them. The average number of village women is based on the figures submitted to the Committee in November 1917
and referred to previously. These covered only 50% of farms in the county and might therefore be unrepresentative of the position in 1918. However, it is possible that they constitute an underestimate since the source on which they were based does not reflect the 1 in 5 ratio of full-time to part-time workers apparent in other counties. Nonetheless, the 1917 figures have been adopted without modification and represent the only available source on female employment. The figures for the employment of children are taken from the Report on Wages and Conditions of Employment in Agriculture, and although they refer to 1916 and 1917 the number is not likely to have diminished in 1918.

Figures for the various subsidiary sources are not available, but it is not likely that they were large enough to make any significant difference to the overall number of units.

If the man-unit value of replacements in Worcestershire is equal to the total loss of men from agriculture by 1918, then that loss is equal to 37.4% of the county's recruitable labour force, or 15.4% of the total labour force available in 1914. It is, however, quite clear that labour difficulties persisted right up to the end of the war and that the total number of replacements did not balance the total loss of men. Therefore, the percentage losses are necessarily greater than the two figures mentioned above, and considerably greater than the 11% suggested by Dewey as the initial loss of workers by 1918.

However, this set of calculations does not take into account the likely increase in labour demand occasioned by the increase in arable production. In this respect, the application of Dewey's 11% figure to the situation in Worcestershire produces some interesting results. An 11% loss from the pre-war total of 22,850 reduces the available number of man-units within the 'conventional' 1

2. 'Recruitable labour' represents the number of males aged c. 18 - 38 who were employed in agricultural work in Worcestershire in 1914. The resulting total of 9,412 is based on the assumption that the number of people in the various age categories defined by the 1911 Census are relatively stable in the following years. Farmers and graziers are excluded on the grounds that they were largely exempt from service, and the number of their relatives has been halved because they also enjoyed a comparatively privileged status.
labour force to 20,347 by 1918. This would be the equivalent of a 26.7% decline among those of recruitable age. If the average value of replacement labour is then added, the total labour force is increased to 23,876 man-units. This represents an increase in available effort of almost 5%, which was the estimated increase suggested by Dewey in his study of agricultural labour supply. However, as indicated earlier, the demand for additional labour was maintained throughout the year; thus either the original loss was greater than 11%, or the increase in demand was greater than 5%. Evidence that the latter may have been the case has already been presented, and if it were also true that the value of replacement labour has been under-estimated, this case would be strengthened. There is also the third possibility that the two co-incided with an original loss of more than 11% and a much higher increase in demand producing a shortage not far short of the apparently discredited estimates made by Middleton and others.

Clearly, there are still major uncertainties about any conclusions drawn from this kind of exercise, but it seems probable that the loss of men from the land in Worcestershire lies somewhere between a minimum of 11% and 15% of the total 1914 labour force, or 25 - 35% of those of recruitable age. The latter figure bears considerable similarity to some of the assessments made by the Agricultural Wages Board investigators and quoted earlier, while the former tends to corroborate Dewey's assessment of earlier higher totals, even though it suggests that some upward revision of his own estimates may be necessary for those counties in which the effects of the food production campaign were most pronounced.

VII

No examination of labour in the First World War would be complete without some reference to the status of full-time agricultural labourers.

In view of the uncertainties and pitfalls associated with the use of replacements, it is not surprising that attempts were often made to retain skilled agricultural workers or to obtain the early release of those already serving with the armed forces. Thus in August 1917, the Worcestershire Executive Committee
requested that

"bona fide agricultural labourers now in this country should be released at once for one month to help with the harvest as otherwise considerable quantities of corn will be lost. " 1

At the same time, exemption certificates were being granted to those men who would otherwise have been liable to conscription, although this system was by no means foolproof. For example, during the autumn of 1916 the county tribunals dealing with exceptions from the Military Service Act had turned down applications from some 60,000 men engaged in agriculture. Moreover, in May 1918, two months after the opening of the German spring offensive had renewed fears of defeat on the Western Front, many existing exemptions were cancelled and new ones granted only under exceptional circumstances.

For those able to avoid conscription, or to endure only a limited period of service, the war years promised an unparalleled opportunity for improvement. The status of the agricultural labourer had been depressed for several decades, with the majority earning less than the average wage paid to unskilled workers in industry. Lloyd-George had written just before the war that

" more than half the wage earners in the most vital of our industries are living on wages which do not allow them and their families the same amount of nourishment which they could obtain in a workhouse or a prison. " 2

In 1914, average wages were somewhere between 14/- and 15/- a week, 3 and in spite of the rise in prices occasioned by the war it was not until April 1915 that rates of pay began to increase markedly. Of course, the majority of labourers were not paid in cash alone. To supplement their basic pay a variety of allowances and extras were added, which varied from county to county. The extras were usually payments at higher rates or by lump sum at harvest time, and the allowances included cottages at reduced rent or no rent at all, with gardens or land, potatoes, milk, bacon and cider or beer. But there was no doubt that

1. WRO. 179/259.0.2 WAEC Minute Book Vol. 1 Min. No. 720 25/8/17
2. GREEN op. cit. p. 231
for some time farmers enjoyed the benefits of rising prices for their produce without passing on a significant share to their workers. For many years, they had explained their reluctance to increase wages as an unavoidable consequence of the Depression of the 1880s and 1890s, even though in truth wages had been no better in earlier decades when both profits and rents were higher. Now that the war had restored their earning capacity by giving a high degree of 'natural protection' to British agriculture, there were other reasons for their tardiness. They pleaded the uncertainty of their new situation, both in terms of possible government intervention and its consequences, and of the immediate problems involving the supply of animal feed and fertilisers. Although their income was rising, so too were their expenses at a time when men and horses were being conscripted by the Army and adequate compensation was hard to come by. Under these circumstances, to reduce still further their profit margin by greatly increasing wages was regarded as foolhardy. However, their critics adhered to the opinion that if production was to be increased, farmers would have to compete with industry for available labour by paying 'a decent wage'.

By the end of January 1917 the average cash wage was 22/3, to which was added the equivalent of a further 1/3 in allowances. At about this time the National Agricultural Labourers' Union was pressing the Farmers' Federation for 30/- a week. The employers offered 25/-, and as no agreement could be reached the dispute was referred to arbitration. The result was an award of 25/-, a sum which coincided with the minimum wage to be included in the forthcoming Corn Production Act. Indeed, it was widely believed that the Government's prior announcement of this proposal had prejudiced the decision of the arbitrator, especially since the 25/- was to include all extras. It was certainly greeted with little enthusiasm by the farm workers, for only those in the most backward areas benefited. However, between May and September 1918 the District Committees of the Agricultural Wages Board issued orders raising wages to between 30/- and 35/- a week depending upon location. Norfolk was the first county thus

1. BOWLEY op. cit. p. 170
affected, wages being fixed at 30/- for a 54 hour week in the summer and a 48 hour week between November and February. It has been argued that to issue the first order in a low-paying county like Norfolk had the unfortunate effect of setting a trend for settlements that was below the level required to make a significant difference to living standards. Moreover, despite the protection offered by the law, labourers did not always receive the minimum wage to which they were entitled. Between October 28th 1918 and December 31st 1919, 5,266 complaints were received at the Wages Board to the effect that farmers were not abiding by the law. Nonetheless, the following table illustrates the changes in rates of pay for West Midland counties between 1914 and 1921, by which time the minimum wage stood at 42/- in thirty-five counties.

<table>
<thead>
<tr>
<th>County</th>
<th>Rate in 1914</th>
<th>Rate in 1920-21 (minimum wage in winter)</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloucestershire</td>
<td>16/3</td>
<td>46/0</td>
<td>183</td>
</tr>
<tr>
<td>Herefordshire</td>
<td>17/2</td>
<td>46/0</td>
<td>168</td>
</tr>
<tr>
<td>Shropshire</td>
<td>16/5</td>
<td>46/0</td>
<td>180</td>
</tr>
<tr>
<td>Staffordshire</td>
<td>19/0</td>
<td>46/0</td>
<td>145</td>
</tr>
<tr>
<td>Warwickshire</td>
<td>16/6</td>
<td>46/0</td>
<td>179</td>
</tr>
<tr>
<td>Worcestershire</td>
<td>16/3</td>
<td>46/0</td>
<td>183</td>
</tr>
</tbody>
</table>

According to Arthur Marwick, the cost of living rose by approximately 75% over the same period, for although (as William Beveridge shows) retail food prices had risen by 149%, other costs had been pegged by government action. However, it is by no means certain that the mass of labourers seized upon the opportunity to exploit the sudden demand for their skills and dramatically improved their standard of living, for despite the sizeable increases received most were starting from a position of near poverty. In such circumstances even a percentage increase of 150% may have proved insufficient to have raised substantially their real standard of living.

1. GREEN op. cit. p. 289
2. BOWLEY op. cit. p. 170
3. MARWICK op. cit. p. 293
4. BEVERIDGE op. cit. p. 322
Investigators working on behalf of the Agricultural Wages Board were invariably told by the workers themselves that they were less well off in 1918 than they had been in 1914, although this opinion was often said to be based upon their inability to obtain certain basic items that were in general short supply rather than on an assessment of their financial resources. The employers appear to have been less certain, but the majority were of the opinion that the rise in wages had probably matched any rise in the cost of living. The investigator for Worcestershire noted in his report that labourers undoubtedly enjoyed a greater degree of security than they had known before. Their skills were in demand, with the result that

"no man need be idle unless he wishes to be so ... He knows that he can get work at any moment and that if one employer dismisses him another will take him on immediately." 

Wages were higher, and there were the added bonuses of a rent-free cottage, a plentiful supply of vegetables, and in Worcestershire, fruit. Thus while their standard of living remained low in comparison to that of other groups of workers, the labourers had certainly benefited to some extent from wartime conditions. The evidence from Norfolk pointed to a similarly satisfactory condition, but in Kent, the investigator suggested that while labourers' families had been able to afford many articles of food and clothing normally beyond their means in the first two years of war, they were no better off by 1918 than they had been before 1914. The main cause of this was said to be the fixing of a minimum wage, and the strict adherence of farmers to this rate of pay at a time of rapidly rising prices. There was even some suggestion that farmers were deliberately misleading the men as to the wage that the government had fixed and subsequently underpaying them. Although evidence of such sharp practice is extremely limited, it is clear that 25/- a week remained the maximum wage for much of 1918, many counties receiving no increase from the Agricultural Wages Board until the autumn.

However, whether or not the full-time agricultural labourer experienced a

1. AGRICULTURAL WAGES BOARD Wages and Conditions . . . Vol. I op. cit. p. 177
2. Ibid. p. 177
3. Ibid. p. 177
minor or major improvement in his economic status, the revival of interest in
his skills was to prove but a passing phase. The winding down of the food
production drive, the withdrawal of government from the conduct of agricultural
policy, and the rapid return of converted land to pasture following the repeal
of the 1920 Agriculture Act, once more reduced the labourer to a position of
impotence and insecurity.
Whatever the true size of the labour shortage, there were without question too few people on the land to carry through unaided the substantial increase in cultivation demanded by the food production campaign. Consequently, as Lloyd-George wrote in his memoirs:

"the government saw clearly that we should have to resort to labour saving machinery on a large scale." ¹

While it was not the only labour saving device to be adopted, much effort and expense went into the development of the tractor programme. Although a relatively recent invention which was largely untried and widely mistrusted, the tractor promised to be of considerable value in view of the speed with which the breaking and ploughing of land had to be completed. However, those who have commented on the contribution of these machines have been generally unimpressed. Dewey doubts that the small number of tractors available would have gone far in a country with such a large number of agricultural holdings, ² and would certainly not have effected a significant jump in agricultural productivity. Whetham contends that:

"the tractors gave even more trouble to the Committees than the horses and men," ³

and emphasises their unreliability. Nevertheless the fact that the Food Production Department forged ahead with the tractor programme, in spite of the many difficulties involved, is a significant pointer to the extent to which the labour force had to be augmented, and for this reason it is worthy of closer examination.

¹ LLOYD-GEORGE op. cit. p. 1302
² DEWEY Agricultural Labour Supply . . . loc. cit. p. 109
³ WHETHAM op. cit. p. 106
During the first half of 1917 the scheme to provide tractor cultivation in all counties was run directly from the headquarters of the Food Production Department in London. It was felt that the members of the county committees were not sufficiently familiar with tractors to take responsibility for them, and instead local motor engineers were chosen to represent the department. However, although they possessed the necessary mechanical skills they did not always have comparable agricultural experience. Thus in August 1917 a Machinery Sub-Committee was established in each county to control the distribution of machines and their implements. The local Machinery Officer decided which land was suitable for tractor ploughing and was also empowered to agree contracts with farmers. The contracts were fulfilled by Tractor Units, which normally comprised eleven tractors when at full strength and were controlled by a Supervisor. His brief was to ensure that the standard of work was satisfactory and that adequate supplies of fuels and lubricants were available. The Food Production Department supplied the mechanical staff, and their Tractor Representative was in charge of the maintenance of the tractors and machinery. To cope with the expected demand for equipment, the Food Production Department established a central depot at Willesden, North London in carriage sheds belonging to the London and North Western Railway Company.

Even after this re-organisation the tractor programme continued to be extremely expensive and was plagued by the complexities of divided responsibility. In the circumstances cost was an irrelevant factor, but the efficient deployment of resources was vital, and as a result further changes were made in mid-1918. These placed the Executive Committees in total control by allowing them to lease the Tractor Units to independent engineer contractors who operated them under the direction of the Tractor Representative. He in turn became responsible to the Executive Committee rather than the Food Production Department.

From October 1st 1917 the Executive Committees were required to keep records of the work done by tractors and to make returns to the Food Production Department.

1. Middleton gives the total cost of tractor cultivation as £3,213,000 compared to £1,021,000 for horses and £88,000 for steam tackle. Op. cit. p. 296.
of the average acreage ploughed per tractor per week. Thus local sources
provide a very clear idea of the mechanical contribution to the food production
drive. The chief advantage of the tractor was speed. It was faster than a
team of horses, could operate in areas where steam tackle could not, and required
fewer men to work it. Moreover, with the exception of the man who set the
implements, no great skill was required to drive a tractor and training was
correspondingly brief. However, some regions were more suitable for tractor
ploughing than others. In Bedfordshire, the Executive Committee found it
necessary to point out to the Board of Agriculture that although their members
were doing their best to get the land ploughed, the shortage of work for tractors
was due to the fact that

"a large amount of land in this County
is unsuitable for tractor ploughing at
this time of year." ¹

In the event of a neighbouring county requiring tractors and men, they were even
prepared to loan six machines for a limited period such was the difficulty of
using them on their own land. ² There were also problems connected with the
provision of effective implements for use with tractors, particularly ploughs.
Some tractors came complete with their own ploughs, but these were generally
American models that were not suitable for use on British farms. An obvious
solution was to adapt existing horse-drawn machinery, attaching it by means of
a towing-point but this had its drawbacks. Ploughs which stuck in the furrow
were capable of upending tractors, and several fatal accidents are known to have
occurred, while field gates and farm buildings were liable to damage as a result
of the wide turning circle required by a tractor towing a plough or a harrow.
Before the advent of rubber tyres it was also difficult to produce wheels suitable
for work that often involved driving through heavy mud. In 1908, the Hornsby
Company at Lincoln had experimented with caterpillar tractors driven by steam,
and had gone on to produce oil driven models capable of dealing with every kind

1. BRO. WAR 4 Reports to the Committee 16/2/18
2. BRO. WAM 9 Minutes of the Machinery Sub-Committee 21/3/18
of terrain. However, the patents were eventually sold to the Holt Company of America because there was no market for the idea in Britain — not, that is, until it was re-imported as the basis of the tank! Smooth wheels provided poor adhesion, while straked iron wheels damaged the road surface so badly that they were banned from public highways altogether. Thus movement in the field, and from one field to another became very difficult.

An immediate problem was caused by the number of different tractors in use and the frequent impossibility of providing spare parts for all of them. In April 1917 the Food Production Department possessed only 500 vehicles, and plans were drawn up to increase this total by 5,000. While some of these tractors could be built in Britain, a significant number would have to be imported from the United States. Inevitably, deliveries were erratic and well behind the schedule devised by the Food Production Department. By January 1918, when at one time it was hoped that the full 5,000 tractors would be available, only some 1,650 were in use and by March the average number in operation was only 2,240.

Moreover, by 1918 more than 30 different makes had been supplied to the County Committees, although the number in use was eventually reduced to six — namely the Titan, the Mogul, the Clayton-Shuttleworth, the Overtime, the Saunderson Universal, and the Fordson. The Titan and the Mogul were both built by the International Harvester Company in America. Between 1914 and 1920, 3,500 Titans were imported at a cost of £410 each, their 25 horse power two cylinder engines proving both efficient and versatile. Between July and October 1917, 15 Titans were ordered by the Bedfordshire Executive Committee, while in Worcestershire 16 of the county's first 18 tractors were Titans. The Overtime was also American built. Its two cylinder engine produced 28 horse power, transmission being by means of exposed teeth and gearing, with the engine, radiator and fuel tank

1. MIDDLETON op. cit. p. 235
2. Ibid
3. WHETHAM op. cit. p. 106
4. BRO. WAM 9 Minutes of the Machinery Sub-Committee 26/7/17 and 20/10/17
5. WRO. 179/259.9.2 Parcel No. 14 Minutes of the Machinery Sub-Committee 21/11/17
independently mounted on a main frame. The Clayton-Shuttleworth was the best of the caterpillar tractors, and although expensively priced at £650 its four cylinder engine produced 35 horse power, which made it especially suitable for working heavy clay. The British built Saunderson-Universal had made its first appearance before the outbreak of war and was available in two models. It too had a four cylinder engine and ran on paraffin, with petrol as a starting agent.

However, the tractor generally regarded as having been the cheapest, most reliable and most popular was the Fordson. Originally imported from America, it was eventually built in Britain after Percival L. Perry - first managing director of Ford's British subsidiary and by 1917 Director of Agricultural Machinery at the Food Production Department - had persuaded Henry Ford to establish a new factory in Ireland. A distribution centre was set up at Trafford Park in Manchester, and by the end of the war some 6,000 Fordsons had been supplied to the Food Production Department as against a combined total for all other makes of 3,262. Add to this the 2,500 bought privately and the importance of this machine becomes clear. The Fordson was well in advance of most other designs and bears a strong resemblance to many more recent vehicles. It could run on petrol or paraffin, while its weight was only one hundredweight per horsepower compared with three or four hundredweight per horsepower of some other makes. It was also undoubtedly versatile.

"When followed by a self-lift plough, a Fordson enabled one man by himself to operate one or two furrows on light land; it could pull one furrow on heavy land that had already been broken up by steam ploughs or a team of horses; it could pull a binder in harvest, and haul carts." 3

There were, however, occasions on which it was not altogether successful and evidence from the Bedford records clearly shows that it did have limitations. In January 1918 the Machinery Sub-Committee of that county agreed to accept 10 Fordsons offered by the Food Production Department, but by April they had

1. LLOYD-GEORGE op. cit. p. 1303
3. WHETHAM op. cit. p. 107
resolved to take no more and at the end of June took steps to return those they already had and exchange them for Titans, which had already demonstrated their superior ability to deal with the heavy local soil.  

Whatever the make of tractor in use, a high degree of unreliability was a feature of the war years. In large measure this was due to the fact that they were new machines, and that they were being introduced well in advance of their ability to cope with the work they were asked to do. Most early tractors had chain drives, which were easily damaged, and the metals from which the engines were made were often unable to stand up to the prolonged heat and stress endured by tractors engaged on heavy duties. Pistons were particularly subject to rapid wear, and the tendency for most operators to adopt paraffin as the standard fuel did nothing to help in this respect. In normal times these machines would have undergone a much gentler initiation and would have had the benefit of a much better repair and maintenance service than they were to receive in wartime. Thus the number of breakdowns is not necessarily a true reflection of the tractor's usefulness. Spare parts were particularly difficult to come by and often caused lengthy delays. Nonetheless there was much truth in the view that

"the agricultural tractor at its present stage of development is the least reliable of all ploughing instruments."  

II

The records of the Worcestershire Executive Committee provide the most comprehensive source available for tracing the progress of the tractor programme in a given area. The weekly minutes of the machinery sub-committee indicate the number of tractors in use, the number of hours worked and acres ploughed, and the problems, frustrations and successes of the enterprise as a whole.  

1. BRO. WAM 9 Minutes of the Machinery Sub-Committee
2. WHETHAM op. cit. p. 106 Circular from the Food Production Department to all County Committees
3. WRO. 179/259.9.2 Parcel No. 14 Minutes of the Machinery Sub-Committee
In the autumn of 1917 there were only 17 tractors at work, no spare parts, and not enough trained men to operate them. Their services were in demand in some areas, such as Worcester and Bromsgrove, but not in others. In Shipston on Stour for example, the whole of the 230 acres scheduled for ploughing under the survey of October 1917 was declared unsuitable for tractors. However, the lack of work was more often attributed to the natural suspicion with which farmers viewed the introduction of new machinery, and following a drive to secure more contracts and overcome such 'consumer resistance' the tractors were fully employed by the end of March 1918.\(^1\) Urgent requests for spare parts were made at frequent intervals, and failure to meet them promptly was often responsible for tractors being taken out of service. Nevertheless, the number of tractors in use increased steadily from 14 in September 1917 to 59 a year later. Many of the later deliveries were Fordsons, and in May 1918 a start was made on training girls to drive them. They were soon found to be "very keen, and manage the tractors excellently, and are doing very good work."\(^2\)

From time to time, special incentives were introduced in an effort to increase the acreage ploughed, one of these being the 'Championship Flag' awarded to the driver of the tractor ploughing the greatest area in four consecutive weeks. In Worcestershire, this was regularly won by Privates Clegg and Soden of the Bromsgrove Tractor Unit. In the four weeks ending April 10th 1918 they ploughed 48.5 acres and cultivated a further 198 - well above the averages for the county as a whole. However, there were occasions when the Executive was less than pleased with their tractor operatives - particularly when the weather was wet or the tractor out of commission and the men refused to be assigned to other work on the farm. Similar instances were noted in other counties.\(^3\)

1. Evidence of this suspicion can also be found in Bedfordshire, where the Machinery Officer noted "a rooted objection to tractor work ... In one instance I begged of a man two months ago to let me go and tractor plough his field, and I believe steam tackle has only got into it this last day or two." BRO. WAR 4 Reports to the Committee Feb. 14th 1918

2. WRO. 179/259.9.2 Parcel No. 14 Minute of May 10th 1918

3. BRO. WAR 4 Report of the Machinery Sub-Committee 14/2/18
was revised to include a clause allowing farmers to use such labour for other purposes whenever conditions prevented tractor operation. By the autumn of 1918 tractors were being used for tasks other than ploughing. On one occasion it was reported with some pride that

"a girl working a binder had done a 3½ acre field in two hours using less than one gallon of paraffin per acre, and two balls of string. Two hundred acres of tractor binding had already been done in the County in a very satisfactory manner, very few complaints having been received." ¹

Measures were also taken to maximise the efficiency of tractors by re-organising their distribution within the county. Initially, they had been allocated between eight districts - Droitwich (11), Evesham (5), Bromsgrove (8), Kidderminster (4), Martley (9), Pershore (8), Rock (2) and Upton (9). These locations were not always close to the areas in which tractors were required, thereby wasting valuable time and fuel on lengthy road journeys, and some units were regularly underworked. Thus a new plan was devised based on nine centres, some old, some new. These were Bromsgrove (9), Evesham (9), Kidderminster (5), Abberley (5), Redditch (4), Shipston (5), Worcester No. 1 (14), Worcester No. 2 (8) and Upton (4). Each became responsible for its own supplies and repairs in accordance with the national policy of the Food Production Department, and a request for five extra tractors was made to bring the number up to the required level. ²

Once the Armistice had been signed the tractor scheme was quickly wound up. In Worcestershire, operations were terminated on January 31st 1919. The tractors themselves were overhauled and put into a state of repair sufficient to allow their immediate sale to the public. Forty were disposed of at Worcester on March 17th and further sales followed at Bromsgrove on April 8th and Worcester on April 28th.

III

The Report of the Food Production Department for 1918 states that during

1. WRO. 179/259.9.2 Parcel No. 14 Minute of August 12th 1918
2. WRO. 179/259.9.2 Parcel No. 14 Minutes of the Machinery Sub-Committee 23/9/18
that year, 650,000 acres of land had been ploughed by state owned tractors, and a further 580,000 acres cultivated. 1 Thomas Middleton calculated that "the whole of the tillage carried out by tractors for the preparation of the land for the 1918 crops would have been equivalent to the ploughing of about 600,000 acres" adding that "tractors gave valuable aid in the late spring and summer cultivation of 1918, and they were specially useful in the harvest field where they contributed materially to the rapid ingathering and thus ... to the safety of the crops in the south and east of England." 2

Similar sentiments were expressed by G. T. Hutchinson, who argued that in addition to helping the County Executives to increase corn production the tractor programme had introduced a new and useful means of cultivation to the farmers. 3 However, none of these assessments seeks to place the tractor programme and its successes in the context of the food production campaign as a whole. In particular, it is difficult to assess the significance of figures on ploughing and cultivation without knowing the total of which they form a part. Do the figures quoted by the Food Production Department represent a fraction of all the land ploughed and cultivated in 1918, or of the amount converted from pasture to arable use?

In 1914, there were 19,414,000 acres of arable land in the United Kingdom, and by the end of the war this had increased by 3,381,000 acres, giving a total acreage of 22,795,000. If the 650,000 acres ploughed by tractors during 1918 is a fraction of this figure, then it represents a mere 2.8% of the total. If, on the other hand, tractors were mainly used for ploughing land that was previously under grass, the proportion rises to 19.5%. An examination of tractor cultivation in Worcestershire produces similar results. The total arable area stood at 142,735 acres in 1918, of which approximately 28,000 were newly ploughed. 4

1. PRO. Report of the Food Production Department for 1918 loc. cit. p. 7
2. MIDDLETON op. cit. p. 225
3. HUTCHINSON loc. cit. p. 1046
4. GAUT op. cit. p. 441

WRO. 179/259.9.2 WAEC Minute Book Min. No. 1745 23/11/18
Tractors had been responsible for the work done on 6,580 acres between September 1917 and September 1918 – the equivalent of 2.3% of the total area, or 23.5% of the additional acreage. There are some grounds for believing that the breaking of grassland was the more likely employment undertaken. Firstly, tractors were much quicker than other forms of ploughing and for land that had to be broken and made ready for crops, speed was of the essence. Secondly, those farms which were simply increasing their existing arable acreage would already possess some ploughing equipment and would be unlikely to require tractors to undertake all of their work. However, it is equally true that some tractors and ploughs were not suited to the ploughing of turf and had to give way to the more traditional steam tackle.

Obviously, the greater the amount of work done, and the greater the importance of that work to the food production campaign, the greater the overall importance of motive power. Ploughing, cultivating and harvesting duties made the tractor an extremely versatile piece of equipment, and yet it is difficult to escape the conclusion that in the contemporary imagination, the disadvantages of the tractors obscured their usefulness. In Worcestershire, the number of hours lost for repairs or to bad weather amounted to 50.78% of the time available for work between September 1917 and September 1918, a situation which exemplified the apparent unreliability of these machines. Hutchinson's account of the tractor programme remarks critically that

"the statement of weekly averages in the counties circulated by the Food Production Department shows that few counties are able to maintain an average of 10 acres ploughing per week per tractor in commission, or a fuel consumption below 5 gallons an acre." 3

Even though the cost of the operation under wartime conditions was officially regarded as irrelevant, remarks such as this concerning the expense of running and maintaining the tractors also appear in the records of the County Executive Committees.

1. See statistical table 'Tractor Work in Worcestershire' p. 160 - 1
2. See statistical table 'Tractor Work in Worcestershire' p. 160 - 1
3. HUTCHINSON loc. cit. p. 1050
The reluctance of farmers to make widespread use of tractors in the post-war period has also been seen as a reflection of their limited value in wartime. However, in all probability such reluctance stemmed from a realisation by the individual farmer that at this stage in their development tractors were insufficiently cost-effective. The evidence points much more to the view that the tractor programme was an important part of the food production drive, both in terms of its contribution to the ploughing and preparation of land, and the degree to which it off-set the shortage of skilled ploughmen particularly during 1918. Add to this the 250,000 acres ploughed by steam tackle, and 880,000 acres cultivated by the same means and the role of machinery in First World War agriculture assumes a much greater importance than it has generally been accorded.

1. PRO. Report of the Food Production Department for 1918 loc. cit. p. 7
TRACTOR WORK IN WORCESTERSHIRE

Statistics compiled from the reports of the Machinery Sub-Committee, September 1917 - September 1918.

<table>
<thead>
<tr>
<th>DATE</th>
<th>NO. OF TRACTORS WORKING</th>
<th>NO. OF TRACTORS IDLE</th>
<th>AREA OF LAND PLoughED (IN ACRES)</th>
<th>AREA OF LAND CULTIVATED (IN ACRES)</th>
<th>AREA OF LAND REAPED (IN ACRES)</th>
<th>AVERAGE NO. OF ACRES PER TRACTOR WORKING</th>
<th>AVERAGE HOURS WORKING</th>
<th>AVERAGE HOURS IDLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.9.17</td>
<td>11</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.9.17</td>
<td>11</td>
<td>3</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.10.17</td>
<td>8</td>
<td>6</td>
<td>88</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.10.17</td>
<td>14</td>
<td>0</td>
<td>45½</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.10.17</td>
<td>12</td>
<td>2</td>
<td>105½</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.10.17</td>
<td>12</td>
<td>2</td>
<td>110½</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.11.17</td>
<td>15</td>
<td>4</td>
<td>115½</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.11.17</td>
<td>15</td>
<td>9</td>
<td>92½</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.11.17</td>
<td>17</td>
<td>7</td>
<td>137½</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.11.17</td>
<td>21</td>
<td>3</td>
<td>185½</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.11.17</td>
<td>18</td>
<td>6</td>
<td>166</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.12.17</td>
<td>20</td>
<td>4</td>
<td>208½</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.12.17</td>
<td>18</td>
<td>6</td>
<td>173½</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.12.17</td>
<td>18</td>
<td>6</td>
<td>71</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.12.17</td>
<td>8</td>
<td>16</td>
<td>16½</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1.18</td>
<td>3</td>
<td>19</td>
<td>149</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.1.18</td>
<td>18</td>
<td>6</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.1.18</td>
<td>20</td>
<td>4</td>
<td>81½</td>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.1.18</td>
<td>21</td>
<td>3</td>
<td>60½</td>
<td></td>
<td>12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.18</td>
<td>21</td>
<td>3</td>
<td>209</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.2.18</td>
<td>21</td>
<td>3</td>
<td>151</td>
<td></td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.2.18</td>
<td>21</td>
<td>3</td>
<td>150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.2.18</td>
<td>20</td>
<td>4</td>
<td>204</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3.18</td>
<td>19</td>
<td>5</td>
<td>195</td>
<td></td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.3.18</td>
<td>18</td>
<td>6</td>
<td>202½</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DATE</td>
<td>NO. OF TRACTORS WORKING</td>
<td>NO. OF TRACTORS IDLE</td>
<td>AREA OF LAND (IN ACRES)</td>
<td>AVERAGE NO. OF ACRES PER TRACTOR WORKING</td>
<td>HOURS WORKING</td>
<td>HOURS IDLE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------</td>
<td>----------------------</td>
<td>-------------------------</td>
<td>------------------------------------------</td>
<td>---------------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.3.18</td>
<td>20</td>
<td>4</td>
<td>209½</td>
<td>14.52</td>
<td>808</td>
<td>630</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.3.18</td>
<td>20</td>
<td>4</td>
<td>210</td>
<td>18.32</td>
<td>1098½</td>
<td>491½</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.3.18</td>
<td>20</td>
<td>4</td>
<td>179½</td>
<td>18.25</td>
<td>805½</td>
<td>660½</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4.18</td>
<td>20</td>
<td>4</td>
<td>103½</td>
<td>11.33</td>
<td>485</td>
<td>947</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.4.18</td>
<td>21</td>
<td>10</td>
<td>119½</td>
<td>9.78</td>
<td>565</td>
<td>1184</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.4.18</td>
<td>17</td>
<td>14</td>
<td>83½</td>
<td>7.63</td>
<td>451</td>
<td>1453</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.4.18</td>
<td>23</td>
<td>8</td>
<td>142½</td>
<td>9.26</td>
<td>646</td>
<td>1125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5.18</td>
<td>28</td>
<td>3</td>
<td>206</td>
<td>16.20</td>
<td>1267</td>
<td>730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.5.18</td>
<td>26</td>
<td>7</td>
<td>148½</td>
<td>12.29</td>
<td>807½</td>
<td>1107½</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.5.18</td>
<td>28</td>
<td>5</td>
<td>153½</td>
<td>19.18</td>
<td>1171½</td>
<td>718½</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.6.18</td>
<td>29</td>
<td>6</td>
<td>172</td>
<td>16.80</td>
<td>1109</td>
<td>1001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.6.18</td>
<td>29</td>
<td>7</td>
<td>215½</td>
<td>15.08</td>
<td>1412</td>
<td>723</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.7.18</td>
<td>28</td>
<td>14</td>
<td>189½</td>
<td>8.60</td>
<td>1093</td>
<td>1369</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.8.18</td>
<td>29</td>
<td>14</td>
<td>190½</td>
<td>9.20</td>
<td>1105</td>
<td>1164</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.8.18</td>
<td>33</td>
<td>14</td>
<td>147</td>
<td>11.80</td>
<td>1081</td>
<td>1387</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.8.18</td>
<td>35</td>
<td>14</td>
<td>136</td>
<td>16.41</td>
<td>1153</td>
<td>1230</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.8.18</td>
<td>37</td>
<td>15</td>
<td>187</td>
<td>15.37</td>
<td>1306</td>
<td>1645</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.9.18</td>
<td>43</td>
<td>13</td>
<td>257½</td>
<td>11.66</td>
<td>1404</td>
<td>1796</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.9.18</td>
<td>47</td>
<td>12</td>
<td>435½</td>
<td>12.29</td>
<td>1367</td>
<td>1514</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTALS</td>
<td></td>
<td></td>
<td>6,580</td>
<td>10.21</td>
<td>31,796½</td>
<td>32,814½</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ADDITIONAL NOTES

1. Difficulty experienced in obtaining supplies of paraffin.
2. Frost a major problem. Only one day worked.
3. Paraffin consumption noted as 5.67 gallons per tractor per acre.
4. 66% of working hours idle accounted for by bad weather.
CHAPTER FIVE

THE FINAL RECKONING

I

Thus far evidence has been gathered of the degree to which some accepted ideas about the food production campaign have proven unreliable. The difficulties of administration facing the War Agricultural Executive Committees and the importance of compulsion as a means to their solution have been shown to be greater than is generally supposed. The shortage of labour and the need for replacements continues to defy precise analysis but remains an important factor in any consideration of farming in this period, while the contribution of the tractor programme seems to have been consistently under-rated.

If key elements of the campaign are open to alternative interpretation, what of the claims made for the overall success of the whole programme? How accurate are the statements of men such as Lloyd-George, whose opinions were noted at the beginning of this thesis, and what was the influence of food production policy on agriculture in the immediate post-war period?

II

During the final year of the war there was much discussion and speculation about the government's plans for the future of agriculture. In some quarters the feeling persisted that the emergency of war would be used to create the framework of a radical post-war policy in which state control would be an important element. Others feared that the controversy and resentment surrounding the government's food production campaign would create a back-lash strong enough to sweep away every vestige of state involvement, irrespective of its merits.

The final report of the Selborne Committee, published in January 1918 under the aegis of the Ministry of Reconstruction, certainly provided ample evidence of a desire to retain those powers concerned with the regulation of land use.
The majority opinion was that

"when once the State has embarked upon such a policy as we recommend (namely a permanent increase in home grown food supply) it can run no avoidable risk of failure. Neither the idiosyncrasies, nor the incapacity, nor the lack of patriotism of individuals can be allowed to interpose even a partial barrier to the success of a national policy."

Therefore

"the present powers possessed by the (Food Production) Department of enforcing proper cultivation by entering on the land and tilling or letting, it should be enacted in a Permanent Act."

In its conclusion, the Committee re-asserted its belief that the Corn Production Act, with all its powers of compulsion and management, should be retained as the cornerstone of future agricultural planning. The one dissenting voice among the members of the Committee was Sir Matthew Wallace, whose minority report found favour among those members who viewed government intentions with suspicion.

"It must be borne in mind" (wrote Sir Matthew) "that the reference deals exclusively with post war conditions and I demur to the present state of emergency and the measures adopted to cope with it being exploited so as to postulate a continuance of these measures as a settled policy after the war."

Those involved in the day to day running of the food production drive viewed this debate with some anxiety, fearing that it might hamper them in the completion of their task. Critics of the plough policy had continued to pour scorn upon the work of the Agricultural Executive Committees, and to make their protests heard in Parliament. Many M.P.s had personal experience of the powers that had been available to the Food Production Department in their capacity as landowners, while many more had received letters on the subject from their constituents. The following Parliamentary exchange was reported in 'Berrows Worcester Journal' in July 1918.

2. Ibid. para. 78 p. 34
3. Ibid. para. 1 p. 28
"In the House of Commons on Wednesday Mr. Rupert Wynne (Con. Eastbourne) asked the President of the Board of Agriculture whether it was with his knowledge and consent that the Worcestershire Agricultural Executive Committee were still ordering the breaking up of grassland under threats of penalties to be completed on or before August 1st next, and whether in view of the shortage of labour to get in the harvest he would give instructions that unreasonable orders of this kind should be withheld.

Sir Richard Winfrey (Secretary of the Board of Agriculture): "My right honourable friend is unwilling to interfere with the Agricultural Executive Committee's discretion in the exercise of the powers entrusted to them, but if the honourable member will supply particulars of any orders made by the Committee which he regards as unreasonable enquiry will at once be made into the circumstances."

This type of aggressive questioning and defensive response was not untypical during the spring and summer of 1918, particularly when the consequences of the poor weather during the early part of the year came to light. Ploughing conditions had been good, but a subsequent period of drought and an abundance of insect pests, principally wireworm and leather jacket, caused a number of crop failures on the newly broken grassland. In addition, the Executive Committees and their representatives were guilty of some errors of judgement. Land was planted which could not have been expected to yield good results under any circumstances, crops were sown in soils that were not suited to them, and in some areas were sown at too late a date for the prevailing weather conditions.

"These losses were widely advertised by letters in the press, and otherwise, and an attempt was made by opponents of a tillage policy to support the position they had taken up and to prejudice the efforts that were being made to secure a further extension of the area under ploughed land for the harvest of 1918."

Events were to show that the total area on which crops failed was small in relation to the whole and that the publicity these losses received was out of all proportion to their significance. One observer of the 1918 harvest summed

1. Berrow's Worcester Journal July 13th 1918 p. 6
2. PRO. Report of the Food Production Department for 1918. loc. cit. p. 2
up the results of the plough policy in the following terms:

"the success which attended the effort generally shows the possibilities of a very large proportion of the grassland of England and Wales when put under the plough, and the results moreover prove that even inferior land may, by thorough working and skilful management, be made to yield in many cases what must be regarded as remarkably fine crops." 1

However, in the summer of 1918 evidence of crop failure undoubtedly played an important part in the debate on government control of agriculture which prefaced the passage of the Corn Production (Amendment) Act.

The Corn Production Act of 1917 had included a provision for the lapse after one year of the Defence of the Realm Regulations affecting agriculture and their replacement by Part IV of the Act itself. This would allow a right of appeal to landowners in receipt of cropping orders, and it was because the Food Production Department felt that its efforts would be severely hampered by such a system that the government introduced an amendment designed to secure the continuation of the existing powers. In spite of this, majority opinion in both Houses of Parliament favoured a reduction in the authority of the County Committees, and in consequence a compromise resulted. The Agricultural Executive Committees were allowed to carry on their work much as before, and could continue for example to issue orders requiring negligent occupiers to improve their standards of cultivation; but if the Committees issued orders requiring an occupier to plough up grassland, an appeal could now be lodged with an independent arbitrator appointed by the President of the Surveyors Institution. The same right of appeal was also accorded to those whose land the Committees wished to take over and farm themselves.

The refusal of Parliament to accept the continuation of powers still regarded as essential to the success of the programme for the following year resulted in the resignation of Lord Lee of Fareham as Director General of the Food Production Department, and was greeted with furious protests from the County

Executive Committees themselves. The general impression was that if the question of whether grassland was or was not to be ploughed were submitted to arbitration, little increase in acreage would be secured. Experience soon showed this view to be correct, particularly in the light of the Food Production Department's proposal to plough a further 500,000 acres of grass in time for the 1919 harvest. Farmers were most reluctant to extend their commitments further at a time when uncertainty about post-war policy continued, and steps were taken to resist the Committees' directives by all available means, including the appeal to arbitration. In the face of such opposition some Committees chose to reduce the scale of their demands and eventually abandon any further attempt to increase the arable acreage under their control. Others continued as best they could, but inevitably found it difficult to make significant progress.

The Worcestershire Executive Committee made their position clear in a letter forwarded to newspapers in the county and published toward the end of July 1918.

"Dear Sir,

My attention has been called to statements in the papers that under the recent circular of the Food Production Department no more grassland need be ploughed up for corn, and also to action taken in other counties from which it would appear that it is the intention of some Agricultural Committees that the breaking up of any more grassland should remain in abeyance.

The Cultivation Sub-Committee of the Agricultural Executive Committee have carefully considered all communications which have been received from the Food Production Department and have decided to proceed with the ploughing up of all land which has already been ordered to be ploughed, unless any facts in connection with the farm or holding have arisen to alter the situation since such Orders were issued. On any such facts being brought to the notice of the Committee, they will be considered upon their merits.

The Committee consider that it would be obviously unjust to those who have already met the needs of the times and complied with the orders of the Committee that those who have by obstruction or procrastination up to now evaded carrying out the order should not be obliged to contribute their share for the general good.

The Committee are now in a far better position than they were nine months ago to assist the farmers with horses and machinery, while as regards labour there is a considerable amount of labour now available which has been obtained with a good deal of trouble and for which applications are not being received.

In view of the admitted facts that the country will be short of food for some time to come my Committee feel that it is their duty to proceed on the above lines, and it is their intention to do so.

Yours faithfully,
E.V.V. Wheeler
(Chairman)

1. Berrow's Worcester Journal July 27th 1918 p. 4
At the same time, the members of the Committee demonstrated their appreciation of the uncertainties that were persuading farmers to reject their appeal. In August 1918, the following resolution of the Southampton Agricultural Executive Committee was discussed and endorsed without reservation.

"The Executive Committee... are of the opinion that unless the maximum prices of corn for the 1918 harvest are fixed at sums sufficient to give growers a fair profit, it is improbable that the present acreage can be maintained for the 1919 harvest, and no encouragement will be given to farmers to voluntarily break up further grassland. Taking into consideration the shortage of skilled labour, the indifferent substituted labour, the high wages that have to be paid, the increase in the price charged by order of the Food Production Department for tractor and horse ploughing, and finally the higher cost of all materials required by the farmer, the Committee consider the average prices for corn for the 1918 harvest should be fixed at not less than -

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>80/- per quarter (504 lbs)</td>
<td></td>
</tr>
<tr>
<td>Barley</td>
<td>67/- &quot; (448 lbs)</td>
<td></td>
</tr>
<tr>
<td>Oats</td>
<td>50/- &quot; (336 lbs)</td>
<td></td>
</tr>
</tbody>
</table>

The Committee would further point out that their own activities must be greatly hampered in issuing cultivation orders if the farmer is not properly remunerated when compelled to grow corn crops."

The question of grain prices continued to cause concern throughout the summer and autumn of 1918 and further resolutions were submitted to the Food Production Department in October and November.

The Worcestershire Executive Committee also adopted a conciliatory position on the question of how much land was required for the 1919 harvest. At a meeting in the Shirehall, Worcester on September 28th 1918 it was announced that the Food Production Department had proposed an increase of 18,000 acres in the arable acreage. However, the Chairman of the Committee, Colonel E. V. V. Wheeler, stated that at the present time he did not feel justified in asking District Committees to obtain the full quota, but he did ask them to secure the area set out overleaf, and as much over and above this as possible.

1. WRO. 179/259.9.2 WAEC Minute Book Vol. 2 Min. No. 1612 August 17th 1918
2. WRO. ibid. September 28th 1918
<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>ORDERS ALREADY ISSUED (acres)</th>
<th>AREA NOW UNDER GRASS (acres)</th>
<th>AREA ASKED FOR (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bromsgrove</td>
<td>3,714</td>
<td>33,000</td>
<td>1,500</td>
</tr>
<tr>
<td>Droitwich</td>
<td>3,086</td>
<td>31,000</td>
<td>1,500</td>
</tr>
<tr>
<td>Evesham</td>
<td>1,255</td>
<td>8,000</td>
<td>500</td>
</tr>
<tr>
<td>Feckenham</td>
<td>1,514</td>
<td>8,000</td>
<td>500</td>
</tr>
<tr>
<td>Kidderminster</td>
<td>1,809</td>
<td>11,000</td>
<td>500</td>
</tr>
<tr>
<td>Martley and City of Worcester</td>
<td>3,000</td>
<td>33,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Pershore</td>
<td>3,277</td>
<td>34,000</td>
<td>1,500</td>
</tr>
<tr>
<td>Rock</td>
<td>718</td>
<td>10,000</td>
<td>500</td>
</tr>
<tr>
<td>Shipston on Stour</td>
<td>1,856</td>
<td>11,000</td>
<td>800</td>
</tr>
<tr>
<td>Tewkesbury</td>
<td>1,145</td>
<td>6,000</td>
<td>300</td>
</tr>
<tr>
<td>Tenbury</td>
<td>1,253</td>
<td>14,000</td>
<td>600</td>
</tr>
<tr>
<td>Upton</td>
<td>3,922</td>
<td>32,000</td>
<td>500</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>26,549</strong></td>
<td><strong>231,000</strong></td>
<td><strong>9,700</strong></td>
</tr>
</tbody>
</table>

The response from the farmers was not encouraging. Early in January 1919 a meeting of the Farmers' Union at Kidderminster had advised farmers not to plough any more land, and suggested the organisation of a fund to pay the fines of those who might be prosecuted for disobeying the Committee's instructions. Without the announcement of guaranteed prices for the coming harvest to encourage them, farmers were making little effort to convert pasture. By January 18th 1919, only 173 orders to plough land had been issued affecting 1,763.5 acres, and 59 of these were subject to arbitration appeals. By February 1st the total had risen by only one, 53 appeals were in progress and 40 cases had been settled, with the majority of farmers being excused altogether.

Eventually, it became clear that the programme for 1919 could not be completed. In mid-February, a speech delivered at Newcastle Upon Tyne by Lord Ernle persuaded the Worcestershire Executive to suspend the schedule for ploughing grassland and to consider whether or not they should insist on the ploughing of land already ear-marked.

The following resolution confirmed the shift in policy -

1. WRO. Ibid. Minute No. 1841 p. 303
2. WRO. Ibid. p. 327
the Committee considered the general policy to be adopted with reference to the ploughing up of grassland and matters connected therewith. With regard to land scheduled under the new survey for the 1919 harvest, it was resolved that no further cases be taken to arbitration; that having regard to the Board's Circular CL 114/C1 no further land be scheduled for ploughing up; that except in cases in which the Committee direct otherwise any orders that have been issued to tenants or occupier-owners shall be waived or remain in abeyance and that such persons who have been ordered to plough shall be informed that as a result of instructions from the Board on the general policy of ploughing up further land, the Committee do not propose to enforce orders served, but where an occupying owner or tenant has received such a ploughing order the benefit of same shall remain in force provided that the land is ploughed under it; owners of land who have either in conjunction with the occupiers or of their own volition objected or have required that the order served shall be referred to arbitration shall be informed of the intimation above mentioned sent to the occupiers of the land in question. Further resolved that those cases in which the occupier is prepared to plough but in which the owner objects to the ploughing shall be brought before the Committee for further consideration. Resolved that no further action be taken with regard to ploughing Orders which were not subject to right of appeal. 1

Within a month, notices appeared in the press announcing the Committee's intentions to the farmers in the county, and indicating that

"for the present season, farmers have a free choice as to the crops to be grown on their land. " 2

Thomas Middleton was of the opinion that the changes forced upon the government during the debates on the Corn Production (Amendment) Act

"practically ended the efforts made in England and Wales to increase the area under corn. " 3

while Lloyd-George stated that they had

"clipped the wings of the Food Production Department and made it impossible to hope for the carrying out in full of its proposals for the 1919 harvest. " 4

However, it appears equally evident that the government's failure to take positive action in matters over which it still had control, particularly the fixing of prices for the 1919 corn harvest, undermined what little chance the

1. WRO. 179/259.9.2 Min. No. 1015 of the Cultivation Sub-Committee 10/2/19 in WAEC Minute Book Vol. 2 Min. No. 1901 p. 336 15/2/19
2. WRO. 179/259.9.2 WAEC Minute Book Vol. 3 p. 2 Min. No. 1938 15/3/19
3. MIDDLETON op. cit. p. 276
4. LLOYD-GEORGE op. cit. p. 1320
Executive Committees had of securing the voluntary co-operation of farmers. The net result was a decrease of 488,000 acres in the area under corn and a consequent reduction in home produced food.

III

In spite of the various constraints and uncertainties prevailing upon the Agricultural Executive Committees, the general consensus of opinion has been that the work of increasing home food production was carried through with determination and that its results were of considerable value to the well-being of the nation as a whole. In examining this view, the success of the food production campaign can be measured in a variety of ways, and it is therefore necessary to collect as much detail as possible on the results of the Food Production Department's efforts at local and national level before drawing any final conclusions.

According to T. H. Middleton, the overall effect was to increase the number of days' food supply that could be home produced per year from 125 days in 1914 to 155 days in 1918. This was made possible by an increase in the area under tillage of 1,989,000 acres between June 1917 and June 1918, and a consequent improvement over the same period in the output of certain food crops, namely:

- Wheat: 920,000 acres increase, equivalent to 1,015,000 tons
- Oats: 1,564,000 acres increase, equivalent to 1,421,000 tons
- Potatoes: 338,000 acres increase, equivalent to 2,631,000 tons

The original aim had been to put 3,000,000 more acres under the plough by 1918 than had existed in 1916. The returns for 1918 showed that the cultivated area had risen by 2,960,000 acres, with 75% of this additional land secured in England and Wales by the ploughing of permanent grass. In his memoirs, Lloyd-George noted that:

1. Ibid. p. 1322
2. MIDDLETON op. cit. p. 322
3. Ibid. p. 240
4. Ibid. p. 241
"the wheat crop in England and Wales exceeded the average of the last 10 years before the war by 59.3% and the oat crop was similarly greater by 38.5% and potatoes by 59.2%. ... The 1918 harvest was in fact the greatest that had been secured in this country for over 60 years." 1

The report of the Food Production Department for 1918 quantified the increases for certain crops as follows -

<table>
<thead>
<tr>
<th>CROP</th>
<th>INCREASE OVER 1916 (in acres and as %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>2,557,000 - 645,000 or 34%</td>
</tr>
<tr>
<td>Barley</td>
<td>1,501,000 - 169,000 or 13%</td>
</tr>
<tr>
<td>Oats</td>
<td>2,780,000 - 695,000 or 33%</td>
</tr>
<tr>
<td>Mixed Corn</td>
<td>142,000 - 141,000</td>
</tr>
<tr>
<td>Beans and Peas</td>
<td>401,000 - 52,000 or 15%</td>
</tr>
<tr>
<td>Potatoes</td>
<td>634,000 - 206,000 or 48%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>8,015,000</strong></td>
</tr>
<tr>
<td><strong>1,908,000 or 29%</strong></td>
<td></td>
</tr>
</tbody>
</table>

These figures all testify to the richness of the resources which until 1916 had been allowed to lie dormant in British fields, and to the skill with which the limitations created by wartime conditions had been overcome by the farming community under the direction of the Agricultural Executive Committees. However, there were considerable variations from county to county, with several counties falling short of the targets set by the Food Production Department - a situation which served to fuel continued speculation as to whether the gains secured were any greater than those which would have come from the intensification of livestock farming.

In Worcestershire, the original target set by the Food Production Department had been an increase in corn acreage from 49,000 in 1916 to 93,000 acres by 1918. The area ultimately devoted to corn crops in 1918 was 68,756 3, comprising 43,552 acres of wheat, 5,088 acres of barley and 20,116 acres of oats - an increase of only 18,955 acres. Despite a later reduction of 19,000 acres in the area required, this fell some way short of expectations. The increase required

1. LLOYD-GEORGE op. cit. p. 1317
2. Report of the Food Production Dept. for 1918 loc. cit. p. 1
3. GAUT op. cit. p. 442
of Huntingdon was 20,000 acres over the 1916 total of 65,205. By 1918 only
71,430 acres were devoted to wheat, barley and oats, while in neighbouring
Bedfordshire the increase was a mere 9,306 acres - from 71,822 to 81,128.  

Thomas Middleton accepted that

"the extra month's supply . . . falls far
short of the total quantity of human food
that the 1918 harvest could have furnished."

but argued that a greater increase would have been achieved

"if prolongation of the war had compelled
us to stretch our resources to the uppermost."

However, the continuing opposition from agricultural interests and the degree
to which compulsion had been necessary to achieve the 1918 results suggest that
perhaps the upper limits of production were already close at hand. Much of the
work connected with the selection and preparation of land had been undertaken
at a time when no-one could have been sure of victory before the end of the year
and as much food as possible had to be secured by home production. Indeed, it
could be argued that the Armistice represented a welcome release from the prospect
of once more exhorting reluctant farmers to increase their arable acreages.

Bearing in mind the reduction in powers occasioned by Parliamentary criticism,
again well before the outcome of the war could be foreseen with any certainty,
and the fact that much of the land so strenuously worked since 1916 was in
desperate need of fertilisers (of which there were limited quantities) or a
period of rest (which could be ill-afforded) and it becomes increasingly difficult
to accept Middleton's optimism.

Nevertheless, even allowing for criticisms such as these, the general view
of the campaign as a success cannot be entirely dismissed - particularly if it
can be shown that comparable results would have been unattainable without
government action.

As noted previously, there is little evidence to suggest that farmers would
have responded in quite the same way had they been left to their own devices.

1. HRO. HCR/MB/927/3 Huntingdon WAEC Minute Book Vol. 3 p. 137
2. MIDDLETON op. cit. p. 322
Prior to the Lloyd-George initiative of December 1916, voluntary conversion of grassland had been piecemeal and paltry. Splendid though the ultimate effort was to be, it was primarily a response to government policy and to the authority of the local Executive Committees, which in practice ran directly against what farmers considered to be their best interests. However, even if the will to increase food production had existed it is difficult to see how the agricultural community could have overcome certain problems without government assistance.

The question of labour supply is perhaps the obvious example. In the face of severe competition from the military authorities and from industry, farmers acting independently would have been even less able to retain their workers than they were in practice, while the difficulties created by recruitment could not possibly have been tackled without some form of organised replacement scheme. Given that the majority of substitutes came from 'controlled' sources such as the Army or the German prisoners of war, some sort of local or preferably national body would have been necessary to deal with the administrative details on behalf of the farmers. It is of course possible that such a body could have been established, possibly through the agency of the Farmers' Union, but it is unlikely that its overtures would have been as well received as those of a government department possessed of the necessary powers to enforce co-operation and cut through the muddle and delay of administrative red-tape.

It is equally hard to envisage the farming community in a position to organise and finance a significant increase in the supply of machinery, particularly tractors, at a time when the government had already established tight control over the allocation of shipping space. The tractor schemes that were run by the Food Production Department relied heavily upon the import of vehicles from the United States, while the total cost involved was never passed on to the farmers who benefited from them. They did not have to buy, maintain or operate the tractors, which they would have been obliged to do to a much greater degree had they been solely responsible for the introduction of this form of motive power. Admittedly, the Food Production Department did ultimately 'sub-contract' its
own tractor scheme to a network of local motor engineers who might have been just as willing to participate on behalf of a different paymaster; and there is of course no reason why the farmers could not have expanded the existing steam tackle business as an alternative to tractors. However, the over-riding problem of cost would still obtain, and the conclusion could still be drawn, that a smaller area would have been ploughed or cultivated mechanically than was achieved by the Food Production Department's involvement. Indeed it could be argued that their difficulty in organising an effective tractor scheme serves only to underline the greater problems likely to have attended any independent operation.

It is undoubtedly true, therefore, that the food production campaign made a very important contribution to the war effort and brought about improvements in agricultural land use. But it is equally true that its success was short-lived and that the long term consequences of the campaign were in many ways negligible. At first sight it seems strange that successful policy and valuable productive capacity should be so readily abandoned, but to a considerable degree it was success itself that prompted this reaction, for success had depended upon measures that had irritated and angered the farming community and had limited their jealously guarded right to independence where the cultivation of land was concerned. Instances of their frustration and opposition have already been cited and evidence of an intent to dismantle the odious apparatus of state control already adduced. Thus, much as it may have been necessary during the war, government involvement as represented by the Food Production Department and its executive committees was not welcome and was not encouraged once the war was over. Despite the recommendations of Lords Milner and Selborne, despite the reality of the risk that over dependence upon imported food supplies created, and despite the increase in the overall standard of cultivation achieved by the county committees, little support was forthcoming for any plan designed to construct a comparable post-war policy.

The Food Production Department formally came to an end on March 31st 1919 when its remnants were incorporated into the former Board, subsequently Ministry,
of Agriculture. During the course of the same year the War Agricultural
Executive Committees steadily scaled down their activities. Control over the
use of land ended in the spring, land taken into occupation was handed back to
its owners and the personnel recruited in each county either returned to their
former employment or went in search of new jobs. Under the Ministry of
Agriculture and Fisheries Act (1919) the remaining branches of the Executive
Committees were reconstituted as permanent bodies within the County Councils,
in charge of smallholdings and responsible for agricultural education and
advisory services. Wartime legislation, particularly that connected with the
Corn Production Act, lasted a little longer, with the Agricultural Wages Board
doing valuable work in many parts of the country and the system of guaranteed
prices being maintained in an attempt to reduce the inevitable trend towards
re-conversion of arable land to pasture. However, in 1920 came the repeal of
the Agriculture Act, ditched as soon as the guarantees threatened to cost the
government too much money, and in circumstances that left farmers who had kept
faith with official exhortations to maintain supplies of home produced grain
feeling a justifiable sense of betrayal. Only the Wages Board survived the
debacle, due in large measure to widespread and vocal protest in its support.
Elsewhere the reversion to grassland accelerated rapidly and farmers were left
to pick up the pieces as best they could. It was a situation that did not
change substantially until the country felt the blast of war once again in
1939.
BIBLIOGRAPHY

PRIMARY SOURCES

The Public Record Office

Ministry of Agriculture Fisheries and Food
- Food Production Department: Correspondence and Papers 1916 - 1920
  (MAF 42 - especially MAF 42/8).
- Correspondence and Papers of the Essex County War Agricultural
  Committee (MAF 900/1).
- Correspondence concerning the Employment of Women (MAF 59/1).

Ministry of National Service - NATS 1/53 and 1/132.

Minutes of the War Cabinet - CAB 23/2 - 23/3.

County Record Offices

Bedfordshire - WAM 0 - 5 Minutes of the War Agricultural Committee
  WAO 10 (1 - 3) Orders to Plough
  WAM 7 Minutes of the Labour Sub-Committee
  WAM 9 Minutes of the Machinery Sub-Committee
  (14/6/17 - 7/11/19)
  WWA 2 Minutes of the Women's War Agricultural Committee, 1919, and Summary of the Committee's work
  WAR 3 - 5 Reports to the Committee 1917 - 1919
  WAV 13 POW Camp Weekly Time Sheets

Huntingdonshire -
  HCR/MB/1927/1 - 4 War Agricultural Committee Minute Books 1915 - 1920.
  HCR/CL 19/3 Letter Books of the War Agricultural Committee 1917 - 1920.

Worcestershire - Bulk Accession No. 179
  Reference No. 259.9:2
  1. Minute books of the War Agricultural Executive Committee
     (3 volumes).
  2. Minutes of the Cultivation Sub-Committee.
  8. Minutes of the Machinery Sub-Committee.
  14. Minutes of the Machinery Sub-Committee.
  16. Reports and Papers of Labour Sub-Committee.
  60. Papers re-notices of Objection Meetings.
  84. Cultivation Orders.
  310. Samples of Categories destroyed, including Breaking-up Orders.

Official Publications

Board of Agriculture and Fisheries
- Wages and Conditions of Employment in Agriculture Vols. I and II
  (Cmd. 24 and 25) HMSO LONDON 1919.
Ministry of Agriculture, Fisheries and Food

Ministry of Reconstruction
- Report of the Agricultural Policy Sub-Committee of the
  Reconstruction Committee (Chairman Lord Selborne) HMSO LONDON 1918
  (Cd. 9079).
- Also Interim Report (Cd. 8056) HMSO LONDON 1917.

Royal Commission
- Report on the Supply of Food and Raw Material in Time of War
  HMSO LONDON 1905 (Cd. 2643)

Report of the Milner Committee on Home Grown Food Supplies (Cd. 8048) HMSO
LONDON 1915.
SECONDARY SOURCES

BEVERIDGE W. - British Food Control OXFORD 1928.
BOWLEY A.L. - Some Economic Consequences of the Great War LONDON 1930.
- Wages and Income in the United Kingdom since 1860 LONDON 1921.
BULKLEY M. E. - Bibliographical Survey of Contemporary Sources for the Economic and Social History of the War OXFORD 1922.
COLLER F. H. - A State Trading Adventure LONDON 1925.
COLLING J. - The Great War - Its Lessons and Warnings LONDON (no date)
DEARLE N. B. - Economic Chronicle of the Great War for Great Britain and Ireland OXFORD 1929.
- Patriotism and Agriculture EDINBURGH REVIEW 1915.
FORDHAM M. - The Rebuilding of Rural Britain LONDON 1925.
GAUT R. C. - A History of Worcestershire Agriculture WORCESTER 1939.
HALL A. D. - A Pilgrimage of British Farming LONDON 1913.
- Agriculture after the War LONDON 1916.
HAMMOND R. J. - British Food Supplies EHR VOL. 16 1946.
HIBBARD B. H. - Effects of the Great War upon Agriculture in the United States and Great Britain NEW YORK 1919.
LLOYD E. M. H. - Experiments in State Control OXFORD 1924.
MARWICK A. - The Deluge HARMONDSWORTH 1967.
MIDDLETON T. H. - Food Production in War OXFORD 1923.
MONTGOMERY A. K. - The Maintenance of the Agricultural Labour Supply in England and Wales ROME 1922.
OLSON M. - The Economics of Wartime Shortage DURHAM, NORTH CAROLINA 1963.
REW R. H. - Food Supplies in Peace and War LONDON 1920.
TAWNEY R. H. - The Abolition of Economic Controls 1918 - 1921 EHR VOL. 13 1943.
TRACY M. - Agriculture in Western Europe - Crisis and Adaptation since 1880 LONDON 1964.
WRIGHT P. - Old Farm Tractors NEWTON ABBOTT 1972.