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*Labour and
wages,
Agricultural*

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THE SUPPLY, USE, COSTS AND REMUNERATION OF
LABOUR IN AGRICULTURE.

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There is a common opinion that the productivity of British agriculture has been declining during the last 70 - 80 years. In most cases the opinion arises from an inherent objection to fundamental changes in the character of our agriculture and to changes in the form and organisation of production processes. A shift from arable to grassland farming was assumed to indicate a decline in productivity and the relatively high production possible from well managed pastures was little understood. Full consideration was not given to the steady increase in the demand for animal products and particularly for such high priced protective foods as milk and eggs. Likewise the steady fall in the numbers of persons engaged in farming was thought to be due to a declining industry and sufficient consideration was not given to the influences of machinery and implements upon labour requirements.

Records are vague and measurements somewhat uncertain but available information shows that at some periods agricultural output has increased and that people directly dependent upon the industry for their livelihood have enjoyed a steadily rising standard of living. Since 1924 hired workers have enjoyed the protection of statutory regulation of their wages and during the years 1930-33 farmers were able to withstand the effect of low prices by changes in the character of their farming and by improvements in the organisation of production. During this period the average rate of wages fell by less than one shilling a week.

I. SUPPLY OF LABOUR.

Information relating to supplies of farm labour is provided in the Reports on the Census of Population and in the Agricultural Statistics prepared yearly by the Ministry of Agriculture and Fisheries. The following summary shows that between 1871 and 1931 the number of people directly engaged in agriculture fell by nearly 450,000.

Estimates of Persons Engaged in Agriculture.

| <u>Year.</u> | <u>Number.</u> | <u>Percentage Change.</u> |
|--------------|----------------|-------------------------------|
| 1871 | 1,326,278 | 100.0 |
| 1911 | 1,041,422 | 78.5 |
| 1921 | 978,481 | 73.8 |
| 1931 | 876,729 | 66.1 |

The information contained in the Agricultural Statistics excludes farmers and their wives but includes sons, daughters and other relatives engaged in farming and is only available for 1921 onwards. The following summary shows the changes which have occurred since 1921.

| | 1921. | 1940. | Difference. | |
|--------------------------|----------------|----------------|----------------|-------------|
| | No. | No. | No. | %. |
| <u>Regular Workers:-</u> | | | | |
| Males over 21 | 456,783 | 362,716 | 94,067 | 20.6 |
| " under 21 | 155,289 | 94,568 | 60,721 | 39.1 |
| Females | <u>73,180</u> | <u>44,253</u> | <u>28,927</u> | <u>39.5</u> |
| Total Regular | <u>685,252</u> | <u>501,537</u> | <u>183,715</u> | <u>26.8</u> |
| <u>Casual Workers:-</u> | | | | |
| Males 21 & over | 103,994 | 51,534 | 52,460 | 50.4 |
| " under 21 | 27,259 | 11,453 | 15,806 | 58.0 |
| Females | <u>56,678</u> | <u>43,357</u> | <u>13,321</u> | <u>23.5</u> |
| Total Casuals | <u>187,931</u> | <u>106,344</u> | <u>81,587</u> | <u>43.4</u> |

Between 1871 and 1921 the number of persons directly engaged in farming declined by 26 per cent. and in 1931 the number was only two-thirds of that recorded in 1871. The detailed yearly information for the last twenty years shows that numbers of regular adult male workers employed on farms in 1940 were 21 per cent. lower than in 1921. The number of youths regularly employed in farming has fallen by 39 per cent. while that of females has fallen by more than 39 per cent. The number of men and youths casually employed on farms has fallen by more than 50 per cent. while that of females has fallen by nearly 24 per cent.

The yearly information does not show the number of hired workers employed in agriculture but the census figures show that about 13 per cent. of the workers excluding farmers, are relatives of farmers. In the decade 1921-31 there was a fall of 47 per cent. in the number of female relatives assisting farmers while the number of male relatives fell by 10 per cent.

This fall in the numbers of people employed on farms has been continuous over the last twenty years. Some people are inclined to say that farmers were compelled to reduce their labour force during the difficult years of 1930-34 and that this was reflected in the general conditions of some farms at the beginning of this war. But the general information does not show any abnormal reductions in the labour force during the depression years. Nor do the statistics for the years 1936 onwards, when the financial conditions of farming were showing substantial improvements, indicate any check upon the rate of yearly reductions in numbers of workers used. The continuous fall in the strength of the labour force is the result of changing organisation to take advantage of continuous change in relative values of different farm products, and of the application of new methods of production.

Numbers of Persons Engaged in Agriculture*
(Census Data).

| | 1911. | | 1921. | | 1931. | |
|---------------------------|------------------|---------------|----------------|---------------|----------------|---------------|
| | Males. | Females. | Males. | Females. | Males. | Females. |
| Farmers and Graziers | 208,761 | 20,027 | 244,653 | 19,440 | 230,879 | 17,367 |
| Farmers' Relatives | 97,689 | 56,856 | 80,257 | 15,384 | 72,593 | 8,189 |
| Bailiffs and Foremen | 22,141 | 25 | 22,462 | 217 | 16,588 | 114 |
| Machine Owners! | | | | | | |
| attendants | 7,286 | 60 | 11,078 | 100 | 8,172 | 58 |
| Shepherds | 20,838 | 6 | 11,240 | 42 | 10,298 | 25 |
| <u>Agri. Labourers in</u> | | | | | | |
| <u>charge of:-</u> | | | | | | |
| Cattle | 69,094 | 4,934 | 59,382 | 10,603 | 62,342 | 6,461 |
| Horses | 128,122 | - | 113,616 | 313 | 69,754 | 119 |
| Other Agri. Labourers | 425,063 | 8,280 | 376,331 | 21,349 | 334,590 | 11,164 |
| " " Occupations: | 28,704 | 392 | 6,075 | 1,323 | 23,178 | 3,838 |
| Total | 1,007,698 | 90,580 | 925,094 | 68,771 | 828,394 | 47,335 |

*N.B. In addition to these numbers there are other classes, namely (1) Gardeners, Nurserymen, Seedsmen, Florists, and (2) Gardeners' Labourers, representing totals of 144,095, 231,216 and 274,582 at these three census periods.

II. EFFICIENCY IN THE USE OF LABOUR.

Reduction in the number of farm workers has not been associated with a decline in agricultural activity, but has been part of a continuous change in the character of farming and in the processes of production. The movement from mixed arable to dairy farming on grassland has not in all cases resulted in any appreciable economy of labour and this is particularly the case where close attention has been paid to the production of high grade milk from attested herds. In the main economy in use of manual labour has been achieved by the introduction of agricultural machinery and implements and through the increasing attention paid to enterprises in which mechanical aids can be applied.

In 1871 the total cultivated area in England and Wales amounted to 19.8 acres for each person engaged in the industry and by 1931 this had increased to 28.7 acres. This increase coincided with a reduction in the national area under tillage crops and with an increase in the national area grazed by livestock. It is noteworthy that the area of tillage crops per person was about the same in 1871 as in 1931 and is much higher in 1941. In the same period the number of dairy cows per person increased from 1.3 to 3.2, that of other cattle increased from 2.0 to 3.8, that of sheep from 15.7 to 19.9 and that of pigs from 1.7 to 3.1.

Crops and Stock per Person engaged in Agriculture.*

| | 1871. | 1921. | 1931. | 1941. |
|------------------------------|--------------|--------------|--------------|--------------|
| | Acres | Acres | Acres | Acres |
| Corn Crops | 6.16 | 6.40 | 5.00 | 7.52 |
| Roots etc. | 2.71 | 2.76 | 3.09 | 3.64 |
| Hay | 3.85 | 6.07 | 7.29 | 5.48 |
| Grazing | 7.07 | 11.31 | 13.36 | 10.87 |
| Total Cultivated Area | 19.79 | 26.54 | 28.74 | 27.51 |
| | No. | No. | No. | No. |
| Horses | 0.82 | 1.39 | 1.07 | 0.91 |
| Cows and Heifers | 1.32 | 2.60 | 3.16 | 3.55 |
| Other Cattle | 1.98 | 3.12 | 3.76 | 4.09 |
| Sheep | 15.75 | 13.85 | 19.91 | 16.42 |
| Pigs | 1.73 | 2.32 | 3.14 | 2.21 |
| Poultry | - | 28.79 | 64.10 | 47.55 |

* In this statement no account has been taken of the varying work capacities of each class of male and female worker nor of the fact that some persons are not fully engaged in agriculture.

With reduced labour on farms there was economy in the use of labour on tillage crops and transfer of labour to the management of dairy herds and grazing stock on grassland. Farmers increased their livestock and between 1871 and 1910 became increasingly dependent upon imported supplies of animal feedingstuffs.

In order to appreciate the relationship between changes in farm organisation and the use of labour it is necessary to weight each of the general groups of farm tasks, crops and livestock, by their requirements of labour. Ashby and Davies** have shown that the land and stock managing capacity per person in 1921 was about 30 per cent. higher than in 1871. Use of the same measurement shows a further increase since 1921 and in 1931 the managing capacity was nearly 44 per cent. higher than in 1871. During the ten years 1921-31 the increase was nearly 11 per cent. Applying the same manual labour requirements to the crops and stock managed per person in 1941 the results show the capacity of labour was 57 per cent. higher than in 1871. Over the last ten years the capacity of labour in handling crops and livestock has increased by 9 per cent. The following figures summarise

** Farming Efficiency and the Agricultural Depression, Journal of the Agricultural Economics Society 1929.

the changes which have occurred since 1871.

Labour Requirements of Crops and Stock as
in 1921.

| <u>Year.</u> | Comparative Totals of Unit Require- ments. | <u>Change.</u> |
|--------------|---|----------------|
| 1871 | 1,850 | 100 |
| 1921 | 2,413 | 130 |
| 1931 | 2,661 | 144 |
| 1941 | 2,906 | 157 |

These crude measurements assume no change in the normal working week. Ashby and Davies estimated that the average length of the working week in 1921 was 11 per cent. shorter than in 1871. Since 1921 there have been only small changes in the length of the normal working week, but there have been increases in the number of days taken as holidays by workers. The extent of the holidays taken in 1921 is not fully known but many single hired men had from three to six working days as holidays and some other workers took holidays. Under the Holidays with Pay Act, 1938, Wages Committees have power to grant holidays with pay to farm workers and these holidays are to be additional to any public holidays normally granted. Up to 1938 the number of holidays granted did not amount to more than three days for each regular full-time worker and at the present time is not more than five days. In 1931 the length of a normal working week would be about 51 hours making a gross yearly working period per person of 2,652 hours exclusive of any overtime. Deducting from this 3-4 days holiday and 4 per cent. for lost time through illness and unemployment the net annual working period for employees would be about 2,500 hours. At the present time the normal yearly working period is estimated at 2,400 hours for hired workers. The average number of hours of manual work for all engaged, including farmers, will be somewhat smaller.

On the basis of available information it would seem that between 1921 and 1931 the average working year, allowing for holidays, was reduced by not more than 3 per cent. and that the normal working year is now only 5 per cent. shorter than in 1921. After allowing for these changes in working hours Column 3 in the table below shows the changes in the crop and stock managing capacity per hour of labour:-

| <u>Year.</u> | Gross change in land and stock managing capacity. | Changes in Hours of Labour. | Net Change in managing capacity. | Decennial increases %. |
|--------------|--|-----------------------------------|--|------------------------------|
| 1871 | 100 | 100 | 100 | - |
| 1921 | 130 | 89 | 146 | - |
| 1931 | 144 | 87 | 165 | 13 |
| 1941 | 157 | 85 | 185 | 12 |

These figures (Column 1) indicate an appreciable increase in work output per person engaged in the industry, and a greater increase per hour of labour (Column 3). The net increase in work capacity during the decennial period 1921-31 was 13 per cent. as compared with an increase of 12 per cent. during the last 10 years.

III. AGRICULTURAL OUTPUT.

It has been estimated that the value of the gross output of agriculture amounted to £127,150,000 in 1908 and that by 1925 it had increased to £225,330,000. Yearly estimates of the output have been made since 1924 and these show that the value fell from £235,065,000 in 1924-5 to £182,545,000 in 1932-33. After 1933 the estimates show a steady increase in the yearly value of the gross output and when subsidies and government grants are added the total gross value increased from £186,815,000 in 1932-33 to £229,200,000 in 1937-8.

When fluctuations in market values are eliminated the estimates show that total gross output was approximately the same in 1908 and 1925. Between 1925 and 1930-31 total output increased by about 4 per cent. and between 1932-3 and 1937-8 it has shown increases of 11 to 23 per cent. above that of 1908. Seasonal changes in crop yields and in the outputs of livestock and livestock products affect the total output in any particular year but the following summary shows a general increase during a period of 8 years.

| Year. | Value of Agricultural Output. £000. | Value of Agri- cultural Output inc. Government Grants and Subsidies. £000. | Index of gross Physical Output. |
|--------|--|---|--|
| 1930-1 | 202,660 | - | 100 |
| 1931-2 | 186,990 | - | 100 |
| 1932-3 | 182,545 | 186,815 | 107 |
| 1933-4 | 198,990 | 205,740 | 113 |
| 1934-5 | 206,045 | 214,355 | 118 |
| 1935-6 | 205,935 | 213,895 | 112 |
| 1936-7 | 220,940 | 225,030 | 117 |
| 1937-8 | 224,590 | 229,200 | 110 |

Statements of changes in agricultural output are misleading unless account is taken of changes in the use of such intermediary products as imported feedingstuffs and fertilisers. But available information shows that imported supplies of feedingstuffs in the years 1931-38 were approximately the same as those for the period 1913-14. On the other hand there has almost certainly been an increase in quantities of fertilisers used. In this period there has been an increase in the net output of agriculture.

In order to obtain a fair measure of the value of gross agric. output for each person fully employed in the industry, yearly numbers of each class of

Chart 1.

Changes in Gross Value of Agricultural Output per "Man" and in Agricultural Wages.

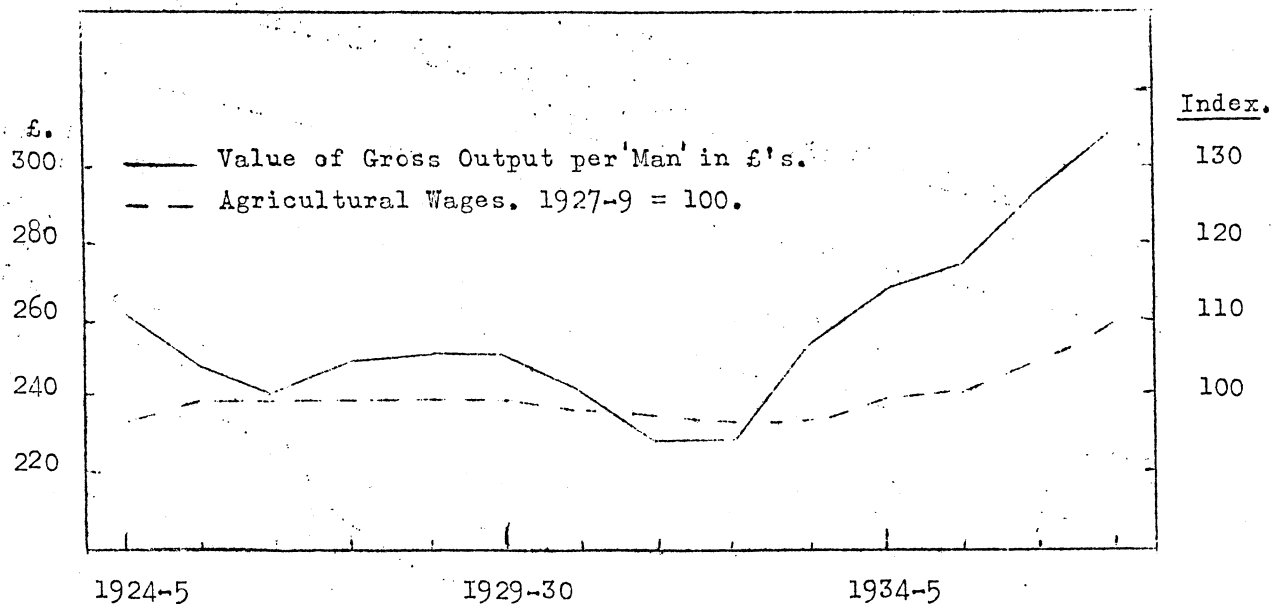


Chart 2.

Changes in the Gross Output of Agriculture.

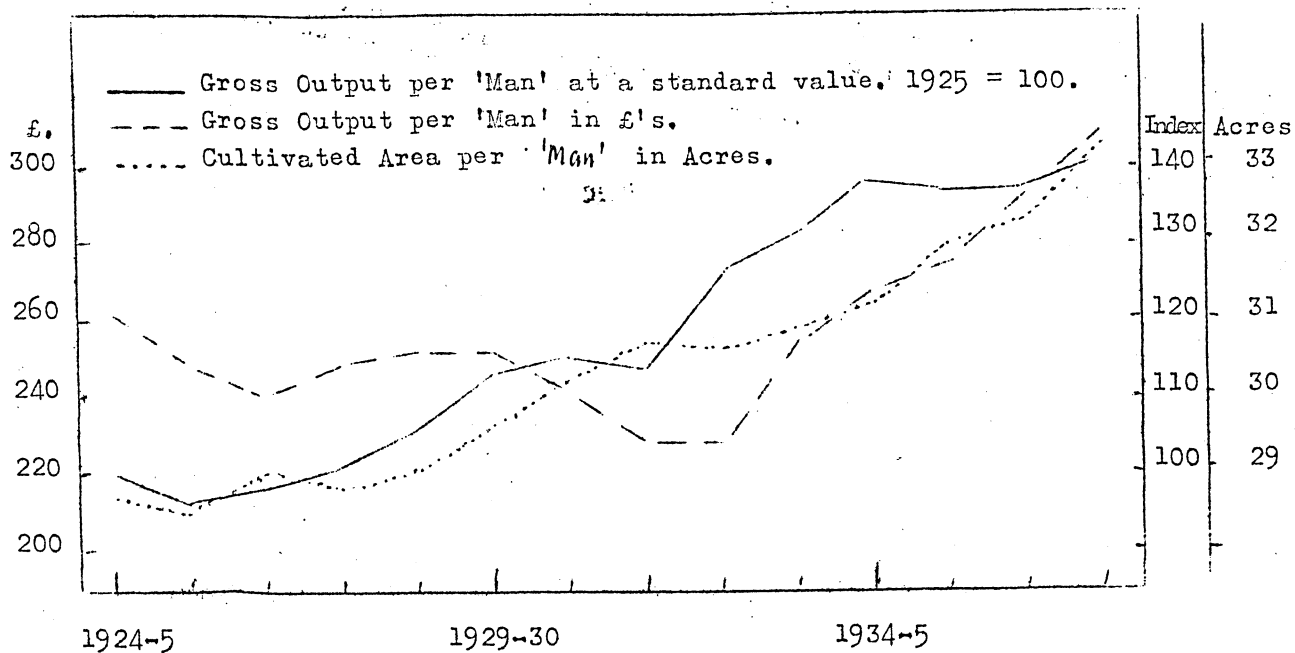
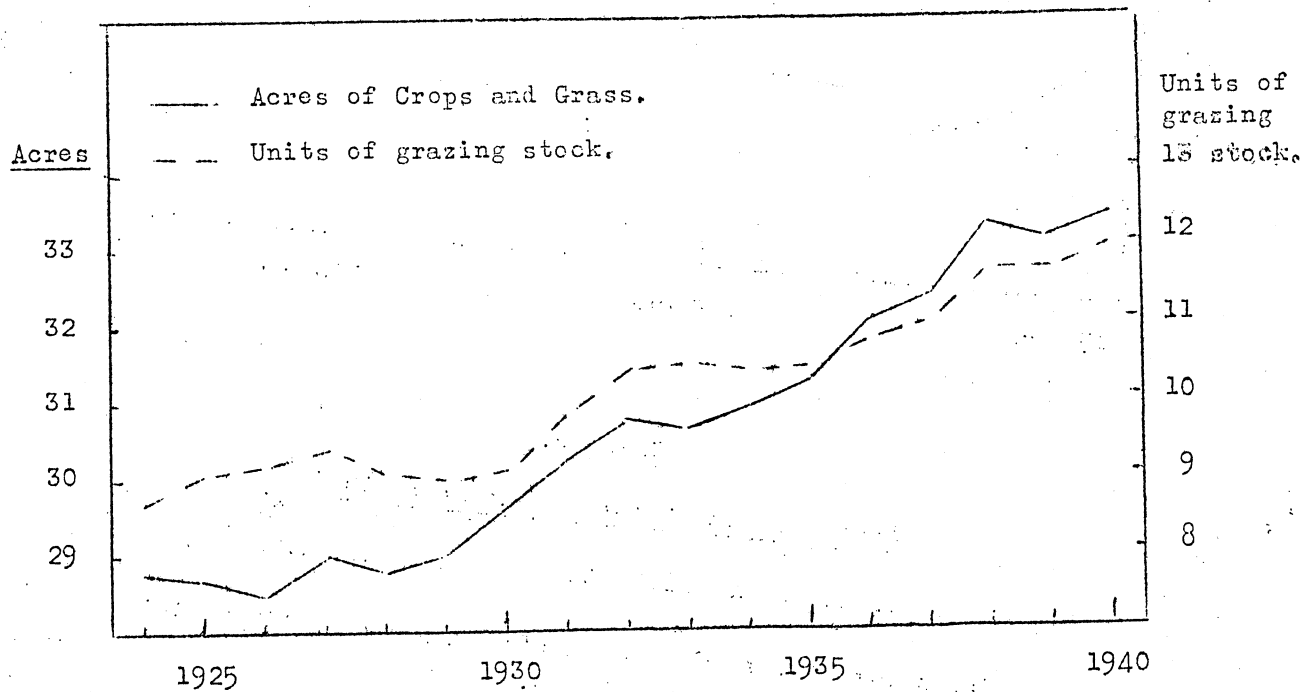


Chart 2a.

Acres of Crops and Grass and Units of Grazing Stock
per "Man".



Grazing stock includes all horses, bovine stock, and sheep
expressed as cow units.

worker have been converted to man equivalents.* Using this measure shows that the output per "man" fell from £262.3 in 1924-5 to £227.9 in 1932-3, the latter figure including government grants and subsidies. Since 1932-3 the total output per "man" including grants and subsidies has increased each year and in 1937-8 amounted to £309.0. (Chart 1).

Fluctuation in market values of agricultural products have been eliminated before measuring output per man as shown in Chart 2. It will be seen that between 1925 and 1930 output per man increased by about 16 per cent. This approximates the increase shown previously when considering crops and stock managing capacity per person. For subsequent years the chart shows a steady increase in output and in 1937-8 was 41 per cent. higher than in 1924-5. It is not suggested that this method correctly measures changes in the productivity/net per worker employed in agriculture, but it does add support to the other evidence that there has been a steady improvement in the efficiency of organisation and use of labour. (Chart 2a).

IV. AGRICULTURAL WAGES.

In the long run wages and other forms of remuneration of those engaged in the industry are dependent upon the net output per person. But the distribution of the total net output between workers, farmers, landlords, and financiers changes from time to time. Public attention has been directed much more to the division and distribution of the total income from agriculture than to the total amount available for distribution.

At the beginning of the present century a number of enquiries were made into rates of wages and conditions of employment. These various enquiries and reports taken together provide a comprehensive statement on variations in rate of wages paid in different parts of the country. Generally speaking farmers in the northern and western counties of England and in Wales paid the higher rates of wages while the lowest rates were generally paid to workers on the arable farms in the eastern counties.

The most complete information for the 1912-3 period is that provided in the report of the Central Landowners Association, of which the following is a summary:-

Average weekly rates of Cash Wages and Earnings for Ordinary Agricultural Labourers (1912-13).

| Area. | Number of Counties. | Cash Wages. | | Average weekly earnings. | |
|-----------------------------------|------------------------|-------------|----|-----------------------------|----|
| | | s. | d. | s. | d. |
| Northern Counties | 4 | 20. | 9 | 22. | 6 |
| Yorks., Lancs. & Cheshire | 6 | 18. | 8 | 21. | 6 |
| North & West Midlands | 11 | 15. | 11 | 19. | 8 |
| South Midlands & Eastern Counties | 11 | 15. | 3 | 18. | 6 |
| South Eastern | 5 | 15. | 9 | 19. | 7 |
| South Western | 5 | 14. | 4 | 17. | 10 |
| Wales | 12 | 16. | 2 | 20. | 7 |

* The following weights have been used: (a) Farmers & Regular workers - adult male = 1, youths = 0.69, women & girls = 0.59. (b) Casual workers - adult males = 0.5, youths = 0.34, women & girls = 0.29.

Information collected by the Board of Trade at the beginning of 1914 shows that the average weekly cash wage of ordinary adult male workers amounted to 16s. 9d. and, taking account of certain payments in kind, the total weekly earnings to 18s. This is the wage commonly taken for comparative purposes and form the basis of official statements of changes in weekly rates. During 1915 and the early part of 1916 only small increases were made in wages but by the beginning of 1917 earnings in most counties had increased by 25 to 30 per cent.

Under the Corn Production Act 1917 the responsibility of determining minimum rates of wages rested with the Agricultural Wages Board. The first weekly rates in each of the counties became operative in 1918 and generally range from 30s. to 36s for ordinary adult male workers. The higher rates generally applied to workers employed for a longer working week in the grassland counties. Under the Corn Production Acts county rates were steadily raised until in 1921 - the period in which farm wages generally were at their highest level - the minimum rates in the counties varied from 46s. to 52s.

Average Weekly Cash Rates 1914 and Minimum Rates
of Wages in Agriculture.

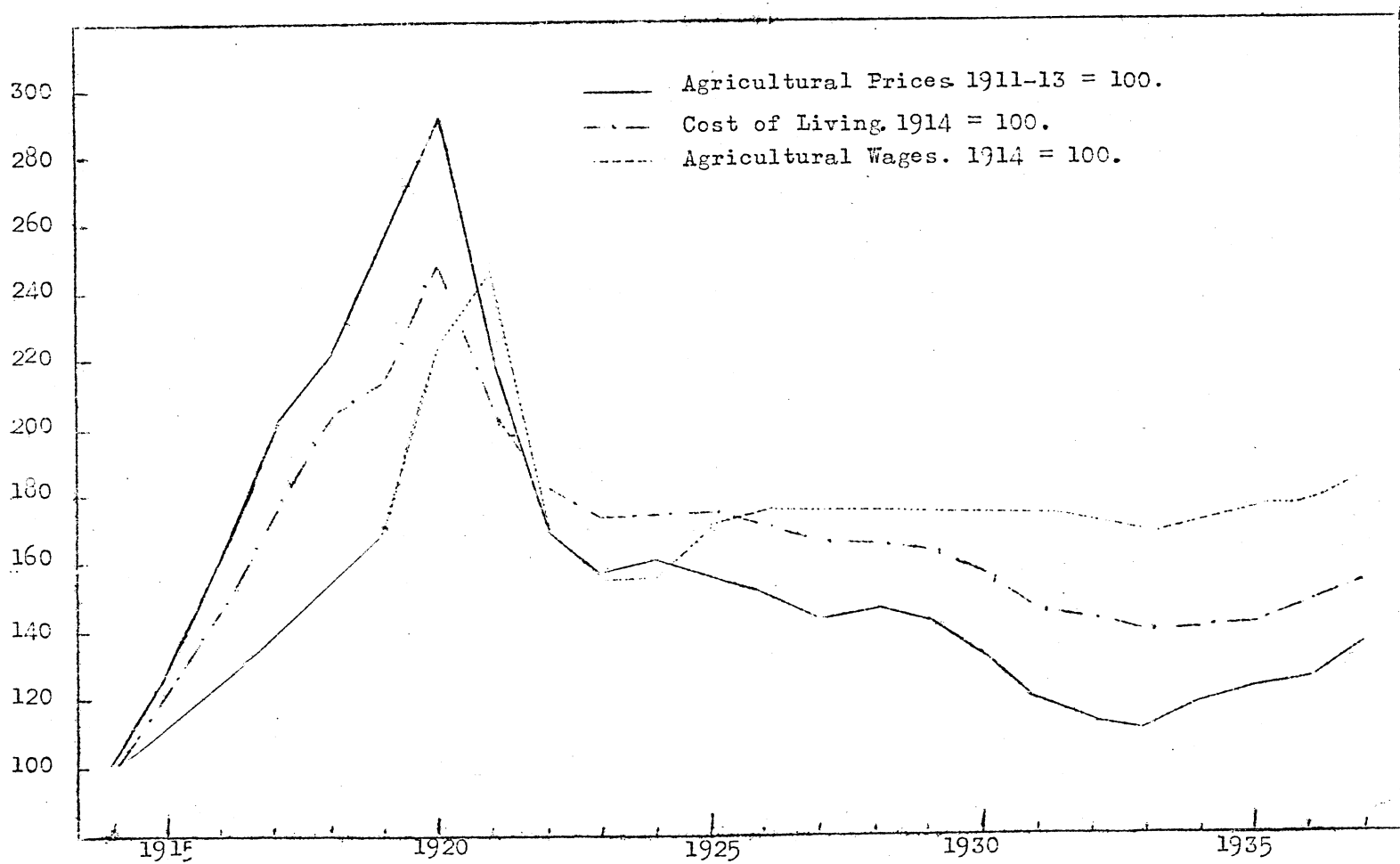
| 1914. | | : | 1918. | | : | 1921. | |
|---|------------------|---|-----------------------------------|------------------|---|-----------------------------------|------------------|
| Range of Rates of Cash Wages. Shillings | Number of Cases. | : | Range of Minimum Rates. Shillings | Number of Cases. | : | Range of Minimum Rates. Shillings | Number of Cases. |
| Under 14 | 4 | : | 30 - 31 | 17 | : | 46 - 47 | 33 |
| 14 - 15 | 8 | : | 31 - 32 | 10 | : | 47 - 48 | 3 |
| 15 - 16 | 12 | : | 32 - 33 | 3 | : | 48 - 49 | 4 |
| 16 - 17 | 6 | : | 33 - 34 | 3 | : | 49 - 50 | 1 |
| 17 - 18 | 8 | : | 34 - 35 | 3 | : | 50 & over | 5 |
| 18 - 19 | 8 | : | 35 - 36 | 5 | : | | |
| 19 - 20 | 0 | : | 36 & over | 5 | : | | |
| 20 & over | 7 | : | | | : | | |
| | 53 | : | | 46 | : | | 46 |

It will be seen that as a result of the action of the Wages Board greater uniformity in county wage rates was effected. In 1921 out of a total of 46 areas 33 had weekly rates of 46s. and the range of variation was limited to 6s. The weekly rates quoted for 1914 show a range of 7s. 2d between the lowest and highest average county rate.

The Corn Production Act was repealed in 1921 and the District Wages Committees were replaced by County Conciliation Committees. These committees, composed of equal numbers of representatives of farmers and workers, had no statutory authority to enforce their decisions. This period of free negotiations for the determination of wages coincided with the general policy of deflation which preceded the return to the gold standard in 1925. Workers' representatives were unable either to restrict the downward fall in wages or to insist upon farmers paying the rates agreed upon. By 1924, when Agricultural

Chart 3.

Indices of Prices of Agricultural Produce of
Agricultural Wages and of Costs of Living.



Wages (Regulation) Act was passed, average weekly earnings of agricultural workers in England and Wales had fallen to 27s.11½d. The immediate effect of statutory regulation was to raise the weekly average wage to 30s.9½d. The general movement in wages between 1914 and 1924 is indicated in the following summary:-

| | <u>Average Weekly Rates.</u> | | <u>Comparative</u> |
|-------------|------------------------------|---------------|--------------------|
| | s. d | <u>Index.</u> | <u>Real Value.</u> |
| | | | s. d |
| 1914 | 18. 0 | 100 | 18. 0 |
| August 1917 | 25. 0 | 139 | 16.10 |
| 1918-1919 | 30. 6 | 169 | 14. 3 |
| 1919-1920 | 37.10 | 210 | 17. 2 |
| 1920-1921 | 46.10 | 260 | 18. 9 |
| 1923 | 27.11 | 155 | 16. 1 |
| 1926 | 31. 8 | 176 | 18. 5 |

Measurements of real wages in terms of cash rates and changes in costs of living indicate that there was no improvement in the real wages of farm workers until 1921 and that again in 1923 the general position was most serious. Even when the Agricultural Wages Committees had secured improvements in 1926 the position of farm workers was only comparable to that which they had enjoyed at the beginning of 1914.

From 1926 to 1930 farm wages remained remarkably steady despite the continuous decline in prices of agricultural products and the average of weekly minimum rates in each year remained at 31s.8d. (Chart 3). During the next three years 1931 to 1934 inclusive this average weekly rate fell to 30s.7d. and from 1933 onwards there was a continuous increase in weekly wages. The following summary shows the general movement in rates of wages since 1926:-

| | <u>Average of Minimum Weekly Rates.</u> | | <u>Comparative</u> |
|------|---|---------------|--------------------|
| | s. d | <u>Index.</u> | <u>Real Wage.</u> |
| | | | s. d |
| 1926 | 31. 8 | 100 | 18. 5 |
| 1933 | 30. 7 | 96.6 | 21. 9 |
| 1936 | 32. 2 | 100.1 | 21.10 |
| 1939 | 34. 6 | 109.7 | 21.11 |
| 1940 | 42. 9 | 137.7 | 23. 3 |

These figures show that there has been some real improvement in the condition of farm workers since 1926.

The Agricultural Wages Committees under the Act of 1924 did not achieve the same narrow range of county rates as was obtained under the Corn Production Act. Under the Corn Production Act the responsibility for fixing wages rested with the Agricultural Wages Board, the function of District Committees being limited to providing local information and making recommendations.

Minimum Weekly Wage Rates of Ordinary Male Workers.

| <u>Shillings.</u> | <u>1924.</u> | <u>1933.</u> |
|-------------------|--------------|--------------|
| Under 28 | 0 | 1 |
| 28 - 29 | 1 | 4 |
| 29 - 30 | 2 | 4 |
| 30 - 31 | 16 | 21 |
| 31 - 32 | 7 | 5 |
| 32 - 33 | 8 | 8 |
| 33 - 34 | 3 | 2 |
| 34 - 35 | 3 | 0 |
| 35 and over | 6 | 2 |
| | <u>47</u> | <u>47</u> |

In general terms the Agricultural Wages Act 1924 placed the responsibility of determining wages and conditions of employment with the Agricultural Wages Committees, the function of the Agricultural Wages Board being limited to making orders giving effect to decisions made by these Committees. Thus under the 1924 Act greater consideration was given to local circumstances which resulted in a greater range of variation in district rates of wages.

After 1933-4 there was some general improvement in the financial conditions of British agriculture and the Committees were able to propose increases in wages. Between the seven years 1933 to 1939 inclusive the average/weekly wage increased by 4s.1d and in the latter year was nearly 10 per cent. higher than the average of the rates prevailing in 1926. (Chart 4).

The special war-time need to increase food production at home made it necessary to ensure an adequate supply of farm labour. In order to achieve this, restrictions have been placed upon the movement of labour from agriculture. It was recognised that if workers were not to be allowed to go into other more remunerative occupations their wages in agricultural employment would have to be made more nearly comparable to those prevailing for other unskilled tasks. The Agricultural Wages (Regulation) 1940 Act came into operation in June of last year and empowered the Agricultural Wages Board to make orders fixing a national minimum wage for ordinary adult male workers.

The Agricultural Wages Committees were free to determine conditions of employment and if considered necessary to propose weekly rates of wages above or below the national minimum. The Agricultural Wages Board had made an order fixing the national minimum weekly wage at 40s. and almost all the Committees subsequently made proposals accepting the basic national minimum. In recent months there has been some agitation for national weekly minimum wage of £3 and a large number of Committees have now secured orders fixing rates above the national minimum. The following summary indicates the general position at the present time (October, 1941):-

In January 1939 the difference between the highest and lowest rate was 6s.6d., but it may be expected that under the present system the range of

Chart 4.

Indices of Prices of Agricultural Produce,
of Agricultural Wages and of Cost of
Living. 1927-9 = 100.

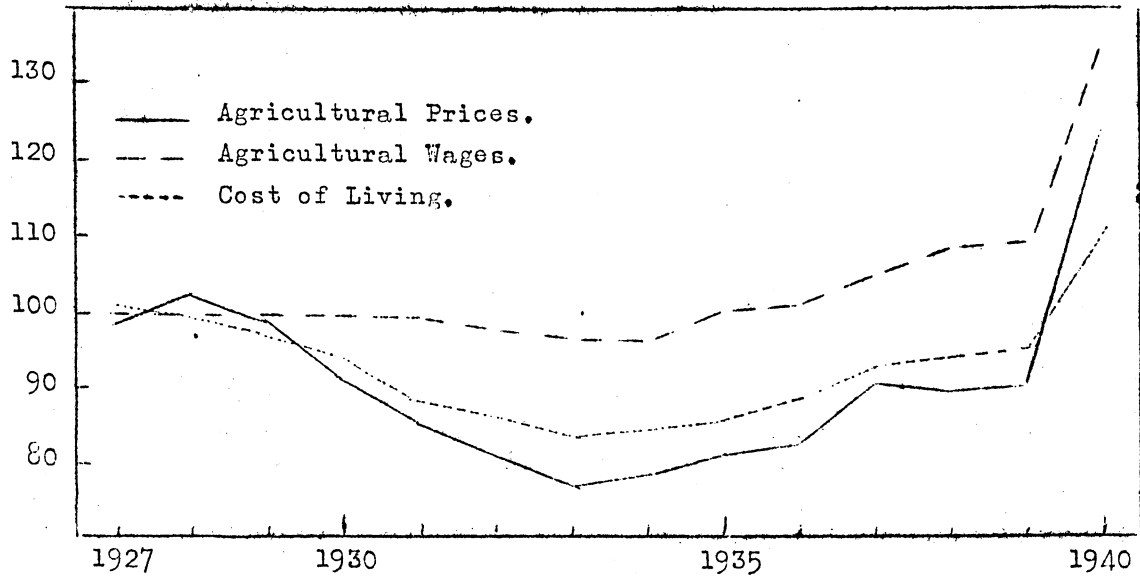
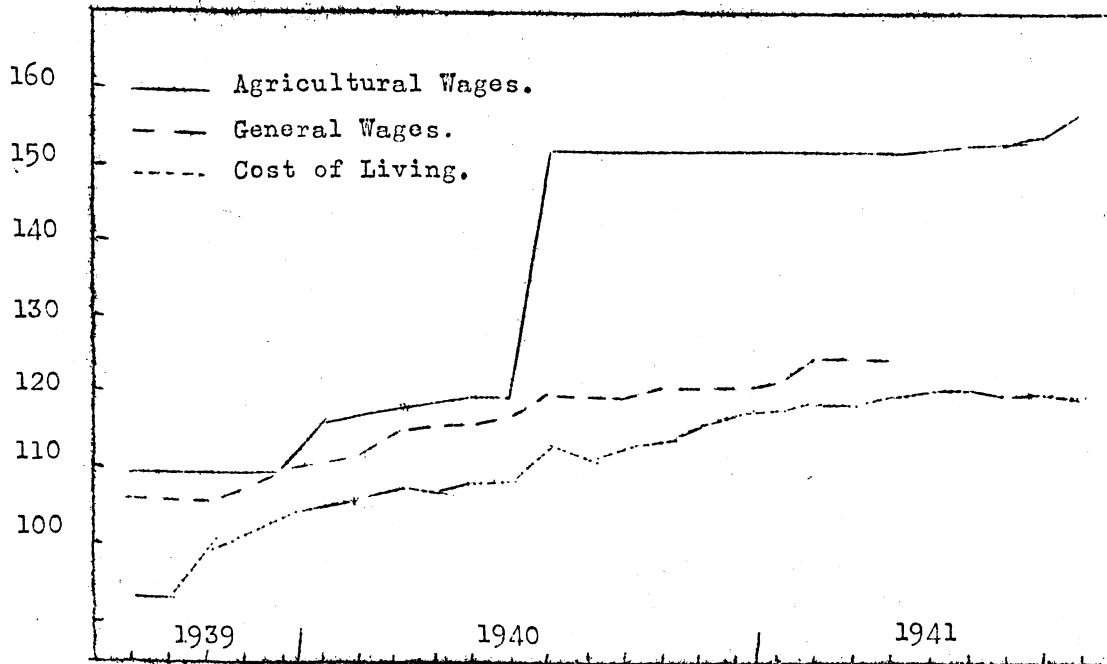


Chart 5.

Indices of Changes in Wages and in Cost
of Living. 1927-9 = 100.



Number of Districts.

| Range. | January 1939. | Range. | October 1941. |
|---------------|---------------|---------------|---------------|
| Shillings. | | Shillings. | |
| Under 33 | 3 | 48 & under 49 | 25 |
| 33 & under 34 | 10 | 49 " " 50 | 1 |
| 34 " " 35 | 15 | 50 " " 51 | 9 |
| 35 " " 36 | 14 | 51 " " 52 | 1 |
| 36 " " 37 | 3 | 52 " " 53 | 4 |
| 37 " over | 3 | 53 " " 54 | 3 |
| | | 54 " over | 5 |
| | 48 | | 48 |

variations will again be reduced.

Unfortunately comparative information on the movement of agricultural wages during the early months of the 1914-18 war is not available. Chart No. 5 however shows the monthly movements of wages during the first two years of the present conflict.

V. CHANGES IN REAL WAGES OF FARM WORKERS.

In assessing changes in the economic conditions of farm workers it is necessary to relate weekly earnings to costs of living. The Ministry of Labour's index shows that in 1920 retail prices were 156 per cent. higher than in 1914 while the general cost of living increased by 149 per cent. After 1920 there was a general fall in the retail prices of foods and in the cost of living, and by 1933 retail prices of food were only 20 per cent. and costs of living 40 per cent. above the level existing in 1914. Retail prices and costs of living increased after 1933 in conformity with changes in the general price level. (Chart 3). The average level of retail prices in 1939, as measured by the index prepared by the Ministry of Labour, was 41 per cent. and the general cost of living 58 per cent. above the 1914 level.

During recent years the Ministry of Labour index of cost of living has been subjected to much criticism on the grounds that it does not take account of changes in the dietetic standards, of changes in standards of dress, and of changes in workers' expenditure on social entertainment and conventionally necessary items now commonly enjoyed by all. In order to meet this criticism a new enquiry into costs of living was instituted in 1937-8 and while the general results of this enquiry have been published, the information is not yet being used for measuring changes in costs of living.

In the absence of any more reliable index it is necessary to relate wage rates to changes in costs of living as indicated by the old index. This shows that farm workers were relatively poorer in the three years 1923 to 1925 than in 1914. And that owing to a fall in retail prices between 1926 and 1930 their position improved even though wage rates underwent no important change.

After 1930 there were some reductions in weekly rates of wages but these were offset by further reductions in retail prices. In 1936 and 1937 increases in costs of living were sufficient to reduce the comparative market value of the increase in wages, but in the last four years wages have more than offset increases in costs of living (Chart 6).

This general improvement in the standards of living of farm workers is also found in the available information relating to household budgets. A number of enquiries into standards of living of farm workers have been instituted from time to time some by government agents others by workers' organisations and others by private individuals.

The outstanding feature of changes in these budgets is the large increase in expenditure on insurances and miscellaneous items. In 1914 and 1918 expenditure on food accounted for two-thirds of the total weekly budget. In 1924 the weekly expenditure on food was only 53 per cent, and in 1937-8 was only 47 per cent, of the total budget. Cottage rents are now higher but expenditure on light and fuel has not changed since 1918. Expenditure on clothing when spread evenly over the year is now approximately the same as in 1918. But insurances and other miscellaneous items of expenditure now amount to about one quarter of the total as compared with five and eight per cent, in 1918 and 1924 respectively. This increase in miscellaneous expenditure partly consists of increases in provisions against unemployment, ill-health and old age and of increases in family expenditure on personal pleasures and entertainment.

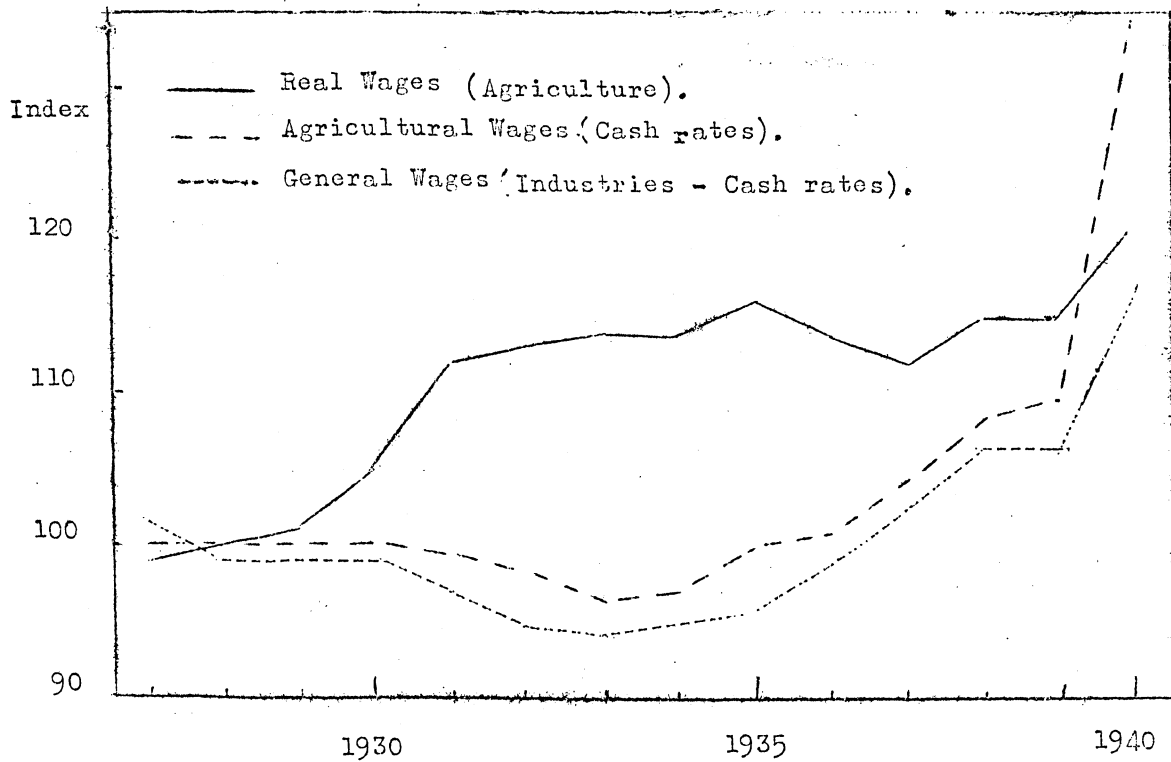
The average weekly expenditure of a farm worker's family in 1914 amounted to about 25s.3d, while in 1918 the expenditure amounted to 46s.5d. The available information shows that average weekly expenditure had fallen to 38s.11d. in 1924. There is no further information about household expenditure of farm workers' families until 1937-8 enquiry which showed an average weekly expenditure of 57s.11d. The following is a summary of the available information.

Weekly Budgets of Farm Workers Families.

| | 1914. | 1918. | 1924. | 1937-8. |
|----------------------------|--------------|--------------|--------------|--------------|
| | s. d. | s. d. | s. d. | s. d. |
| Food | 16.10 | 31. 1 | 20. 9 | 27. 9 |
| Rent | 1.11 | 2. 1 | 2. 2 | 4. 9 |
| Fuel and Light | 1. 9 | 4. 1 | 4.10 | 4.11 |
| Clothes | 3. 6 | 6. 8 | 8. 0 | 5.10 |
| Insurance & Miscellaneous | 1. 3 | 2. 8 | 3. 2 | 14. 8 |
| Total | 25. 3 | 46. 5 | 38.11 | 57.11 |
| Per cent. Change | 100 | 184 | 154 | 230 |
| No. of Man units in Family | 3.80 | 3.80 | 3.85 | 2.97 |
| Expenditure per man unit | 6s.8d. | 12s.3d. | 10s.1d. | 19s.6d |
| Per cent. Change | 100 | 184 | 152 | 293 |

Chart 6.

Changes in Real and Actual Wages.



The enquiries indicated a small reduction in the size of families between 1914 and 1938. Using the man unit* as a measure of change a farm worker's family in 1914 consisted of 3.8 "men" as compared with an average of 2.97 in 1937-8. Total weekly expenditures per man equivalent given in the budgets was 6s.8d. in 1914, 12s.3d. in 1918, 10s.1d. in 1924 and 19s.6d. in 1937-8. Thus in the latter period the budgets show that family expenditure was 230 per cent. higher than in 1914 and that expenditure per man equivalent was 293 per cent. higher.

VII. CHANGES IN THE TOTAL WAGE BILL.

Reductions in numbers of persons employed in agriculture are reflected in a continuous fall in the estimated yearly wage bill. The yearly wage bill in 1924-25 was estimated by Harkness** to be £54.0 million and his estimates for subsequent years show that by 1930-1 it had fallen to £52.6 million. Using the same measurements for the last nine years shows that by 1933 the annual wage bill had fallen to £49.4 million and that in each of the next six years it varied between £47.5 and £47.9 million. The estimate for 1940 is £58.3 million.

Another estimate based upon changes in wages, and changes in numbers of persons employed, shows the same general movement. This method shows that the immediate effect of the introduction of statutory minimum wages in 1925 was to increase the total wage bill by about 12 per cent. and by 14 per cent. in 1926. The general level of wages was maintained in subsequent years but the decline in numbers of persons fully employed caused some decline in the total wage bill in the three years 1927-9. In each of the following years the total wage bill diminished and in 1938 the estimate puts it at only 90 per cent. of that of 1924. The larger increases obtained in weekly wage rates in the last two years have more than offset the fall in numbers of persons employed but the estimate for 1940 is still 3 per cent. lower than in 1924. The implication of this analysis is that during the period 1930-39 a decreasing amount of the increasing gross agricultural output went to the workers in the form of wages.

* On the basis of dietetic requirements males over 14 years = 1 unit, females over 14 years = 0.8 units and children of 14 years and under = 0.5 units.

** D. A. E. Harkness: The Distribution of Agricultural Income. Journal of Agricultural Economics Society, Vol. III No. 1, March 1936.

Gross Output* and the
Agricultural Wages Bill.

| <u>Year.</u> | <u>Gross Output.</u> | <u>Estimated Total Wage Bill.</u> | <u>Year.</u> | <u>Index of Total Costs of Labour. (Changes in numbers of workers and rates of wages).</u> |
|--------------|----------------------|-----------------------------------|--------------|--|
| | £ mill. | £ mill. | | |
| 1924-5 | 235.1 | 54.0 | 1924 | 100 |
| 1925-6 | 224.1 | 54.9 | 1925 | 112 |
| 1926-7 | 212.7 | 54.5 | 1926 | 114 |
| 1927-8 | 220.6 | 54.6 | 1927 | 111 |
| 1928-9 | 221.4 | 54.8 | 1928 | 111 |
| 1929-30 | 216.2 | 53.3 | 1929 | 111 |
| 1930-1 | 202.7 | 52.6 | 1930 | 106 |
| 1931-2 | 187.0 | 49.6 | 1931 | 102 |
| 1932-3 | 186.8 | 49.4 | 1932 | 98 |
| 1933-4 | 205.7 | 47.7 | 1933 | 97 |
| 1934-5 | 214.4 | 47.8 | 1934 | 95 |
| 1935-6 | 214.0 | 47.5 | 1935 | 95 |
| 1936-7 | 225.0 | 47.6 | 1936 | 92 |
| 1937-8 | 229.2 | 47.9 | 1937 | 93 |
| 1938-9 | - | 47.9 | 1938 | 90 |
| 1939-40 | - | 58.3 | 1939 | 93 |
| | | | 1940 | 97 |

* Including Government grants and subsidies.

VIII. LABOUR AND COSTS OF PRODUCTION.

The most common way of measuring the importance of costs of labour in the production of agricultural products is to express all direct expenditure of labour as a percentage of total gross or net costs. The pre-war distribution of farm expenses in the chief classes was -

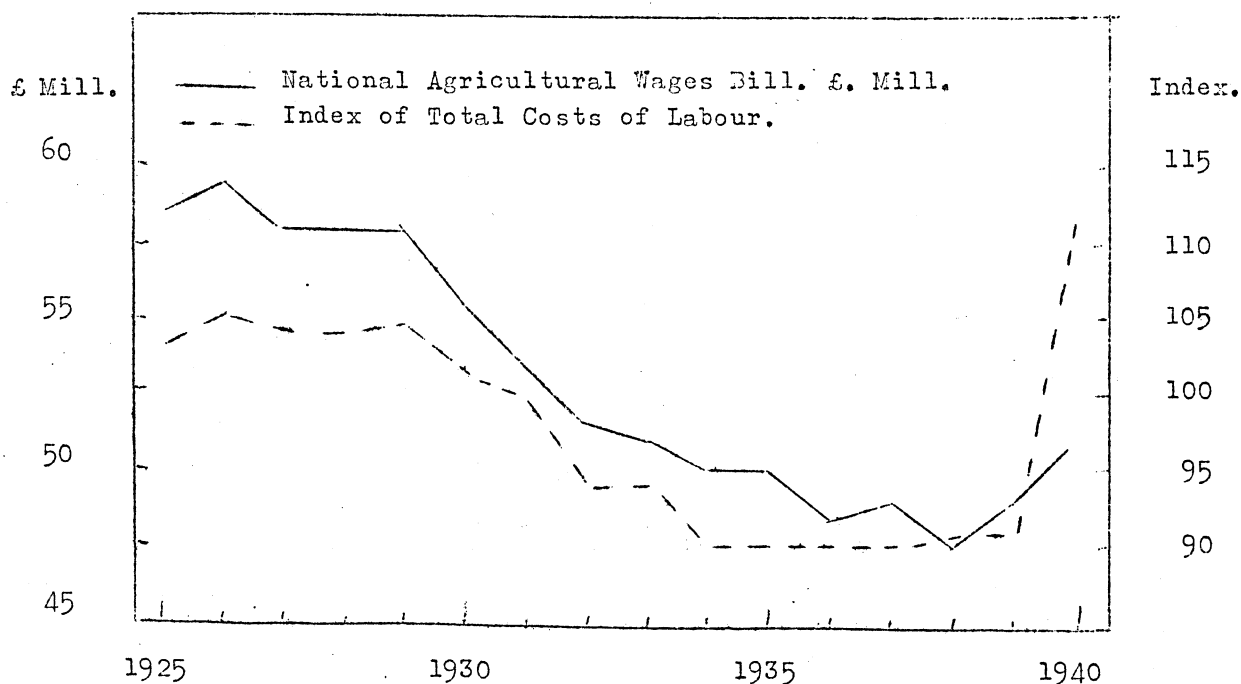
| | <u>Per cent.</u> |
|---------------|------------------|
| Labour | 32 - 33 |
| Feedstuffs | 22 - 26 |
| Fertilisers | 4 - 6 |
| Rent | 18 - 21 |
| Miscellaneous | 17 - 21 |

100

But in order to get a proper perspective of costs of labour in production of individual products it is important to take account of labour used to

Chart 7.

Estimate of National Agricultural Wages Bill, and
Index of Total Costs of Labour.



The National Agricultural Wages Bill is calculated from numbers of workers of each type and estimated rates of wages. The Index of Total Costs of Labour represent changes in average rates of wages for adult workers and changes in numbers of "man units" engaged.

produce intermediate products as well as that used directly on the final marketable article. Fundamentally the factors of production are land, capital and labour (including management), and the usual statements of costs of production of any particular agricultural product can be resolved into these factors. In milk production the most common statement of costs takes the following form:

- (a) costs of purchased food,
- (b) costs of home grown food including grazing,
- (c) costs of hired and family labour,
- (d) costs of herd replacement,
- (e) costs of miscellaneous items.

From the gross statement so prepared is deducted the manurial residues of feedingstuffs used. But each of the components, with the exception of labour are intermediate products which have required the use of the three factors land, capital and labour to bring them into the state necessary for use in milk production. In crop production the common items of cost can also be split up into the same prime factors. The items of costs commonly presented in any statement of costs of production are known as secondary cost items and the fundamental items as the prime factors. Labour directly spent on the production of cereal crops accounts for from 22-24 per cent. of the total costs but when all secondary items are split up into prime factors the total costs of labour are of the order of 31-33 per cent. of total costs. The following table shows the importance of costs of labour for some of the most important enterprises when the items of cost are presented as (a) secondary factors and (b) as prime factors.

The table shows that in some cases labour not directly associated with the production of any particular product forms an important part of the costs. In particular labour directly used on fattening cattle during winter periods accounts for only 4 per cent. of the costs but other labour used on the farm to produce hay, grass and corn for the cattle and used on establishment work represents a further 33 per cent. of costs of winter fattening.

In order to measure accurately the effect of changes in farm wages upon costs of production it is necessary to know the importance of labour both used directly and indirectly. The effects of a 40 and 70 per cent. increase in rates of wages upon costs of production are indicated in the table. The effect of raising the weekly minimum wage to 48s. was to increase costs of labour by nearly 40 per cent. A minimum wage of £3 would increase costs of labour by approximately 70 per cent.* An increase of 70 per cent. on costs of labour means an increase of 21-22 per cent. in the costs of production of wheat and milk, an increase of 31-32 per cent. in the costs of producing potatoes and an increase of 25-26 per cent. in the costs of fattening cattle.

* As compared with 1939.

Costs of Labour as Percentage of Total Costs
of Production.

| | Total | Direct | Increase in Costs of | |
|--|-----------|-----------|----------------------|-----------|
| Farm Costs: | Costs Of: | Costs Of: | production caused by | |
| of Manual: | Manual : | Manual : | 40% | 70% |
| Labour. : | Labour: | Labour: | increase.: | increase. |
| %. | %. | | | |
| <u>Cereals and Cash Crops:-</u> | | | | |
| Wheat | 30.7 | 22.0 | 12.3 | 21.5 |
| Barley | 33.0 | 24.0 | 12.2 | 23.1 |
| Oats | 32.3 | 24.0 | 12.9 | 22.6 |
| Potatoes | 45.6 | 32.0 | 18.2 | 31.9 |
| Sugar Beet | 40.9 | 37.0 | 16.4 | 28.6 |
| <u>Livestock & Livestock Products:</u> | | | | |
| Milk - full year | 30.8 | 19.2 | 12.3 | 21.6 |
| - summer | 30.3 | 21.5 | 12.1 | 21.2 |
| - winter | 30.1 | 17.5 | 12.0 | 21.1 |
| Fat Pigs | 11.0 | 10.0 | 4.4 | 7.7 |
| Eggs and Poultry | 19.0 | 19.0 | 7.6 | 13.3 |
| Store Cattle | 40.5 | 19.5 | 16.2 | 28.4 |
| Fat Cattle - winter | 37.0 | 4.0 | 14.8 | 25.9 |
| - summer | 35.7 | 2.5 | 14.8 | 25.0 |
| Fat Lambs | 30.8 | 18.0 | 12.3 | 21.6 |
| Fat Hogs | 37.4 | 22.0 | 15.0 | 26.2 |
| <u>Fodder Crops:-</u> | | | | |
| Fodder Roots and Kale | 50.7 | 45.0 | 20.3 | 35.5 |
| Mixed Hay | 32.4 | 30.0 | 13.0 | 22.7 |
| Grazing | 13.5 | 10.0 | 5.4 | 9.5 |
| Horse Labour | 32.0 | 15.0 | 12.8 | 22.4 |

APPENDIX I.

Labour on Different Types of Farms.
(Enquiry by Ministry of Agriculture
and Fisheries).

| | <u>Number</u> <u>of Farms.</u> | <u>Average</u> <u>Size of</u> <u>Holding.</u> <u>Acres.</u> | <u>Number of</u> <u>Regular</u> <u>Workers per</u> <u>1000 acres.</u> |
|--------------------------------|-----------------------------------|--|--|
| <u>Norfolk (Arable Farms):</u> | | | |
| Over 90% Arable | 142 | 569 | 33 |
| From 80% - 90% | 230 | 594 | 31 |
| " 70% - 80% | 206 | 496 | 30 |
| " 50% - 70% | 191 | 502 | 30 |
| <u>Potato Farms:-</u> | | | |
| Lincoln (Holland) | 112 | 72 | 54 |
| Isle of Ely | 102 | 83 | 40 |
| Lancashire | 127 | 39 | 61 |
| Cheshire | 104 | 70 | 39 |
| Bedford | 109 | 49 | 89 |
| Kent | 112 | 87 | 94 |
| Arable Sheep Farms | 129 | 720 | 25 |
| <u>Mixed Farms:-</u> | | | |
| East of England | 1,315 | 30 | 30 |
| " " " | 1,416 | 150 | 26 |
| " " " | 1,902 | 300 | 26 |
| West of England | 1,540 | 30 | 26 |
| " " " | 1,477 | 150 | 21 |
| " " " | 1,027 | 300 | 20 |
| Hill Sheep Farms | 584 | 1,042 | 2 |
| Sheep Farms in Kent | 68 | 378 | 15 |
| Dairy Farms | 1,977 | 155 | 30 |