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DEPARTMENT OF AGRICULTURE AND HORTICULTURE

PROFITS AND LOSSES IN POULTRY FARMING

BY

C. V. DAWE, M.Com. Ph.D. and S. R. WRAGG, B.A.

UNIVERSITY OF BRISTOL.

Department of Agriculture and Horticulture

Head of Department: Professor B. T. P. Barker, M.A.

DVISORY STAFF

(BERKELEY SQUARE CENTRE)

Agricultural Officer in Charge: A. W. Ling, M.Sc.

Agricultural Chemistry

Advisory Chemist

A. W. Ling.

(H. T. Watkins, M.Sc. W. R. Muir.

Agricultural Economics

C. V. Dawe, M.Com. Ph.D.

J. E. Blundell, M.Com.

L. G. Hewett. S. R. Wragg, B.A. P. J. O. Trist, M.R.A.C.

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Advisory Officer

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Poultry Pathology

Poultry Pathologist

J. S. Garside, M.R.C.V.S., D.V.S.M.

Dairy Bacteriology

Dairy Bacteriologist

J. W. Egdell, B.Sc., N.D.A., N.D.D.

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by

C. V. DAWE, M.Com., Ph.D.

and

S. R. WRAGG, B.A.

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POULTRY MANAGEMENT INVESTIGATION

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INTRODUCTION

In presenting the report on the second year's investigation into the economics of poultry management, a somewhat different line of analysis has been pursued from that of the previous year.^{*} A more detailed examination is made of the monthly record sheets received from farms, and more especially from those farms which during the last year have shown a profit, the object being to discover, if possible, what particular features of the farm management appear to have exerted the most direct influence upon the financial results of the farms in question.

Of the 24 farms which were included in last year's bulletin, many have been unable to complete the records for the second year. A number of new farms have been included, so that it is possible to bring 23 farms under review.

The method of treating the records is almost exactly similar to that of the previous year, although the representation of the results has been somewhat modified. A profitable farm is assumed to be one that shows a gross output in excess of gross costs, the latter including the remuneration of the farmer's own labour and interest on invested capital, charged at 5%. An unprofitable farm will be one, therefore, on which gross costs are in excess of gross income.

In 1932-33, of the 24 farms analysed, 11 were profitable and 13 unprofitable. This year (1933-34) only 8 farms show a profit, while the remaining 15 were carried on at a loss.

* See Bulletin No.12 - "An Economic Survey of the Poultry Industry", Whether this change is indicative of the growing seriousness of the depression in the poultry industry, it is difficult to say. The fact remains that in spite of the present adverse conditions which confront the poultry keeper, onethird of the farms have made a profit.

Financial Results as a whole

If the 23 farms are put together and regarded as one large farm the financial result in the aggregate is as given in the following table. It will be observed that even after charging as an expense a 5% interest on capital invested, and meeting the charge for the farmer's own labour, there remains a profit of £329 which represents a further $2\frac{1}{2}$ % on capital. In other words, the aggregate of the net return may be regarded as giving $7\frac{1}{2}$ % on invested capital after charging £1283 for labour services performed by the farmer himself.

Aggregate Results of Twenty-three Poultry Farms #

Expenditure			Income	
	£. s.	d.		£. s. d.
FOOD STUFFS	7683.1.	9	EGGS Market	9025.13. 8
LABOUR Paid	1525.15.	-	Hatching	688.1
Unpaid	1283. 3.	-	Own set	1132.13.10
HATCHING Stock and Eggs	865.13.	11	TABLE POULTRY	2982.3.9
EGGS Market	82.6.	11	D.O.Chicks Other	1370. 1. 4 1257.17. 1
UWN SET	1167 3	TO	SUNDRIES	140. 1. 9
DEPRECIATION Livestock Deadstock	672.4. 725.17.	11 4		
RENT INTEREST ON CAPITAL	512.5. 617.6.	- 3_		
TOTAL EXPENDITURE	16267.11.	3		
BALANCE PROFIT	329.1.	2		
ct2	16596.12.		£ 1 =	6596.12.5

* Details relating to each farm are given in the Appendix.

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Type of Farm

Generally speaking the farms are of a very mixed character. They vary to such an extent that any attempt at classifying them according to type is quite impossible. With three exceptions (V, B and A) egg production is the predominent activity. The bulk of the eggs were sold as commercial eggs, although two farms, K and P, made a special line of hatching eggs.

Table poultry was not as prominent as one might have anticipated; farms A and V were the only farms on which fattening birds for the table received any special attention.

In the majority of cases, the table poultry side had not been developed on any scientific lines, but consisted for the most part of boiling fowls and spring cockerels, both of which may be regarded as incidental to egg production.

On farms K, B, A and T pullet stock and day-old chicks were fairly important.

Size and Type of Flock

There was a wide range in the size of the laying flocks. The smallest flock numbered only 23 (farm W), while the largest numbered 3150 birds (farm B). The latter, in fact, represents the only profitable farm with over 1000 birds. The size of the flock on the remaining profitable farms lies within a range varying from 300 to 700, with an average of 436 birds.

The flocks were usually of a mixed type, Rhode Island Reds and White Leghorns being the most prominent. The following table gives an approximate composition of the flock on five farms having the highest annual egg yield per bird.

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Farm	Yield Eggs per Annum	Composition of Flock
И	179.89	Sex Linked White Wyandottes x Buff Rock 79%. White Wyan- dottes 21%.
R	170.18	R.I.R. 97%. Light Sussex 3%.
J ·	207.38	White Wyandottes 100%.
Q	182.70	R.I.R. 50%. White Wyandottes 25% White Leghorns 25%.
x	170.30	White Wyandottes x Australs 100%.

Houses and Accommodation

Many of the larger farms had very elaborate housing and equipment. For the most part these were semi-intensive slatted floor houses. The smaller farms were as a rule equipped with home constructed houses, usually of the slatted floor type. Nearly all the farms, with the exception of the very smallest, were equipped with incubators and hovers, or batteries, together with the usual complement of rearing houses and night arks.

Mortality Rates

The average rate of mortality was 12.1% with a range from 1.77% up to 48.0%. There is no indication that the high rates were consistently associated with any particular breed, they were for the most part due to poor stock or disease. Farm L, with a mortality rate of 24.24, suffered a severe out-This is quoted as an example. When break of fowl pox. considering these mortality figures, two aspects should be kept Taking 5/- as the average value of a laying bird, in mind. then a mortality rate of 12%, which was the average on the 23farms, represents a loss in capital value of £3 per 100 birds. This loss is naturally set against the income when the profit and loss account is made up at the end of the year. The second aspect of the high mortality rate is the loss of eggs which

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these birds would have laid. Even on a small farm this figure must run into several hundred eggs per annum. Further, there is no suggestion in the figures that the high mortality rates are related in any way to the egg yields. One might have anticipated finding the high rates associated with high egg yields where the birds had been forced. On the other hand, this may be explained by the fact that on those farms with a high mortality the condition of the remaining birds may have been very poor and this would have affected the egg yields. There is actually a tendency for the higher egg yields to be associated with the lower mortality rates, a fact which further suggests that high and low egg yields are very closely related to the condition of the birds in the flock.

Egg Yields

These figures are intended to be merely an approximate indication of the performance of the individual bird in the flock. An average flock figure over the year was obtained by averaging the figures, giving the number of birds in the flock both at the beginning and end of the month. This average flock was then credited with the total number of eggs laid during the year, then by dividing the one by the other an approximate figure was obtained, representing the average number of eggs laid by each bird during the year.

The results of this investigation into egg yields has established at least one conclusion. With the exception of K, which is a very mixed type of farm on which old hens were maintained for stock purposes, all the farms which made a profit had very high egg yields per laying bird. Farm J had a very remarkable performance notwithstanding the fact that all the birds at the beginning of the year were in their first laying season. The four remaining profitable farms had each egg yields well over 150 eggs per bird. Although there were farms which had obtained high egg yields but had failed to make a profit, this in no way invalidates the conclusion that high egg yields are essential to

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profitable farming. In the latter instances, other influences doubtless acted to counter balance the benefit of high yields. It is sufficient to point out that farm M with a yield of only lll lost $4/8\frac{1}{2}$ per laying bird, and farm V with a yield as low as 109 eggs lost 16/1 per laying bird.

The following table sets forth particulars relating to egg production and the rates of mortality.

Farm	Average No. of laying birds	Total Eggs Produced	Eggs per Layer	Mortality Rates
В	2198	30161	165	13.7
C	1960	21326	131	48.0
G	1105	9278	101	2.0
E	1071	11879	133	8.7
D	1021	11642	137	11.1
H	795	9658	131	11.7
0	701	⁸ 793	135	13.0
A	688	10462	179	9.1
F	683	9274	163	10,5
М	544	5021	111	14.1
N	50 0	7246	180	6.1
L	495	6076	146	24.2
J	418	7224	207	6.2
K	391	3887	119	6.4
Q	320	4872	183	7.5
R	302	4283	170	9.9
P	335	4 0 86	146	8.9
S	221	2287	124	29.9
U	151	2024-	161	3.3
T	146	2087	171	9.6
V	79	715	109	16.5
X	31	440	170	1.8
W	23	215	112	8.7
A.c.	-			·

EGG YIELD AND MORTALITY RATE

The tendency here shows that amongst the larger flocks (over 500 birds) the yield of eggs per bird is considerably lower than amongst the smaller flocks. Birds on farms having an

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average flock of over 500, averaged 138.6 eggs, whereas on farms having flocks below 500 the average was 161.5 (that is excluding farms V and W which may be regarded as peculiar exceptions). Three farms in the large flock group, farms $\overset{A}{\mathbb{V}}$, F and B, achieved egg yields far above the group average, due, no doubt, to the high quality of the stock on these farms. In addition, it might be pointed out that farms F and B are two of the most successful farms amongst the total of 23 under review.

The importance of a high egg yield can scarcely be over-stressed. The figures bear testimony to this fact in that, with only one exception, the egg yields on the profitable farms are amongst the highest recorded. The average yield per bird on these farms was 170 eggs whereas on the remaining farms, those which failed to make a profit, the average yield was only 137 eggs.

Closely associated with the egg yield per bird is the distribution of the yield over the year. During the year 1933-34 the prices of first and second quality eggs at Bridgwater Market ranged from 42% below the average in May up to 59% above the average in November. The average price was taken as a mean of twelve monthly prices of first and second quality eggs. From March until July prices were below the average for the year, while from August until February they were above. Consequently, those farmers who were able to maintain a fairly high level of production during the latter period were able to reap the benefit and over the year realised a higher average price per dozen for their This ability on the part of the farmer to manage his eggs. flock so that yields are maintained during the early winter period of scarcity and higher prices, has been very apparent in the cases of those farmers who have made a profit.

This contention is amply demonstrated by the accompanying graphs on which the monthly egg production of individual farms is plotted against the monthly egg prices at Bridgwater Market.

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As illustrated by the graphs egg prices were at the minimum in March, April and May, after which they rose steadily until maximum point was reached in November. In the case of farm J, which was a profitable farm, the maximum monthly egg production was obtained in October, but even in November when egg prices were at their peak, the egg production was 13% above the monthly average over the year. This is a typical instance of a farm which succeeded in maximising egg production during the period of high prices.

Although this was partly achieved by the introduction during the early autumn of a considerable number of February and March hatched pullets, it is interesting to note that the egg output per bird was well maintained throughout this period. In August, September and October while prices were rising to the autumn peak the number of eggs laid per bird was well above the monthly average. In November and December when this figure fell below the average, the total supply was maintained by the introduction of new laying birds.

In considering this farm as an example of successful management, a brief description may serve as a useful guide to those who would wish to compare these results with their own.

The size of the farm is 22 acres. Two acres are occupied by the plant, the other twenty being used by the birds as range. The flock, averaging 418 birds over the whole year, is composed entirely of White Wyandottes. These are housed in six laying houses of the slatted floor type with a broody pen attached at the side or rear. The stock is all home bred and reared for selected second and third year birds. The incubators of the ordinary standard type are housed in a large stone building which has been suitably adapted for the purpose. The experience was that high fertility is accompanied by heavy losses of young chickens, but when fertility was low the stamina of the young chicks was remarkably high. With a view to rearing a strong and

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hardy bird, the young chickens were put out as soon as possible and every encouragement was given them to cone into the open. The pullets are separated out and moved to their laying quarters about six weeks before laying commences. The first batch of eggs hatched about the beginning of February and the hatching continued into the middle of April. The first lot of pullets came into lay about the middle of August, and by the middle of November about 350 spring pullets were laying. Two feeds were given - dry mash in the morning and a corn feed in the evening.

Another very successful farm was farm Q, a somewhat more intensive farm than farm J, with an average flock of 320 birds on six acres although the birds are at present confined to a much smaller area. The flock is a varied one, containing Rhode Island Reds, White Wyandottes and White Leghorns.

The housing equipment is also very varied. It consists partly of the old type of solid floor houses, which owing to their weight are not moved frequently enough, and partly of folding units from which the runs have been detached. The remainder of the equipment has been built by the farmer himself to suit his own particular requirements, except, of course, the incubators.

The stock is replaced by buying hatching eggs and hatching begins about December. The heavier birds are hatched in March, and, coming into lay in September and October, lay steadily throughout the winter. The white leghorns tended to get rather fat, but were very useful in keeping up the summer supply of eggs when the heavier birds were falling off. As a contrast to farm J, the chickens on this farm are battery reared, no attempt being made to harden them off quickly by turning them out into the fields at an early date. The battery is more or less a home-built structure with a wire netting floor. The chicks are on dry mash ad lib and one feed of grain, while the laying flock have grain day and night with one dry mash feed during the day.

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The egg yield per laying bird was the second highest (182.7). The flock is heavily culled and no birds are retained after the second laying season. Roughly, about one-third of the eggs were sold retail, the remainder were sold wholesale through a dealer. A rough system of grading is adopted. Every egg is weighed and every one below a certain weight is classed as a pullet egg, whether laid by a pullet or not.

Approximately, 17% of the total income was on account of table poultry. This side of the farm is only just developing, but it appears to be along the right lines. A special line of day-old chicks are purchased with the object of producing a good quality white fleshed table bird. The breed is Indian Game cock x Rhode Island Red hen, and the male progeny is later crossed with a Light Sussex hen.

An intesting contrast is afforded by the two largest farms, A and B. In the former case a loss of £496 was incurred, while in the latter case a profit of £568 was made. Some idea of the type of enterprise carried on may be seen from the detailed table in the Appendix, but, briefly, it may be pointed out that farm A had something like one-third of its total output as table poultry, while farm B had only one-tenth. On the other hand, the latter farm had something over half of its output in the form of market eggs, while the former had only % of its output in this form. Both farms had almost the same proportion of their outputs in day-old chicks, namely, almost one-fifth. Upon further inquiry being made at these two farms for the purpose of ascertaining the reason for the opposite results, the following points emerged.

Farm A accounts for the loss owing to a severe outbreak during the rearing season of Coryza, which, if fowls culled are included, accounted for a loss of two-fifths of the total flock, amounting at that time to 10,000 birds of varying ages up to sixteen weeks old. A further contributory factor towards the

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loss was found at the time the final valuation of the birds was made; the effect of the epidemic upon the remaining birds was that they fattened much more slowly than in normal years and thus had to be valued at a lower figure. Owing to this outbreak and resulting heavy loss, the farmer concerned has decided in future to place much more emphasis upon day-old chicks and commercial eggs than upon table poultry. When inquiry was made on farm B the opinion was that the bulk of the profit was obtained from day-old chicks rather than from commercial eggs, not only in the year now under review but also in previous years. This farmer is making a careful study of management methods for the production of winter eggs, and in the year now under review the chickens were hatched on the intensive system, but it was found that January hatched pullets began to lay at about 42 months old. During the early winter months, however, when egg prices began to rise, the greater part of these birds went into partial moult and their egg yield began to fall considerably. The system of rearing has been changed for the 1934 rearing year; the chickens were turned out in the fields at 10 - 14 days old and did not come into lay until six months old, and so far the prospects suggest that they will maintain a substantial yield of eggs throughout the winter months. These pullets commenced to lay in the middle of June, whereas the previous year they were averaging about twelve eggs per month per pullet at this time.

Both these farms had approximately the same capital invested, but, the one, farm A, occupies the full time attention of the owner, while the other, farm B, is run as a part of a fruit farm and occupies only half the time of the owner, with the result that the former carries a cost for the farmer's own labour of £156 per annum as compared with £67 on the latter. In the case of hired labour also the cost is considerably greater on farm A as compared with farm B, and, in brief, it may be said that the predominance of table poultry on the former calls for a great deal more labour effort than the commercial eggs on the latter.

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Price per Dozen Eggs as a Factor Determining Profitability

There are innumerable methods employed by poultry farmers in disposing of their eggs many of them, as pointed out in the Commissions Report, being very wasteful. The information relating to the method of disposal of eggs is rather scarce, but the figures seem to suggest that the success of the profitable farms can, in certain cases, be attributed to their having acquired a favourable market. The highest average selling price, 1/8d. per dozen, was obtained by farm K. Market eggs alone, although they were nearly all graded, averaged only slightly over 1/- per dozen. About 30% of the total eggs laid, however, were sold as hatching eggs or were set by the farmer himself, and as these realised considerably more in cash than the remaining 70% sold as market eggs, the final average price per dozen of all eggs sold reached 1/8d. This farm appears to be an outstanding example of a very fine balance which has been achieved between the different branches of poultry farming. Farm F, with an average price of 1/5d. per dozen, is a further example of the effect on the money receipts of disposing of part of the eggs for sitting purposes. Farm Q realised an average price of $1/3\frac{1}{2}d$. per dozen for eggs which were all sold for table purposes. It has already been pointed out that one-third of the total were sold retail, but in spite of this $1/3\frac{1}{2}d$. per dozen is a very substantial figure. Most of the remaining farms averaged about 1/3d. per dozen. Two exceptions are notable, farms P and S, although they realised a very good average price for their total egg sales yet failed to make a profit. In the case of the former, 36% of the total eggs were sold as hatching eggs which tended to raise the average price considerably. Against these receipts, however, is set off a rather heavy charge for livestock and deadstock depreciation together with a big charge for miscellaneous items amounting to 2/10d. per bird.

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Farm S sold all the eggs for table purposes mainly retail realising an average price of 1/6d. per dozen. Food costs, however, were a very expensive item, being $1/1\frac{1}{4}d$. per dozen eggs. When this figure is compared with a food cost of 8d. per dozen eggs on Farm Q a satisfactory explanation is forthcoming as to why farm S in spite of the high money return failed to make a profit. Egg prices on the remainder of the unprofitable farms averaged only about 1/- per dozen, which suggests that they were unable, for one reason or another, to adapt themselves to the best market conditions.

Cost of Production of Eggs

Having considered the selling price of eggs the next logical step is to examine costs of production. As previously pointed out, the task of arriving at the cost of producing a dozen eggs is complicated by the fact that no separate figures are available relating to labour and feeding stuffs expended on the In the following table, which gives the egg laying flock. receipts as a percentage of total receipts, it can readily be seen that on all the farms, with the exception of farms W and V, egg production was in varying degrees the item of major importance. From this it is possible to evolve a method of arriving at an approximate figure for egg production costs. It is possible in the circumstances to regard income from any source other than eggs as incidental to egg production, and it can be assumed that its selling price is more or less equal to its cost of production. If then the receipts on these accounts are subtracted from the total farm costs, the remaining costs figure will give a fairly accurate guide to the cost of producing eggs on each particular farm.

The results of this method of procedure are set out in the table overleaf.

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Farm	Egg_Sales as % of Total Sales	Dozens	Total Cost of Eggs	Cost per Dozen
			£. s. d.	Pence
C	91	21326	1280. 4. 1	14.4
D	72	11642	769. 4.11	15.86
E	83	11879	77 ⁸ . 9. 4	15.7
F	71	9274	399.16.7	10.34
G	80	9278	545.10	14.1
H	67	9658	564. – 5	14.02
J	72	7224	244.10.9	8.12
K	64	388 7	243.16.1	15.05
L	77	6076	392. 8. 5	15.5
М	81	5021	411. 6. 2	19.66
N	75	7246	243. 3. 8	8 .0 5
0	99	8793	455. 3. 6	12.42
P	60	4086	345.10. 1	20.3
Q,	67	4872	191.15.2	9.45
R	0 3	4283	201.10.11	11.29
S	72	2287	207. 6.11	21.75
U	80	2024	122. 5. 2	14.5
w	81	215	35.17.8	40.0
X	72	440	54. 4. 8	28.5

Thus the costs ranged from 8.05d. per dozen to as high as 40.0d. per dozen. There is a marked tendency for the profitable farms to exhibit the lowest costs. Although this was anticipated as being one natural cause of profits, there are two notable exceptions, namely, farms K and G. The average cost on the profitable farms is 10.91d. per dozen, whilst the average on the unprofitable farms is 19.5d. per dozen. Even excluding from the unprofitable group farms W and X, whose results are so unusual, the costs still remain at the high figure of 16.6d. per dozen.

Food Costs

It is well known that the largest single item of expense in poultry farming is the cost of feeding stuffs, and, hence, this item bulks largest in the cost of egg production. Unfortunately, farmers co-operating in this investigation were unable to furnish separate information relating to the amounts and types of feeding stuffs fed to the laying flock, table birds and pedigree stock, etc. In the absence of such information, food used on farms whose output of eggs is 70% and above the total production may all be regarded as a cost against eggs, as that part of the foods which was fed to surplus cockerels and immature pullet stock is incidental to egg production. On this basis the following table sets forth the cost of feeding stuffs per dozen eggs on 15 farms. COST OF FOODSTUFFS PER DOZEN EGGS

Pro	ofitable	Unprofitable			
Farm	d.	Farm	d.		
N	7 1	0	61/2		
J	9	C	7		
R	9	U	81/2		
F	11 <u>4</u>	G	9		
		E	93		
		D	94		
		Ŀ	10		
		P	10 <u>1</u>		
		M	12		
		X	14		
		W	26 <u>1</u>		

A study of this table shows that 4 of the 15 farms are profitable but two of the unprofitable farms, namely, farms 0 and C, have food costs actually lower than farm N,which is profitable and on which the cost of food amounts to $7\frac{1}{4}d$. per dozen eggs. The chief reason why the two former farms have not made a profit in spite of their low food costs is due to the heavy charge for depreciation

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of the laying flock resulting from disease and poor condition .

On the other hand, farm F with its fairly high cost of $11\frac{3}{4}d$. for foodstuffs was able to show a profit because, of the total value of eggs produced, approximately one-third was received for the sale of hatching eggs, thus giving a considerably higher average selling price per dozen than on the remaining farms. Farm W is a general farm and the hens receive very little attention. The egg yield at present is very low, and this has doubtless served to put the food cost at such a prohibitive level.

Labour

For obvious reasons, it is not possible to treat the labour costs in the same manner as food costs, and as no Time Sheets were kept, there is no suitable method of arriving at the labour cost per dozen eggs. In view of this, it is best to treat labour as a bulk cost on the farm and to discuss it as such.

On three of the 23 farms no hired labour was employed, whilst on five of the farms the whole of the labour was hired. The relative importance of labour as a charge against the farm differs considerably. Variations in the relative importance of labour costs appear to be associated with variations in the size of the enterprise. Generally speaking, the larger the farm as regards capital and output, the larger the proportion labour costs attain in relation to total costs. On large farms labour costs range from 36% to 15% of total costs, while on the smaller ones labour costs are generally less than 15% of the total costs. One notable exception is farm A, the largest farm in the survey from the point of capital and production. On this farm labour costs are only 10% of total costs. Farm V, which is a very small farm, is another exception in that 34% of total costs were incurred on labour. In point of fact, the size of this enterprise does not warrant the labour which has been

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bestowed upon it. In other words, a total average capital of £70 cannot find profitable employment for one full time worker, and cannot hope to cover a labour remuneration of £54.15.6 as well as all the other items of cost.

The following table shows the relative importance on all 23 farms of the food and labour costs in relation to total expenditure and total production.

Relative Importance of Food and Labour Costs to

Profitable Farms				Unprofitable Farms					
	as % of Total Costs		Total Product- ion per £100 spent on		as % of Total Costs		Total Product- ion per £100 spent on		
Farm	Food	Labour	Food	Labour	Farm	Food	Labour	Food	Labour
В	% 51	15 15	ź42	822	A	38 38	ź4	221	612
F	68	15	205	935	C	44	11	219	884
N	57	31	266	575	D	45	22	220	460
ନ୍ଦ	47	37	282	431	E	51	18	162	445
R	62	16	182	730	G	51	19	205	550
K	62	8	169	1400	Н	41	16	241	420
J	67	19	216	752	L	53	23	157	369
,					M	52	17	150	461
					0	47	10	214	1000
					P	43	17	205	522
					S	47	38	181	221
					Т	28	23	269	321
					U	48	16	201	596
					v	30	38	168	135
					W	63	13	67	320
					X	14	35	213	155

Total Costs and Total Production

Examining first the labour costs, it is seen that the proportion which labour absorbs of the total expenditure is approximately one-fifth on both profitable and unprofitable farms. On the other hand, the value of the output in relation to the expenditure on labour differs very considerably; thus, while the

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average output of the unprofitable farms amounts to £467 for every £100 expended on labour (paid and unpaid), that of the profitable farms amounts to as much as £806. Examination of the detailed table in the Appendix will show that three of the seven profitable farms depend to a considerable degree upon hatching eggs, table poultry and day-old chicks, whereas only two of the 16 unprofitable are so dependent. Apart from this difference in the method of disposal, it would still be true to say that on the average the profitable farms obtain a higher value of output for a given expenditure on labour.

Turning from comparisons of the incidence of labour costs to that of food costs, it will be noticed that of the total expenditure on the unprofitable farms, 43% is absorbed by the cost of feeding stuffs, whereas 59% is so absorbed in the case of the profitable farms.

To put the matter briefly, the combined costs of food and labour absorb 79% of the total costs in the case of the profitable farms, and only 64% on the unprofitable farms, thus leaving 21% and 36%, respectively, to be accounted for by other items of expenditure. The outstanding contrast is that although the unprofitable farms on the average spent a greater proportion of total costs on stock replacements than the profitable farms, yet depreciation of livestock is also very heavy on these farms and absorbs a far larger proportion of total costs than is the case on the profitable farms.

CONCLUSION

With a limited number of farms of such varied size and type it is not possible to arrive at any precise and definite conclusions regarding the factors which make for financial success. There is no doubt, however, that the realisation of good returns must depend largely on a successful (or perhaps 'lucky') hatching season followed by further good

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fortune in rearing the young pullets. For the remainder, the chance of making profits lies within the farmers'ability to make the best use of his marketing facilities, always being careful to ensure a reasonable output of eggs during the late autumn season.

One further comment on the question of family labour can be made. There is a tendency, as shown by the records, for some of the smaller farmers to devote an amount of time to their poultry which is not always justified by the size of the enterprise, and thus the latter has been burdened with a labour charge which in many cases it is impossible to meet.

Thanks are again due to all those farmers and others who have so willingly co-operated in the investigation. With their continued co-operation, it is hoped to follow up more thoroughly the points which have been raised in this and the previous bulletin.

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COSTS	

	FEEDS	LAB	OUR	STOCK A	ND EGGS	······
Farm	Feeds	Hired	Farner's	Stock & Hatching	Market	Own Set
4	£. s.d. 1404. 6.9	£. s. d. 366.1.2	£. s.d. 156. – –	£. s.d. 30.4.7	£. s. d. 	£. s.d. 711.5
В	1236.12.6	297.7.6	67	81. 8. 6		260.9.4
C	621. 3.11	153.13		390.4.6		
D	468.14.8	68.15	156. – –	25.13		18.13. 7
E	460.15.4	114.13	52	39.16.6		7.11. 1
F	454.15.9	100		28.16.6		14. 7. 7
G	353.3. ⁸	132. 3.8		30. – –		16.13
н	343.11.9	53.13.1	144. – –	6.14	1.10	31.19
J	267.18.3	18.15.9	57.17.8			7.17
K	258.14.11	3.12.3	31.10	40. 3. 9	8.6.6	26. 2. 4
L	256.10.5		109. 4	20.16		13.16
М	251.4.8	81.17		47.7		
N	227.1.3	1. 3.10	104	21.11		
0	215. 2. 7	45.18				· · · · · · · · · · · · · · · ·
P	178.1	48.2.9	21.15	26.10		5.10.10
Q	163. 8. 5	4 2	103	26.3.9		
R	160.19.5	2.4.5	37.15	4. 5		6.14. 6
S	127. 1. 5		104	15.10.6		4.9
T	79.11.6	14.15	52	6.5	72.10.5	9. 9.10
ប	71. 3. 3	14.15. 3	9.10	4.13		2
v	43. 9.11	3.4.2	51.11.4	15.15		
W	23.15.11	1	4	1.16.4		
x	15.14. 8		22	2		
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	DEPRECI	ATION	RENT	INT on CAP. TOTAL		
Miscell-	Live-	Dead-		Interest		
f. s d	f s d	fsd	Rent	on cap.	Total	Farm
325,19	342.19	148.16. 9	104. – –	94.7. 1	3683.19.4	A
239, 2. 9		117. – 8	34.5	89.6.4	2422.12.7	В
78.1.1	42.3	58.16. 8	19.10	37. 3.10	1400.16	C
111. 2. 6		65	50	65.9.4	1029.8.1	D
21. 2	72.15	15.1.6	96. – –	29.4	908.18. 5	E
11 1		14. 7. 4	16	28.9.2	667.16.5	F
34.17.7	46.11	22.15. 1	22	29.16.3	688 3	G
115. 6		50.12.10	45	48.12. 1	840.18.9	H
16.16.9		13. 8. 5	4	15.16.4	402.10. 2	J
18. 7. 1		9.5		21. 5. 2	417.7	K
17.14.9		37.1.7	7.5	17.2	479.9.9	L
23.19.7		44.3.5	10	25.18	484.9.8	Μ
16. 3. 5		9.17.9	2	16.11. 3	398.8.6	N
9.0.4		10.10	50	11. 2. I	401.15	· 0
4(•±4•, 0 20 17 /	(.14	<u> </u>	10.10	21.12. 5	41(.19. (P
3 17 3	1813 -	72-	12.	י פר פר ר פר פר	244. (. 1 258 6 8	у Д
6 3 7		[• • •	4.4	918 5	272 18 8	r q
27 3		15. 8. 6		10.11.10	291 7 1	р Т
12.14. 9	2.2	16. 5	8	8.15.10	149.19.1	T
9.2.5	11.14.11	5.9.6	10	3.9.2	144. 6. 5	v
		5. 3.11	10	1.19.6	38 . 5. 8	W
12.2	13.19	3.8.6	2.10	3.6.8	63.11	X
				ł		
				÷		

INCOME

	EGGS		TABLE POULTRY	STO	CK
Market	Hatching	Own set	Table Poultry	D.O. Chicks	Other Stock
£. s. d. 248.18	£. s. d. 150.11.10	£. s. d. 711.5	£. s. d. 1210.11.4	£. s. d 594. 211	£. s.d 226.17.8
1385.14.10	20.16. 6	260.9.4	334.17.1	677.16.3	298.18.6
1242.12. 2			103.19		
724.4.4		18.13.7	177.14.11	12	68.19
596.1.4	10.8	7.11,1	130.9.1		
454.8.1	198. 5. 9	14. 7.7	136.2.4		131.17.6
565.11.4	and and and	16.13	80.14.10	28	55.1.5
498. 7.11	22.16.6	31.19	182. 5	27.1.3	62.17.3
405.9.9	7.14 -	7.17	95.12. 7		49. 2
152. 3.10	137.15.2	26. 2.4	87.9	23.16.8	55. 5.3
301.14. 6	10	13.16	57.15.10		25.13
304.7.10			33.17. 2		39. 3
448 18. 3			49.16. 8	1. 8.3	99.18
454.6.8			6.10.6		
182.11. 8	104.15.9	5.10.10	51.3.6		21. 6
308.11.6			88.10, 4		44.11.6
227.18.5	12	6.14.6	55.11. 9		
164.7.4		4.9	24.12, 9	12.6	39. 7.6
177.6.7	33.11. 6	9.9.10	10.2.5	25. 7	29.15.6
113. 1. 4		2	23. 1.11	4. 9	
31. 3. 2	4		35.18. 8	19.6	5 8
13. 3.10		, 	5.3		2. 2.9
24.11			5. 1.10		2. 1
	Market 248.18 1385.14.10 1242.12. 2 724. 4. 4 596. 1. 4 454. 8. 1 565.11. 4 498. 7.11 405. 9. 9 152. 3.10 301.14. 6 304. 7.10 448 18. 3 454. 6. 8 182.11. 8 308.11. 6 227.18. 5 164. 7. 4 177. 6. 7 113. 1. 4 31. 3. 2 13. 3.10 24.11	EGGSMarketHatching \pounds . S. d. \pounds . S. d.248.18150.11.101385.14.1020.16. 61242.12. 2-724. 4. 4596. 1. 410. 8454. 8. 1198. 5. 9565.11. 4-498. 7.1122.16. 6405. 9. 97.14152. 3.10137.1F. 2301.14. 610304. 7.10448 18. 3182.11. 8104.15. 9308.11. 6-177. 6. 733.11. 6113. 1. 431. 3. 2413. 3.10-24.11	EGGSMarketHatchingOwn set \hat{x} . s. d. \hat{x} . s. d. \hat{x} . s. d. $248.18 150.11.10$ $711.5 1$ $1385.14.10$ $20.16.6$ $260.9.4$ $1242.12.2$ $ 1$ $18.13.7$ $724.4.4$ $ 1$ $18.13.7$ $596.1.4$ $10.8 7.11.1$ $454.8.1$ $198.5.9$ $14.7.7$ $565.11.4$ $ 16.13 16.14.6 10 13.16 13.01.14.6 10 13.16 13.01.14.6 10 13.16 13.01.14.6 10 13.16 13.01.14.6 10 13.16 164.7.10$	EGGSTABLE FOULTRYMarketHatchingOwn setTable Poultry \pounds , 8, d. \pounds , 8, d. \pounds , 8, d. \pounds , 8, d.248.18150.11.10711.51210.11.41385.14.1020.16.6260.9.4334.17.11242.12.2724.4.418.13.7177.14.11596.1.410.87.11.1130.9.1454.8.1198.5.914.7.7136.2.4565.11.416.1380.14.10498.7.1122.16.631.19182.5405.9.97.14.7.1795.12.7152.3.10137.15.226.2.487.9301.14.61013.1657.15.10304.7.10448 18.36.10.6182.11.8104.15.95.10.1051.3.6308.11.69.17.6.733.11.69.9.1010.2.5113.1.423.1.1131.3.2431.3.105.324.115.1.10	EGGSTABLE FOULTRYSTOMarketHatohingOwn setTable Poultry Chicks \pounds 6. \pounds \pounds 8. $d.$ \pounds 240.10150.11.10711.51210.11.4594.2111385.14.1020.16.6260.9.4334.17.1677.16.31242.12.2103.19724.4.418.13.7177.14.1112596.1.410.87.11.1130.9.1454.8.1198.5.914.7.7136.2.4498.7.1122.16.631.19182.527.1.3405.9.97.147.1795.12.7152.3.10137.1F.226.2.487.923.16.8301.14.61013.1657.15.1044818.36.10.6-182.11.8104.15.95.10.1051.3.6308.11.688.10.427.18.5126.14.655.11.913.1.435.18.819.613.3.105.324.115.1.10

LNCOME	
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INCOME							
TOTAL PROFIT OR LOSS							
Total Profit Loss	. Farm						
£. s. d. £. s. d. £. s. 88.6.2 495.13.	d. 2 A						
90.12. 6 567.19.11	- В						
63.4.1 37.11.	11 C						
03.2.1 26.6.	. – D						
44.9.6 164.8.	. 11 E						
35.1.3 267.4.10	– F						
24.13. 7 36. 13. 4	- G						
30.1.9 10.17.	. – · H						
79 2 176. 10	- J						
89.12. 3 72. 5.3	- K						
03.1.10 76.7.	. 11 L						
77.11. 4 106.18.	. 4 M						
04.3.1 205.14.7	- N						
60.17. 2 17.	. 10 0						
65.7.9 52.11.	. 10 P						
61. 3. 5 116. 16. 4	– Q						
92 8 33. 14	- R						
30. 4 42.14.	. 8 S						
.87. 9. 4 3.18	. – т						
42.15. 3 7. 3	.10 U						
74.6.1 70	4 V						
15.11.10 22.13	.10 W						
33.17. 4 29.13	. 8 X						
30. 4 42.14 $87. 9. 4 3.18$ $42.15. 3 7. 3$ $74. 6. 1 70 70 15.11. 10 22.13$ $33.17. 4 29.13$. 8 S T . 10 U 4 V . 10 W . 8 X						

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Hereford.

W. D. HAY, Esq., B.Sc., Somerset Farm Institute, Cannington,

W. T. PRICE, Esq., M.C., N.D.A., N.D.D. Agricultural Department, Polebarn House,

Trowbridge, Wilts.

R. C. GAUT, Esq., M.Sc., Department of Agricultural Education, County Buildings, Worcester

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