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Livestock - Marketing, Cooperative



ECONOMIC ASPECTS OF
CO-OPERATIVE LIVESTOCK
MARKETING

S. J. ROGERS and E. D. SARGENT

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Department of Agricultural Economics

ECONOMIC ASPECTS OF CO-OPERATIVE LIVESTOCK MARKETING

S. J. ROGERS and E. D. SARGENT

A report of a study undertaken on behalf of
the West Cumberland Farmers Trading Society Limited
and made possible by a grant from the Agricultural
Market Development Executive Committee

University of Newcastle upon Tyne

Department of Agricultural Economics

1969

FOREWORD

This Report is based on studies of the workings of livestock marketing schemes in the North of England and the South of Scotland. The main investigation took two years and was conducted by the second of the authors. There were also subsidiary surveys of particular parts of the livestock schemes. The main object of all the studies was to suggest ways of improving the schemes for marketing livestock.

The investigation was undertaken on behalf of the West Cumberland Farmers' Trading Society Limited by the Agricultural Adjustment Unit of this University, and was made possible by financial assistance from the Agricultural Market Development Executive Committee. Under the terms of this grant a summary of the report is available from West Cumberland Farmers. Because of the current interest in the subject, however, a decision was taken to publish the full report.

The Agricultural Adjustment Unit would like to thank West Cumberland Farmers for providing the opportunity to undertake the investigation, and A.M.D.E.C. for its financial support. The Agricultural Adjustment Unit also wishes to acknowledge the generous assistance which was afforded by the many people, representing a wide range of interests within the field of co-operative livestock marketing, who rendered assistance during the course of investigation.

May 1969

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A. INTRODUCTION

In 1966, the West Cumberland Farmers' Trading Society Limited invited the Department of Agricultural Economics at the University of Newcastle upon Tyne to undertake an investigation of the pig, lamb and calf schemes operated by the Society. The investigation was made possible by financial assistance from the Agricultural Market Development Executive Committee.

Terms of Reference

The terms of reference were:

'to carry out an investigation of the pig, lamb and calf schemes at present operated by the Society. The investigation will entail a study of production and marketing methods in order to improve the efficiency of these schemes with particular reference to the improvement of quality and pricing methods in relation to existing and future demand.'

Method of Enquiry and Layout of Report

The enquiry involved close examination of the objectives and working of each of the Society's livestock schemes and of the results achieved. This was done by consulting officers of the Society and examination of records. The views of farmers participating in the various schemes were obtained, by means of field surveys, on a range of questions relevant to past results and to future prospects for the schemes. These surveys were conducted on the basis of stratified random samples of the farmers participating in the particular schemes. Wherever possible, performance in the schemes has been considered in relation to similar schemes elsewhere.

The various schemes (for pigs, calves and lambs) have certain features in common; for example, all are administered by the Society's Livestock Department, and such economic aspects as the influence of throughput on unit costs are relevant in each case. However, each scheme is an independent operation with its own objectives and problems and in the following report the schemes are evaluated separately. Each evaluation is preceded by a brief description of the particular scheme and by some comment on the place of the scheme in the overall activities of the Society. In each case, a similar pattern of presentation has been followed covering such matters as: objectives, membership, throughput, marketing and administration. At the end of each section the conclusions which emerge and suggestions for future action by the Society are summarised.

The West Cumberland Farmers' Trading Society Limited and the Livestock Schemes

The West Cumberland Farmers' Trading Society Limited is the largest agricultural co-operative in the U.K. with a turnover in 1967 of approximately £30 million. Its livestock marketing activities account for

approximately 6 per cent of the total turnover of the Society. Apart from requisites, which account for almost three-quarters of the trade of the Society, livestock marketing is relatively important in the Society's trading, being exceeded in importance only by eggs and poultry which account for about 8½ per cent of turnover.

The Society has recognised the disadvantages that are inherent in small farm enterprises and in a number of fields it has assisted its members to expand and/or change their production activities to obtain economies of scale and the benefits of specialisation. In appropriate cases, one route towards these goals may be through joint or co-operative effort on the part of the producers and the Society has been alert to initiate and assist such moves towards more efficient production and marketing. The introduction of broiler groups, egg producers groups and specialist calf-rearing enterprises are examples.

Furthermore, the Society sees urgent implications for itself and for its members in the rapidly accelerating trend discernible today towards closer links between the requirements of the market and the type of production on farms. For most farm products the number of direct buyers is constantly diminishing and, similarly for farm requisites, production and selling is becoming more concentrated. This trend seems to have two major lessons for farmers. First, the need for concentration or co-operation on their part to provide countervailing power in their commercial operations. Secondly, the need to examine critically, on a case by case basis, the economics of integration (vertical or horizontal) in particular production and marketing chains. The essential inter-relation of all links in the chain from, say, the production or purchase of a breeding sow to the final retail sale of the products made from the sows' progeny has become very clear.

It was in pursuance of the foregoing considerations that the Society embarked on the livestock schemes that are the subject of this report. Moreover, this policy was in line with the Society's basic objective of providing services for its members wherever it considered it could provide a particular service more efficiently than was available to its members through other channels. In the case of livestock and of red meat, changes in traditional trading channels between producer and final consumer, have been slower than changes in the marketing methods for other products. This situation with regard to livestock and red meat has been an important factor in the decision of the Society to arrange for this investigation.

The various schemes, here under consideration, were not initiated by the Society as parts of an integrated strategy; rather, they were established to meet particular needs or opportunities as and when these were seen to arise. Thus, the weaner pig scheme, inaugurated in 1961, was the first venture by the Society into livestock marketing. In essence, its

objective was the clear cut one of matching the needs of pig breeders in the western part of the Society's area, where weaner prices were low, with those of pig-fatteners in the eastern part of the area where weaner prices were normally high. Subsidiary advantages, such as convenience and savings in the farmer's time at markets, were obvious. There were also the possibilities of the scheme, if successful, leading to major advances for the participants along lines of high quality production and greater integration of operations linked to market requirements. The objectives and the development of the scheme will be outlined in that part of this report dealing with the pig schemes.

The beef-calf scheme was started in 1962 when it was clear that prices for week-old calves in Cumberland and the Furness district of Lancashire were lagging behind those in other parts of the country while in other areas, particularly the eastern part of the country, there was a demand for weaned calves, especially Friesians, for fattening. The basic idea of the scheme was to marry the complementary requirements of dairy farmers, calf rearers and fatteners. In 1965 losses were incurred at the rearing stage, when ownership of the calves rested with the Society. These losses were occasioned by a combination of high prices for the weaner calves themselves and for the barley for feeding them, and they led to some change in objective. The new objective was to rear calves only when advance orders were held from fatteners. Throughput fell off and to counter this the outlet was broadened in 1966 to include grassland fatteners as well as the barley-beef producers for whom the scheme had originally catered.

In the case of the fat lamb scheme, the Society was offered the opportunity, in 1965, of taking over the operation of a slaughter-house in Dumfries owned by a multiple grocery store with whom it had had close trade relationships in connection with eggs and poultry. As the Society had been previously requested by its members to provide some sort of fatstock marketing service, it saw this as the chance to provide a service for its members in the area and to expand its activities into a new and challenging field.

The foregoing schemes were all placed within the Livestock Department of the Society which had been established in 1963 to co-ordinate the schemes as well as other activities with which this report is not directly concerned. The latter were, principally, a dairy heifer replacement scheme, a store lamb scheme, store cattle and suckled calf sales, and a dairy management scheme.

The Livestock Department has to operate in competition with other outlets for stock. It is required to be self-supporting financially and is centred in Carlisle under the supervision of the Livestock Manager who is responsible to the General Manager of the Society at Whitehaven. The organisation of the Department has changed over the period since its establishment but, basically in mid-1968, the livestock schemes were

staffed by two livestock officers responsible for the Cumberland and North Lancashire area and by two Group Development Officers responsible respectively for the Southern Scotland area and the Yorkshire area. The latter officers were responsible to the Livestock Department at Carlisle through their Area Managers. They were supported by technical staff provided from trade sources but working under the direction of the Society.

B. THE PIG SCHEMES

This report concentrates on two pig schemes currently operated by the Society. Basically, the two schemes are similar in that they have aimed at providing a service to members producing weaner pigs, which will assist them to produce a higher quality weaner and to dispose of it on the most advantageous terms and with the maximum of convenience. The schemes differ in such matters as: the degree of discipline exercised over participants in such matters as use of performance tested stock, the degree of quality control exercised over the weaners produced, the incentives provided to encourage quality production, pricing arrangements and the closeness of association with the outlets which, in most cases, are individual fatteners.

The Ordinary W.C.F./F.M.C. Weaner Scheme

This is the larger of the two schemes and has grown from the original establishment of weaner marketing by the Society in 1961, followed by the introduction in 1965 of a joint weaner marketing scheme with the Fatstock Marketing Corporation.

The scheme is, in essence, an operation to improve the mechanism and to reduce the cost of the transfer of weaners from pig breeders to fatteners. Weaners are brought from producers at prices in line with prevailing rates and transported to fatteners, to whom they are sold at a price sufficient to cover that paid to the breeder plus a charge to cover administration and leave a small margin. Minimum discipline is imposed on weaner producers and little progress has been made with breed improvement although quality production aimed at establishing a 'brand image' is encouraged. Technical advice to breeders is provided but there is no policy of encouraging participating members to join in budgeting and record-keeping as an aid to better management. Farmers purchasing the weaners for fattening are regarded as customers rather than as participants in the scheme and there is little follow-up work at this stage other than to investigate and resolve complaints regarding the quality of weaners supplied.

The Farmers' Quality Weaner Producers Limited

This company was formed in 1967 from above-average members of the ordinary weaner scheme who were prepared to accept complete discipline regarding use of performance-tested male and female breeding stock made available from the Society and also regarding tied feed sales (the latter has since been dropped). Members receive a quality premium above the list price for ordinary weaners. Fatteners are not contractually bound to purchase the quality weaners at the premium prices nor are they formally associated in any way with the company. Attempts are made to follow the performance of weaners beyond the point of sale to the fatterer but this is not always possible and the fattened quality pigs are not channelled into specific factories.

The Society and F.M.C. are currently responsible for administration of the company and charge a similar levy to that collected in the ordinary weaner scheme.

The Scheme in Practice

For these schemes to be successful all participants, the Society, the fatteners and the rearers, must derive economic benefit from them—either in the form of increased profits or in the form of reducing the management burden. From the Society's point of view it is essential for the scheme to cover direct costs and make some contribution to overhead costs. Since transport costs are virtually recouped directly from the charge made to producers there remains the question of recovering administrative costs. Since they are more or less constant, whatever the turnover, there is a minimum volume of business which will serve to offset the administrative costs, although the Society would, of course, prefer to see a larger throughput and so ensure profit on the scheme. For producers, the schemes must be better than any alternatives. This means that net prices (i.e. net of any charges deducted) from a scheme must compare for example with the auction market price (less commission and transport costs), taking due account of non-price elements such as reliability, efficient collection and delivery. This also involves balancing the price between the interests of fatteners and rearers so that both parties are satisfied that there is an equitable distribution of the advantages of having a scheme.

A consideration of these objectives reveals a number of management problems which must be overcome for the schemes to be successful. If producers regard any scheme as being merely one of a number of alternative market outlets rather than as a method of marketing to which they owe some loyalty, their support may be intermittent. In this situation, administrative costs rise and the scheme may be difficult to operate. If, by contrast, the Society tries to impose marketing discipline to ensure the smooth running of a scheme this may deter some producers and lead to an unacceptably low volume of throughput. Not only must total operating costs be sufficiently low to leave a net economic advantage to all participants in the scheme, but also the distribution of this among all parties must be equitable. This requirement must be seen in the light of the frequently conflicting movement in prices for fat pigs and weaners which makes it a matter of difficulty to devise an equitable system of payment. Finally, and most important, any scheme may be either an attempt to increase profits by avoiding the use of auction marts for weaners or an attempt to run a fully integrated pig-marketing operation. Differences in conception of these schemes will affect the disciplinary requirements for producers and the range of activities which the Society must undertake. And a clear understanding of these differences and their consequences for management is critical to the success of the operation.

The remaining sections of this chapter discuss the following subjects: membership, transport costs and prices, long-run developments such as the quality weaner scheme and breed improvement, organisational aspects and related problems. After that, there are sections regarding field surveys carried out on weaner producers and of fatteners in the scheme and their attitudes. Finally these separate, but inter-related, strands are brought together and considered at the end of the Chapter.

Membership and Throughput

When the Society began its weaner scheme it was estimated that an annual throughput of 100,000 weaners could be regarded as satisfactory. As will be seen from Table 1, this target has not been achieved.

TABLE 1
Annual Throughput of Weaners, by Monthly Totals
All Schemes 1964-68

	1964	1965	1966	1967	1968
January	3,315	4,533	7,035	5,433	7,259
February	2,238	5,730	5,621	4,522	5,069
March	2,365	6,516	7,851	5,577	6,434
April	2,771	8,699	7,357	4,527	5,984
May	2,707	6,119	5,486	5,846	7,793
June	3,955	7,276	7,075	6,836	6,052
July	4,151	7,342	6,116	5,645	6,121
August	4,046	7,630	5,483	6,108	6,515
September	4,739	7,139	6,544	5,430	7,423
October	4,207	7,601	5,427	5,252	7,710
November	5,259	6,884	5,557	5,747	7,475
December	4,376	5,020	6,889	3,875 ²	7,444
Total	44,129	80,498¹	76,441	64,798	81,279

¹ Joint weaner scheme established between W.C.F. and F.M.C.

² Foot and Mouth Restrictions were in force at this time.

Although these numbers may be slightly disappointing, the scheme has continued to attract substantial numbers of pigs and on this basis alone can be judged to be moderately successful. It is, however, necessary to examine in more detail the reason for the substantial fluctuation in numbers.

Table 2 shows the variations in total sow numbers over the period concerned for the relevant regions of England and Scotland. Table 3 compares these figures with W.C.F. throughput.

TABLE 2
Distribution of Total Sows for Breeding
June 1965, 1966 and 1967

	1965		1966		1967	
	No. (000)	% Change From 1964	No. (000)	% Change From 1965	No. (000)	% Change From 1966
Cumberland	6.0	+20.00	4.5	-25.00	4.1	- 8.89
Westmorland	2.2	+10.00	1.7	-22.73	1.4	-17.65
Northumberland	5.4	+ 8.00	4.0	-25.93	3.8	- 5.00
Durham	9.4	+10.80	7.5	-20.21	7.1	- 5.33
Yorkshire (E. Riding)	33.5	+ 7.03	30.6	- 8.66	32.6	+ 6.53
Yorkshire (N. Riding)	24.8	+ 7.36	21.1	-14.92	21.5	+ 1.89
Yorkshire (W. Riding)	33.1	+ 5.75	27.1	-18.13	27.1	0
Scotland S.E. Region	11.1	- 0.89	8.9	-19.82	8.9	0
Scotland S.W. Region	12.6	0	10.3	-18.25	10.3	0
Total W.C.F. Area	138.1	+ 6.06	115.7	-16.22	116.8	+ 0.95
England and Wales	756.3	+ 5.14	668.6	-11.60	665.3	- 0.49
Scotland	63.0	+ 6.96	53.9	-14.45	56.9	+ 5.56
Great Britain	819.3	+ 5.28	722.5	-11.82	722.2	- 0.40

Source: Agricultural Departments.

TABLE 3
Comparison of Scheme Weaner Sales with
Total Sow Population in the Area

	Sow Numbers in the W.C.F. Trading Area as a whole	Scheme Weaner Sales in the following December-May
	(000)	
June 1965	138.1	38,370
June 1966	115.7	32,794
% Change from 1965	-16.22%	-14.53%
June 1967	116.8	36,414
% Change from 1966	+0.95%	+11.04%

Taking due account of changes in the operation of the Society's schemes and of the incidence of foot and mouth disease, it can be seen from Table 3 that, allowing for the lag between the June Census of sow numbers and the subsequent output of weaners, variations in the throughput of the Society's schemes followed the regional pattern fairly closely during the downswing of numbers, but seems to have recovered more quickly during the following upswing, probably because of good prices for weaners at this time. On this basis it can be argued that the weaner scheme in its current form did not increase significantly the stability of the industry. This is not a surprising conclusion if the scheme is regarded as an alternative to auction marts rather than as an integrated scheme. However, it presents problems to the Society if it has to recognise that numbers may continue to fluctuate. Furthermore, the Society may see one of its functions—as an organisation acting to improve the conditions of the industry—as that of reducing instability. A brief discussion of this topic is therefore relevant to the wider issues.

Work undertaken in the Department of Agricultural Economics in the University of Newcastle upon Tyne, indicates that the W.C.F. area has a higher level of instability in the pig population than is found on average throughout the country. An examination of factors concerned with this instability shows that it is strongly associated with two variables, the size of individual herds in an area and the proportion of 'fatteners only'. Thus a region with small herds and a high proportion of fattening herds is likely to be inherently unstable. These conclusions are in accord with common sense. Thus the degree of dependence on fattening pigs for a livelihood and the movement in and out of pigs is likely to affect the stability of pig numbers in any area very considerably.

On this argument, the inference for the Society is clear. Insofar as it wishes to improve stability it should attempt to recruit producers with a reasonable size of herd, say more than 20 breeding sows, or more than 300 fatteners; at the same time it should encourage existing members to expand to these levels. Methods of achieving this will be discussed at the end of the Chapter.

Another factor relevant to the total throughput of the scheme is that of recruitment and losses among producers. Table 4 shows the situation for 1965-67. Of the 833 suppliers who had sold pigs to the W.C.F./F.M.C. Scheme over this period only 116 (14 per cent) had supplied pigs every year.

TABLE 4
Changes in Membership of Weaners and Suppliers for all schemes

	1965	1966	1967	1965/67
New members	283	170	98	551
Members ceasing supply	13	148	260	421
Net gain+ loss—	+270	+22	—162	+130

There was, therefore, a considerable turnover of membership of weaner suppliers. No doubt the regional instability previously mentioned has been partly responsible for this turnover; nevertheless this factor is one which calls for further comment. At its worst there is a possibility that eventually the Society will have run through all its members who keep pigs and if recruitment does not eventuate, the scheme may have to go out to non-members for it to continue. While it may be unduly pessimistic to talk in these terms, and further light is thrown on this issue in the subsequent sections on rearers and fatteners, it highlights one of the potential dangers of running a weaner scheme which, rightly or wrongly, is regarded as no more than an alternative market for buying and selling pigs.

In summary, although the throughput of the schemes has not come up to expectations it is still substantial; there is little evidence that, as yet, the schemes have improved the stability of pig production; there is some cause for concern, but not alarm, regarding the turnover of producers. These conclusions point to two key factors from the producers' standpoint, namely transport deductions and prices.

Transport Costs and Weaner Prices

A detailed examination of transport costs and weaner prices suggests the main management problems associated with weaner schemes.

To recoup its expenses the Society charges a levy per weaner, irrespective of location and volume of business. This system favours the remote, small producer, at the expense of either the other weaner producers, fatteners or the Society itself and might therefore militate against the requirement of large, well-located suppliers. It is however, administratively simple; it does not give rise to what might prove invidious distinctions; finally, the differential necessary to reflect transport cost difference may prove small. Even if the arguments in favour of the uniform levy are accepted, there would, however, remain marked advantages to the scheme recruiting producers from areas where transport cost would be relatively low, given that there was any element of

choice in this matter. As a co-operative, of course, the Society's hands tend to be tied in this matter.

In 1965 the levy was 7s. per pig. By 1968 this had risen to 8s. 9d., a reflection of three years inflation of costs. From the aggregation of levies the Society must meet a substantial transport bill and pay its administrative costs. For this to leave any margin to the Society, total throughput must be sufficiently large, collection and delivery must be efficiently arranged and staff costs must be kept at a low level. Other weaner schemes in the W.C.F. area have attempted to compete by reducing the rate of levy. The danger in such moves are self-evident and emphasise the advantages of scale in weaner schemes.

Generally the transport side of the operations has presented few difficulties. Very few pigs have been lost in transit—an average of two per year. There have been few complaints by fatteners concerning weight losses in transit, certainly not enough to warrant using special vehicles, as required in some schemes. Those which have arisen relate to the lower weight of pigs (45 lb.) and there are several advantages which might accrue from an increase in the minimum weight to 50 lb. Rearers should benefit from the extra weight added, which should prove profitable; fatteners would receive more even batches and would have less likelihood of receiving stressed weaners.¹

The Society's precautions to minimise the risk of disease transmission seem adequate. Hauliers are employed on a regular basis and the trucks are cleaned after each journey. Rearers and fatteners are generally satisfied with the arrangement whereby the haulier is used as an independent inspector of stock and it is not thought that further inspection by additional staff is warranted.

The Society prefers to operate a single price list for the whole area covered; it also prefers a constant price over a period of time. Both of these objectives are difficult to achieve when there are marked regional differences and where market prices fluctuate week by week. Thus there have been occasional instances of regional differentials and, as can be seen in Table 6, frequent price changes over time, some 14 in 4½ years. Despite the advantages of uniformity and continuity of price it can be argued that any scheme which is not completely integrated must maintain a flexible pricing policy if it is to attain all its objectives.

This argument is reinforced by experience of the Society's scheme. In its early stages price was determined by reference to a budgeted cost of production. This proved unsatisfactory for several reasons. The budget, being theoretical, did not reflect actual performance so that some weaner producers were dissatisfied. Perhaps most importantly, this net

¹ In this connection it should be noted that some weaner schemes operate on the basis of a 75–85 lb. pig. In this respect they act more as a source of store pigs for fatteners rather than an outlet for breeders who do not wish to commence feeding after weaning.

price bore little relationship to market prices, either of finished pigs or of weaners. The method was abandoned. Prices are now fixed at meetings between the Society and the F.M.C., which are called when necessary. Price amendments are made in an attempt to take account of market variations. At the same time, an attempt is made to iron out the more extreme variations.

Underlying the change in weaner price is a basic structure based on weaner weights. The scheme is aimed at producing weaners between 45 lb. and 75 lb. The current price structure for weaner suppliers is as follows:

<i>Weaner weight</i>	<i>Price</i>
45 lb.	Basic Price.
45-50 lb.	Basic price plus 2/- per lb. (weight—45 lb.)
50-75 lb.	Basic price plus 10/- plus 1/4d. per lb. (weight—50 lb.)
75 lb. and over ..	A flat rate per pig.

The flat rate for the over-75 lb. pig is designed to discourage the heavier weights. During an experimental period stock up to 85 lbs. was handled on a per-lb. basis, but this proved unsatisfactory. An exception to this is a small market in Edinburgh for which special provision is made. Casual supplies command 2/6d. less per pig. Fatteners receive pigs at the list price plus levy, so that the margin between weights is the same.

An idea of the alternative outlets against which the Society is competing is given in Table 5. As can be seen any comparison must include other weaner groups as well as auction marts.

TABLE 5
Pig Breeders Selling Weaners
Methods of Sale

Enterprise Size (Sows)	Number of Breeders Selling Stores	Percentage of pig breeders selling stores who sold			
		Through Groups	To Farmers	To Dealers	At Markets
Less than 10	339	11	29	9	70
10-20	178	12	48	20	56
30-99	73	25	58	11	52
100+	8	12	88	25	63

Source: 'The Marketing of Store Stock in England and Wales'. A report by Produce Studies Limited, 1965.

In attempting to compare the Society's prices with those of other outlets, there are a number of inherent difficulties. These include variation in weight and quality of stock, the absence of information on such items as transport costs to the market, the fact that any change in market shares occasioning by using different outlets might change relative prices. Recognising the limitations in any analysis, the following paragraphs compare the Society's prices for weaners with other weaner groups and with a selection of auction marts within the area.

Table 6 shows the prices obtainable from weaner groups in the Northern region of England. As can be seen the Society's price changed less than the average for other groups. Except for two months the Society's price was as good or better than other prices. The average difference over the two years was 2/9d. per weaner for a 50 lb. pig.

TABLE 6

Comparison of W.C.F./F.M.C. Weaner Scheme Price with regional¹ Average Group Weaner price June 1966 to June 1968²

Month	W.C.F./ F.M.C. Scheme Price	Regional Average Group Weaner Price Northern Region	Month	W.C.F./ F.M.C. Scheme Price	Regional Average Group Weaner Price Northern Region
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
1966			1967		
June	6 2 0	6 0 0	July	6 13 0	6 11 0
July	6 2 0	6 0 0	August	6 8 0	6 10 0
August	6 2 0	5 19 0	September	6 8 0	6 10 0
September	6 2 0	5 19 0	October	6 13 0	6 9 0
October	6 2 0	6 0 0	November	6 13 0	6 8 0
November	6 2 0	6 0 0	December	6 13 0	6 8 0
December	6 2 0	6 2 0			
1967			1968		
January	6 2 0	6 2 0	January	6 13 0	6 9 0
February	6 7 0	6 4 0	February	6 13 0	6 10 0
March	6 7 0	6 5 0	March	6 13 0	6 9 0
April	6 17 0	6 11 0	April	6 13 0	6 9 0
May	6 17 0	6 12 0	May	6 13 0	6 10 0
June	6 17 0	6 12 0	June	6 13 0	6 10 0

¹ P.I.D.A. Regions.

² Producer prices for white 50 lb. weaners net of deductions for transport and other charges.

Sources: W.C.F./F.M.C. Weaner Scheme Price Lists and 'Information for Pig Groups' published monthly by P.I.D.A.

Table 7 compares the Society's prices with those of five auction marts in the North of England.

TABLE 7
Weighted Average Prices in Individual Marts compared to the
W.C.F./F.M.C. Scheme Price for 60 lb. weaners:
July, 1966 to July 1968

Auction Mart	Auction Marts		Auction Marts		W.C.F. Weaners	
	All Weaners Net of Commission at 4d. in £ ¹		Quality 1 Weaners Net of Commission at 4d. in £ ¹		60 lb. Weaners ²	
	£	s.	d.	£	s.	d.
Beverley	6	0	0	6	11	9
Carlisle	5	7	2	5	11	1
Darlington	6	8	10	7	5	6
Hexham	6	4	11	6	12	9
York	5	19	0	6	7	10

¹ Does not include the cost to the breeder of transporting pigs to auction.

² Net of transport costs.

On the basis of these admittedly limited figures it looks as if, over the period under review, weaner producers fared better in the Society's scheme by comparison with other weaner groups and the open market. For fatteners, the lower price of weaners in the market must be offset by the transport costs incurred taking the pigs back to the farm, the inconvenience and time-wasting associated with attending markets and variations in quality, including risks of disease. It is difficult to evaluate these factors and all that can be said is that, by and large, as supported by the survey cited later, fatteners are satisfied with the scheme.

One of the difficulties facing any organisation attempting to stabilise prices is the fluctuations in the auction marts. An analysis of marts in the North of England shows that not only do prices fluctuate, but that weaner prices are significantly related to the current price of porkers, in the same week and without taking any account of deficiency payments. If buyers are using the current weekly price of porkers as an indication of the future price and are ignoring support payments, which seems a rather unsophisticated approach to price prediction, this may go some way to explaining the apparent illogicality of the market. This situation does not make easier the role of any organisation attempting to stabilise prices, a point which will be picked up again in the conclusions and recommendations.

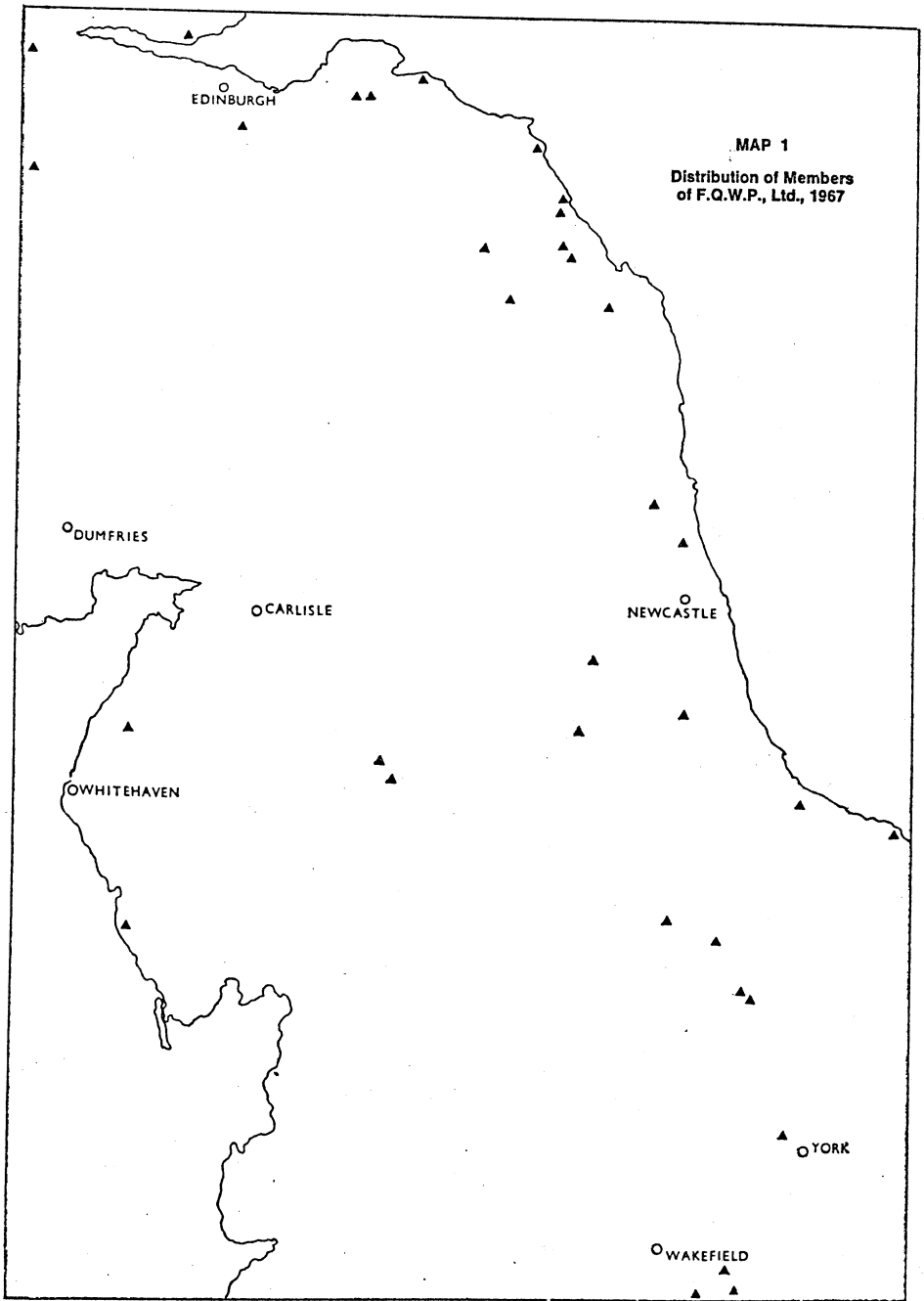
Before finishing this section on pricing, it is worth noting that there is some conflict in evidence between the fact that weaner producer members have a high turnover, while W.C.F. prices appear to have been better than alternative outlets. Part of this may be explained by the Society's insistence on discipline and quality control; part by changes in the industry as a whole; part because some farmers cannot resist the gamble of the open market; part because of inadequate calculation of the advantages of the scheme; part because of the poor image which may exist of the scheme. However, whatever the reasons it is a perplexing result of this investigation.

Integrated Pig Marketing and Breed Improvement

During 1966 officers of the Society, conscious of the limitations and difficulties of the weaner scheme, were exploring the possibility of developing a scheme which was integrated from its breeding-stock supply to its end-product. The main impediments to such a development are variations on the chicken and egg story. Before producers will enter an agreement they want an assurance that it will be profitable, which is difficult to give before any scheme exists. Before breed-improvement can take place a large-scale multiplication unit is required, which requires a number of producers willing to take improved stock. And similarly there is the problem of market outlet and definition of product. It would be tedious to relate the laborious progress which had to precede the establishment of such a venture, but the on-the-ground difficulties should not be under-estimated.

Eventually an independent company was created, Farmers' Quality Weaner Producers Limited. From the total of nearly 600 suppliers of the weaner scheme, 32 agreed to join the company, whereas the target number had been 50 members. A minimum herd-size of 25 sows was stipulated; this was only half of the original figure of 50 sows which had proved to be unattainable. Each member agreed to replace one-fifth of his breeding stock every six months with improved gilts, until the whole herd had been replaced. All feedingstuffs other than home-grown cereals were to be supplied by W.C.F. Management records were to be kept as an aid to technical advice. In return for observing these disciplines a premium of 5/- per weaner—over the normal W.C.F. price—would be obtained by marketing through F.M.C. In addition the Society undertook to help find capital for expansion from outside sources in approved cases.

The new company began in June 1967 under a board of directors comprising four producers and two Society nominees. Several disadvantages have had to be overcome. The first of these is the wide geographical spread of membership, as shown in Map 1. However, it is envisaged that if the company is successful the various members could form the nuclei for further development in their own regions.



The supply of breeding stock has proved a problem. The original budgets for the scheme were based on 'good herd' costs, as recorded by the Cambridge University Pig Management Scheme. Here it can be noted that it rested on the assumption that adequate numbers of improved stock would be available, gilts at £30 per head delivered, boars at £50-£65 depending on boar rating (which would not be less than 70). Because of the inability of the original supplier to deliver stock the breed improvement programme has had to be modified.

Insufficient time has elapsed for records to be assessed. One weakness of the scheme—on the recording side—is that fatteners are not an integral part of the company, so that it will not be easy to obtain data on the ultimate performance of weaners, such as final grading, weight-gain and feed-conversion information. Without this information it is difficult to envisage any firm basis for long-term and expeditious breed improvement or for equitable premiums to be derived.

By May 1968, there were 41 members with about 1,100 sows (average 27 per herd), of which 25 per cent were from performance-tested stock. Potentially, therefore, Farmers' Quality Weaner Producers Ltd. provides a useful basis for a more integrated scheme. The three weaknesses which it will have to overcome are firstly that average herd size is still too small and could be doubled to advantage. Secondly integration at the marketing end is too tenuous and could lead to the break-down of the premium system if no feed-back of information is forthcoming. Thirdly, the breed improvement side is at present inadequate, both in terms of operating a multiplying-farm business and also in having data upon which to select for improvement. Assuming the necessary steps to be taken to overcome these defects, there is no reason why the venture should not succeed.

The Society has recognised for a long time the importance of breed improvement within its pig schemes and has initiated a number of attempts in this field (over and above the F.Q.W.P. Ltd. project just dealt with). The results have been rather disappointing. A separate memorandum concerning breed-improvement has been submitted to the Society. The main reason for lack of progress appears to be the nature of the weaner schemes themselves. It is difficult to demonstrate to the weaner producer that there will be long-run advantages in investing in better breeding stock when he loses interest in the animal shortly after weaning. Equally, it is difficult to determine a policy for breed improvement without access to data on fattening performance. If F.Q.W.P. Ltd. succeeds, this may lead to the formation of additional companies using better stock; it may also give other weaner producers and fatteners sufficient confidence for their interest in better strains of livestock to become effective.

Organisational Aspects

For a weaner scheme to operate successfully it is essential that collection

and delivery are prompt and reliable, that there is no doubt in the minds of suppliers and supplied of the prices which relate to the pigs on offer and that payments and receipts are handled efficiently. In short, that normal business procedures are properly followed. The implementation of procedures is dependent very much on individual circumstances and although it can be improved by detailed O. & M. studies, it is not an appropriate subject for generalisation. A separate memorandum has been submitted to the Society suggesting some improvements. But in an organisation of this size and business experience such improvements are likely to be only marginal to the workings of the scheme.

A second organisational point which may be of more general interest concerns the conditions under which the weaner scheme has been run, particularly the changes which have taken place and the 'blind-eye' which is turned to specific items. Potential members of the Weaner scheme must be members of the Society. After an assessment, which takes account of technical and managerial ability and general reliability, the Society sends out a copy of the current Rearers' Offer, which remains in force until the member withdraws from the scheme. There is no fee charged for joining the scheme. The Rearers' Offer contains some clauses designed to ensure adequate livestock management. This includes an undertaking to improve breeding stock if the current sows are proven unsuitable. But since proof is difficult this clause has not always been enforced. Commonsense animal health conditions apply and it has not proved necessary to have regular veterinary visits, although there are some instances where complaints about disease from fatteners have been traced back and the causes of the complaints have been rectified. The original Rearers' Offer required producers to use an anti-anaemia remedy supplied by the Society. But this provision was reworded in case it was construed as a restrictive practice. Regarding feeding, swill or kitchen waste is not permitted, nor is the use of anti-biotics on a regular basis. Rearers are required to put weaners on to a rearing meal for at least seven days before collection. Requirements about feed formulation, and that feed should be purchased from the Society, have never been enforced nor formally dropped. At one time there was a minimum herd-size requirement of 10 sows but this was not enforced. The points upon which discipline has, on occasion, been enforced include occasions where rearers have sold outside the scheme when tempted by higher prices and secondly in connection with feeding practice immediately before collection. By and large, the scheme is run on liberal lines and there has been no cause for complaint by the Society or its members on these matters, with the inevitable exception here and there.

Fatteners do not need to be W.C.F. members and buy each batch on separate contract, although in many cases there is an understanding that there will be repeat orders.

Survey of Rearers and Fatteners

To provide the Society with information on the working of its weaner scheme two surveys were conducted in the summer of 1967. One was of 50 rearers; the other was of 36 fatteners. In both cases the sample was chosen on a stratified random basis. However, it was found upon examination that the Society's records were inaccurate in a number of cases, so that the sampling framework is correspondingly inadequate and the results must be interpreted with caution. Detailed reports of the surveys have been separately submitted to W.C.F. The main findings are given below.

The most striking fact to emerge from the Rearers survey was the smallness of both the sow herd and the total size of business. Of the 50 interviewed, 28 rearers had less than 20 sows. In terms of size of business, only 14 producers had more than 500 Standard Man Days in Pigs. Furthermore, 14 rearers were below 275 SMD for the whole of their farming business (i.e. classified as part-time). An additional 14 had between 275-599 SMD for their whole farm business. None of the farms with a total of 600 SMD or more depended on pig-keeping for more than one-third of their business. In brief, the membership of the scheme seemed to be confined on the one hand to the part-time or the small family farm and, on the other, to the larger farmer for whom pig production was an ancillary enterprise.

Almost all the livestock were Large White, Landrace or L.W./L.R. cross. More than half of the rearers used only home-bred sow replacements; only 4 out of 50 always bought in replacements. Most replacements boars were bought in, although less than a third of the rearers relied on the Society's sources for these boars. About two-thirds of the sample followed batch farrowing. For about three-quarters of them weaning age was 6-8 weeks. Proprietary rations only were fed in 60 per cent of the herds; only home-mixed rations on 30 per cent. Even on those farms which grew barley, nearly half used only proprietary rations. Costs of production were estimated but, with incomplete information, a number of arbitrary assumptions had to be made. However, it seems probable that average costs per weaner for the whole sample may be about 10/- higher than the Cambridge University Pig Management Scheme figure for the same period, the difference being almost all a question of feed costs. By contrast the best producers in the sample were as good or better than the '10 most profitable' producers in the Cambridge survey. There were significant differences in costs between herd sizes, the larger the herd the cheaper the cost. The average total cost per weaner (including a charge for capital) amounted to about £5 10s. 0d.

Of the 36 fatteners, 13 fattened less than 500 per year, 9 500-999, 9 1,000-1,999, while 5 handled more than 2,000. More than two-thirds of the sample had a total size of farm business in excess of 1,200 SMD's, and this included all those handling 1,000 pigs or more. The sample as

a whole relied on W.C.F./F.M.C. for about two-thirds of their weaners, irrespective of size. Seven fatteners out of 36 were producing pork pigs only; 25 were producing at least 90 per cent bacon pigs. Regarding type of feed, only 5 relied completely on proprietary concentrates, while 19 used home-mixing based on their own barley. Costs of fattening and grading percentage depended very much on final outlet. For 27 who classified themselves as primarily bacon producers, the average food cost per lb. of liveweight gain was about 11d. and about 43 per cent of their pigs came out Grade 1 or better. Costs per £100 of output for both pork and bacon fatteners were marginally better than the corresponding Cambridge average.

Both samples were asked questions about their future intentions and their attitudes to the Society's schemes and various aspects of it. Since these producers were aware of the reasons for the survey, their answers may be biased. Regarding expansion, 29 of the rearers expected to expand in the near future, the average number of extra sows in prospect being about 10, with little difference between small and large producers. Twenty rearers expected to keep the same size herd. For fatteners the same proportion expected to expand, but it was the larger producers who were most ambitious.

Rearers' opinions of the weaner scheme were quite interesting. Table 8 relates and is self-explanatory.

TABLE 8
Advantages of the Weaner Scheme to Rearers and Fatteners

Advantages claimed for the scheme	Rearers: Frequency of Repetition	Fatteners: Frequency of Repetition
Time saved and ease of marketing	33	16
Stability of prices	23	2
Prices known in advance	13	8
Outlets assured	9	—
Large batches available and less variation than in a mart	—	10
Payment by weight	5	—
Prices better than at auction	3	—
Cuts out market risks and reduces disease risk and allows compensation for poor pigs	2	8

It is interesting to note that only 3 rearers volunteered that they obtained better prices than at auction. When asked what improvements they would like, 13 rearers said they were satisfied with the scheme in

the present form. Fourteen rearers (predictably) said they would like higher prices. There were very few suggestions concerning long-run improvements. Four rearers would like to see grading returns; one would like a quantity bonus.

For fatteners, Table 8 indicates marketing convenience and predictability were predominant factors in their thinking. Perhaps more significantly, there were also 25 of the fatteners who gave an unqualified affirmation that they would pay higher prices for better quality stock. Although they were reluctant to quantify this, the general view was that the benefits of such an arrangement could be equitably divided between rearers and fatteners. Asked if they were prepared to supply recorded information to the Society regarding feed costs and grading, 19 fatteners gave an unqualified 'yes'; a further 5 entered the very reasonable caveat 'as long as there is not too much paper work'; 12 said 'no'. Ten fatteners wanted better quality weaners anyway, while 7 would like to be formally associated with the scheme. Only one fattener commented unfavourably about the price of weaners.

Conclusions and Recommendations

Weaner schemes can be broadly classified into two types; those which do no more than by-pass the auction marts or other traditional market channels, and those which are part of an integrated marketing organisation. It is possible to envisage some intermediate scheme between these two extremes, but there are inherent difficulties. Before any scheme can be judged and recommendations made regarding its future, a view must be taken on its objectives. It may therefore be a useful introduction to these general observations to recapitulate the basic characteristics of the two types of scheme.

A scheme whose primary aim is to by-pass auction marts may offer several advantages to weaner producers and fatteners. Firstly by cutting out market commission and reducing transport costs there may be financial benefits. There is the saving of time spent in the markets with its inconvenience. Then there is the possibility of reducing some of the disadvantages of buying through a mart, the risks of buying-in disease, the problem of evenness of batches and the unlikelihood of appropriate numbers being available. Finally, it may be possible to have stable prices or, at least, prices which are known in advance. For the organisation running such a scheme, the management problems are concerned with maintaining an efficient collection and delivery service on fairly narrow margins and setting prices which are acceptable to both rearers and fatteners.

The basic objective of a fully integrated pig marketing scheme is to provide all the economies which are available to one large organisation by disciplined contractual relationships between all the necessary links in the chain of production. These advantages include exercising market

power, by being large enough and by being able to offer sufficient quantities of pre-determined quality to satisfy a known market outlet; also included are economies regarding transport costs, feeding costs and the availability of appropriate breeding stock. Generally, it is still imperative for the production units, both rearers and fatteners, to have low unit costs, which in turn will largely depend on adequate scale of business and technical and managerial competence. The advantages of such a scheme are that, being largely self-contained, the whole operation has greater stability, in terms of both price and volume, than exists in the traditional separation of functions and, because the totality is more efficient, profitability for each part of the operation is higher. For these benefits to materialise the scheme demands high standards of management and the observance of strict discipline among the various component members.

As will be seen from the preceding sections, the Society has a foot in both camps. The main weaner scheme is basically an operation which by-passes the auction marts, whereas F.Q.W.P. Ltd. is an attempt to move towards an integrated operation. The two schemes will be discussed in turn, within this general context.

The Main Scheme

Although it is capable of improvement, the main weaner scheme can be adjudged a success in that it has achieved the prime objectives of such a scheme. The Society has succeeded in running the scheme without undue losses, although, because the throughput has been lower and more variable than was hoped, the contribution to overheads has been lower than expected. Producers appreciate the saving in marketing time, the reduction of market hazards and the efficient collection and delivery.

There is the recognition of more stable and known prices. Weaner producers have obtained higher prices than comparable alternatives, but despite this a proportion are dissatisfied; fatteners have few complaints about prices. On the other hand there have been disappointments regarding fluctuations in throughput, turnover of members, and slow progress with breed improvement.

Some of the more disappointing aspects of the results may have arisen because producers regard the scheme as too impersonal and lacking an information service. This could account for rearers' dissatisfaction with prices and the membership turnover. As supporting evidence it can be noted that when meetings of producers are convened they are often badly attended. To rectify this situation it is suggested that a broadsheet could be sent to producer members at regular intervals, describing the operation of the scheme, comparing prices and performance. This would not be an expensive service since most of the appropriate information would be available as a by-product of administering the scheme.

The main requirement of the scheme is for more members, with larger sow herds. This should reduce the variability of throughput, reduce transport and administrative costs and may make further developments easier to achieve. Larger herds should also mean lower producer costs. This objective could be achieved by encouraging existing members to expand and recruiting new members with large herds. The Society is conscious of this need and already taking steps. A bonus for quantity should be considered as a further inducement in this direction. It could be paid retrospectively for the year to those producers who consigned a minimum of (say) 300 weaners. The size of the bonus should be lower than the premium paid to F.Q.W.P. Ltd. members (5/-), but this would still leave room for a reasonable incentive.

The basic pricing system appears to be sound. However, given that the scheme is competing with auction marts a degree of price flexibility is required and stability should not be a fetish. That is to say the Society should not assume a responsibility for reforming the way in which market prices are generally determined, but accept any illogicalities, with no more than an attempt to iron out the day-to-day variations. As a small point, the Society should consider increasing the minimum weight of a weaner to 50 lb.

Regarding the Society's administration of the scheme, no major changes can be suggested. Constant attention to detail is, of course, essential and total overheads must inevitably be kept small. As far as transport costs are concerned, the use of collection centres for weaners is not recommended. This move could generate more problems than it would solve.

At this stage of the scheme it is difficult to suggest effective ways of introducing improved breeding stock. Perhaps the best prospects for this will come from F.Q.W.P. Ltd. Once proven stock is available from this company there would be a reliable basis upon which to act. It may then be practicable to offer a quality bonus to the improved herds in the main scheme.

Taking due account of these observations, there is every reason for the main scheme to continue for some time in more or less its present form. Any attempt to convert the whole operation into an integrated operation should be resisted, because of the substantial managerial difficulties. This does not, of course, preclude the development of ventures similar to F.Q.W.P. Ltd., but they should be handled as quite separate issues. It is necessary to recognise that, despite any active attempts which are taken to recruit more members of the scheme, the scheme may continue to suffer major fluctuations in throughput. From the Society's point of view this may demand a flexible approach to the administration of the scheme. Finally, this scheme would appear to be best suited to the smaller producer or the farmer who has only a minor pig enterprise. Agriculture is in general changing rapidly towards a

structure of large specialist producers. In due course, therefore, the present scheme may become redundant, by which time integrated schemes will have taken over. A periodic review of the viability of the main weaner scheme, is, therefore, advisable.

Farmers Quality Weaner Producers Limited

Since F.Q.W.P. Ltd. has not been trading for very long it is not possible to make an assessment of its performance in any depth. Nevertheless some observations can be made regarding the organisation of the scheme, based on general considerations of the success and failure of similar attempts at integration. The first of these, which despite its triteness is nevertheless important, is that the Society should take all steps necessary to ensure the long-run success of the venture, even if initially this proves unprofitable. The role of agricultural co-operatives in the field of meat production and marketing is an issue of great interest and importance to the industry at present. The evolution of a successful form of organisation here is not easy, but once achieved could be replicated in many parts of the country. It is with this thought in mind that the following comments are offered.

The main criticism which can be levelled at the present set-up is that it is not sufficiently integrated, in that at least two, and possibly three, important links in the chain are missing. The first and most obvious absentees are the fatteners. The obvious danger, both in maintaining volume and in improving breeding stock, is in having no fatteners in the company, nor at very least in a long-term contractual relationship with it. Ideally such fatteners would depend on F.Q.W.P. for all their purchases of livestock. Secondly, there is the market outlet itself. Admittedly F.M.C. have an interest in the company, but it can be questioned whether this is sufficient. A formal association with a pig processing firm, whether this be a bacon factory or some other outlet, could provide advantages to both sides of the agreement. More particularly, from the company's point of view, it would enable the marketable commodity to be closely defined, in terms of both quality and quantity, and would as a consequence facilitate improved performance overall. Thirdly, and perhaps more open to question, would be the possibility of an association between pig producers and groups of cereal growers. Relationships between the Society and suppliers of proprietary feeding-stuffs are good and need to be maintained, but the dominance of feeding costs in pig economics and the advantages of cheap local sources of carbohydrate are factors which should not be dismissed lightly.

These general observations must be tempered by considerations specific to the company, but it is recommended that the possibility of these further linkages be seriously explored as a matter of some moment. If this integrated scheme were to be expanded on the lines suggested

here, it would naturally change its whole method of operation. It might, for example, be necessary to find new ways of distributing the extra profits accruing from the scheme. One possibility might be to allocate the surplus in relation to the capital commitment of each element in the chain. Equally, planning of sow numbers, timing of farrowing and similar considerations would call for a tight managerial control. However, a comparison with other, and successful, integration ventures suggests that these rigours are both necessary and beneficial.

Within a fully integrated scheme or without, several further points can be made. The first of these concerns record-keeping, where it is obvious that systematic and comprehensive records from both rearers and fatteners are required, not only for assessing an equitable price structure, but also to enable systematic genetic improvement to be undertaken. There are plenty of good recording systems to choose from, including those devised by P.I.D.A. Whatever system is chosen, it should be adopted uniformly by producers and processed by the Society as a matter of routine.

For any breed improvement programme to be successful there are two pre-requisites. It goes almost without saying that adequate records of production performance are essential. It is also necessary to specify the final product with some accuracy. It is often asserted that there are only two sorts of pigs, good and bad, and that it does not matter whether the animal is slaughtered as a porker, baconer or heavy hog, it will perform equally well. Basic genetic principles would contradict this assertion, where it is usually held to be more difficult to breed for a wide target than a narrow one. There is increasing evidence forthcoming confirming these principles. It is for this reason that emphasis has been laid earlier on the advantages of association with a specific outlet. At present the difference between good and bad pigs may be so great that one can settle for a less than optimum pig, but it is argued here that this may prove to be a short-sighted policy.

The Society has always been concerned to offer its members good technical advice and has its own Group Development Officer for this purpose. The demand for such advice is likely to continue or increase within F.Q.W.P. when it is hoped that producers will be moving into higher planes of performance, with consequent higher risks from any inadequacy of management. Apart from ensuring that advisers are technically competent, one additional problem can be mentioned, namely that the producer may regard the adviser as a 'company man' rather than an impartial adviser. The problem is not unique to the Society and arises wherever commercial firms sponsor advisers. Insofar as F.Q.W.P. may be large enough to require its own adviser (or advisers) it may be possible to mitigate this disadvantage by ensuring that any salary is paid by F.Q.W.P. out of general funds, rather than from the parent organisa-

tion, and have advisers located at F.Q.W.P. offices. It is unlikely, however, that this issue will loom large.

In the long run, when and if F.Q.W.P. proves successful and capable of expansion or replication, transport costs will be an item worth examination. The present distribution of members is geographically very dispersed and must, perforce, increase operating costs. The present membership could serve as the nuclei for several companies to succeed F.Q.W.P., each within a smaller area, preferably containing its own fatteners, market outlet and even cereal growers. For the time being, the company must continue with its present structure. Any assessment of its performance should, however, recognise that the higher transport costs are part of the costs of establishment of an integrated scheme.

It has proved difficult to get F.Q.W.P. Ltd. in being at all and none of the criticisms and suggestions made here should detract from what has already been accomplished. The purpose of these remarks has been to point out some of the limitations and possible dangers of having a less than complete integration and a less than comprehensive discipline. Notwithstanding the real difficulties of taking the development several stages further, it is recommended that the company and the Society explore the possibilities suggested above as early as is practicable.

C. THE CALF SCHEME

The immediate objective of this scheme is to provide an additional profitable enterprise to rearers, by providing calves and linking up with fatteners who welcome the availability of stock of assured quality at a known price when they are required. In this operation it is, of course, necessary for the Society to cover its operating and administrative costs and preferably leave a contribution towards overhead costs. In the long run it was hoped to develop a larger scheme for the systematic exploitation of intensively produced beef.

In operating the scheme, the Society buys week-old Friesian or Hereford × Friesian calves, both bulls and heifers, from dairy farmers and dealers at ruling market prices, which are delivered to specialist rearers who are members of the Society. Calves remain the property of the Society, and are paid for on the basis of an agreed price per pound of liveweight gain. At about 240 lb. liveweight the calves are sold to fatteners, who are not necessarily W.C.F. members.

The various aspects of the scheme are discussed below in the following order: throughput, the characteristics of participants in the scheme—farmer-suppliers, dealers, rearers and fatteners—administrative matters, pricing and finally conclusions and recommendations. Separate memoranda have been submitted to W.C.F. concerning a survey of rearers which was conducted and recording procedures.

Throughput

Originally there was a target throughput for the scheme of 10,000 calves a year. Table 9 shows that this figure was never within sight of being

TABLE 9
Throughput of Calves¹

	1964	1965	1966	1967
January	591	386	594	308
February	643	418	362	249
March	481	328	267	383
April	379	259	212	280
May	271	329	648	381
June	297	530	227	291
July	248	444	462	334
August	196	256	239	298
September	101	583	246	309
October	153	322	412	206 ²
November	137	510	154	128 ²
December	343	674	356	269 ²
Total	3,840	5,039	4,179	3,436

¹ Taken in at 7 days old and transferred to fatteners at 240 lb. liveweight.

² Foot and Mouth Restrictions operated in these months.

achieved. One of the major reasons for this shortfall was the failure of barley-beef production to develop at the rate which had been expected. As a consequence it became necessary to recruit fatteners using other methods of production and by 1968 about 20 per cent of calves were sold to grassland fatteners.

One of the difficulties of the scheme has been seasonality, involving on the supply side the autumn peak of calves and a smaller spring peak. In contrast, the demand from fatteners produces a grassland peak requirement in early summer and a peak for yard-fed cattle which tends to be after cereal harvesting. The main problems which these conflicting seasonal patterns present are in early summer, when it would usually be possible to place more calves if these were available and November/December when fattening yards are full and beef prices tend to be low. Needless to say there is considerable variation in this pattern between years.

Participants in the Scheme

Farmer-suppliers of calves are mostly in Cumberland, particularly the West, and the Furness district of Lancashire; and these are areas where calf prices tend to be lower than average. Suppliers do not have any long-term agreement. They can find out the current price of calves from the Society's officers and then indicate what they have available. Stock must be over 80 lb. in weight, from the farmer's own herd, ear-tagged, of the requisite breeds, with an assurance that they have only been fed colostrum and whole milk. The Society arranges collection of calves, but is under no obligation to take all the offerings.

If supplies from farmers are insufficient to meet anticipated demands, dealers are instructed to buy the required numbers. Although this may seem a slight admission of defeat, it is clearly sensible to ensure that the needs of rearers and fatteners are adequately matched by available supplies and despite several attempts to encourage extra offerings from farmers, the use of dealers has proved to be the only satisfactory action.

The central feature of the scheme is the panel of specialist rearers, the number of which has always been small and in 1968 was 13. A set of rules has been provided for rearers, but there is no formal contract. A rearer can reject unsuitable calves at time of delivery and is further invited to notify the Society if stock from any particular source seem to do badly. There is a recommended feeding required, to ensure that calves are suitable for fatteners. Rearers are particularly asked not to use barley mixtures and to be careful in their use of anti-biotics. There is no requirement for feed purchases to be from the Society, although clearly the Society would prefer this. Rearers are expected to keep stock free from external parasites and are advised to rest buildings and clean them between batches. Rearers must keep a record card for each calf and are required to make a monthly return to the Livestock Department

showing the number and stage of development of calves in hand, the number which will be ready for delivery in the next month and the number of new calves which will be required.

Payment is on the basis of liveweight gain, but rearers have to bear the cost of any stock losses. All calves offered to fatteners are certified by the rearer to be delivered, uncastrated, free from ringworm, reared in accordance with the Society's recommendations and fully weaned for at least two weeks. Any complaint from a fattener is investigated and if deemed appropriate a deduction can be made from returns paid to the rearer.

The basic aim of the Society is to keep rearers' accommodation as near to full capacity as is practicable, thus giving the maximum earnings to rearers and reducing transport costs incurred in delivery and collection.

A survey of all rearers was undertaken for the year ending 31st May 1967, which gave the following information. Five of the farmers were

TABLE 10
Average Estimated Costs and Returns
Per Calf (excluding depreciation and interest on capital)

	W.C.F. Rearers £	Compounder's Standard £
Income from calves	13·03	13·00
Less mortality	0·65	0·79
Less cow depreciation	0·01	
Gross Output	12·37	12·21
Less: Concentrates	7·45	7·20
Hay	0·16	0·60
Total food	7·61	7·80
Margin over feed	4·76	4·41
Labour	2·34	2·13
Miscellaneous	1·56	0·40
Total costs	11·51	10·33
*Surplus	0·86	1·88

*The sum to meet depreciation on buildings and plant, interest on capital, management reward and profit.

almost completely dependent on calf-rearing for a living, while for a further five rearing was making a significant contribution to farm output; on the remaining three it was of minor importance.

The average duration of rearing was 96 days, during which a weight gain of 137 lb. was achieved, on an average ration of 43 lb. of milk substitute, 297 lb. of calf pellets and 39 lb. of hay. Average mortality was 4.7 per cent. Table 10 shows the financial performance, compared with a compounder's standard.

The main reason for the substantially lower surplus (£0.86) than standard (£1.88) was the miscellaneous costs. A detailed break-down of these is given in Table 11.

TABLE 11
An Analysis of Miscellaneous Costs of Calf Rearing

	£
Veterinary, drugs and disinfectant	0.63
Tractor (manure removal)	0.10
Electricity and water	0.20
Insurance	0.03
Sundries (including straw)	0.46
Repairs and Maintenance	0.14
<hr/>	
Total Miscellaneous Costs	1.56

The high level of veterinary expenses can possibly be ascribed to the liability of the producer for mortality losses; the costs might be reduced were the Society to limit this liability in some way. There was a wide range of economic efficiency, the rearer with the largest loss averaging £1.6.3d. per calf, while, at the other extreme, one rearer attained over £3 profit per calf, but with a very small number of calves.

As rearers saw things, the main advantages of the scheme were that the margin was guaranteed and that there were no marketing worries. But almost all of them suggested that the margin was too low, particularly in the light of mortality losses. Certainly, acceptance of responsibility for mortality has a profound effect on profitability, if the rearer has the misfortune to lose any calves. In fact, mortality may be no more than an indication of managerial efficiency, but there is still a good case for intensive advisory help in this regard.

Orders are solicited from fatteners some three or four months in advance and the price quoted is the sum of the current cost of the 7-day calf, the cost of rearing, plus a transport and a service charge. When attempts were made to contract further in advance the discrepancy between expected and actual calf prices was too large to be satisfactory either to the Society or to the fattener. Fatteners who give short notice

of their requirements cannot usually be supplied, but the Society will on occasions act as an agent. The fatterer is contacted a week before calves are ready to confirm the order and the time of delivery. Any cancellation of an order, usually because of a fall in market prices, can leave the Society carrying losses.

Since the inception of the scheme, the Society has built up a group of regular clients numbering about thirty, who order regularly each year. In addition there are a number of occasional orders. Table 12 shows the geographical distribution of fatterers in 1967.

TABLE 12

Number and Location of Fatterers for Weaned Calves 1967

County	Number of Customers	% of All Customers	Number of Calves Sold	% of All Calves Sold ¹
Aberdeen	8	13.8	414	13.1
Perthshire	1	1.7	122	3.9
East Lothian	7	12.1	325	10.3
Peebles	1	1.7	18	0.6
Berwickshire	5	8.6	200	6.4
Roxburghshire	6	10.4	252	8.0
Ayrshire	1	1.7	115	3.7
Dumfries	1	1.7	12	0.6
Scotland	30	51.7	1,458	46.3
Northumberland	5	8.6	158	5.0
Durham	4	6.9	120	3.8
Yorkshire	11	19.0	562	17.9
Lincolnshire	2	3.5	273	8.7
Norfolk	1	1.7	87	2.8
Cumberland	4	6.9	138	4.4
Lancashire	1 ²	1.7	350	11.1
England	28	48.3	1,668	53.7
Total All Areas	58	100.0	3,146	100.0

¹ Based on available data relating to 91 per cent of total calf sales.

² Dealer.

More than two-thirds of the fatterers only ordered one batch of calves in the year and only nine of them ordered more than two batches. About one-third of fatterers asked for batches of less than 25 calves, a further third for batches of 25-50, with only four orders for batches exceeding

125 calves. With an average number of calves purchased per fatterer of 53, it can be seen that the scheme is not attracting the larger buyers—or if it is they are only relying on it for a small proportion of their requirements.

As far as breed preference is concerned, the intensive and semi-intensive yard feeders favour the pure Friesian, while those fattening on grassland prefer Hereford crosses. Attempts to use Ayrshire crosses have not been successful and the Society has found that, at least for the time being, Charollais cross calves have been commanding an unduly high price. The main problem in breed has been the difficulty in differentiating the pure Friesian from the black-and-white cross, which has led to complaints from fatteners. Short of supplying drivers with a measuring tape, which is probably not a practical solution, the answer lies in selection of initial suppliers. With the continual up-grading of herds, this problem is likely to disappear over the next few years.

Administration and Pricing Policy

The administration of the scheme appears to be satisfactory. A number of minor recommendations have been made concerning recording procedures. The major snags which arise are due to a shortage of 7-day calves or a shortage of orders, when it is necessary for the Livestock Department to try to remedy the situation. On a few occasions this has been difficult to achieve, but such day-to-day problems are likely to continue with a scheme of this nature.

Pricing can be discussed under three headings: price for the 7-day calf, price for the rearer and price to the fatterer.

Initially calves were purchased on a liveweight basis, an attempt being made to keep prices stable throughout the year. However, in the absence of a contract, farmers quite naturally compared the Society's price with the auction price and sold accordingly. Moreover, there were occasions when poorer quality calves were offered, the better quality being disposed of elsewhere. As an alternative, and still attempting to introduce an element of price stability, prices were based on a three-week rolling average of auction market prices in the North of England for Friesian calves up to three-weeks old. This also failed for much the same reason. Since then prices have been determined within the Livestock Department, based on an assessment of market trends. This system works satisfactorily and, by and large, the Society has few calf procurement problems (other than those of seasonality mentioned earlier).

The rearer is paid a price per pound of liveweight gain. This price is based on a national compounder's estimate of costs of production, tempered by considerations of trends in market prices. It has been possible to maintain fairly stable rates, which have only been changed five times in four years, the most recent of which can be described. For 15 months up to June 1966 the rate was 2/- per lb. for the first

215 lb. of liveweight gain and 1/6d. per lb. thereafter. Then an additional 10/- per calf was given. In 1967 a flat rate system was introduced at 2/- per lb., to which must be added the 10/- per calf.

In principle the fatterer is charged the 7-day calf price plus the rearing cost plus transport and service charges. In view of the risk of cancelled orders if this price turns out to be too high, it is necessary to adjust this price from time to time. And of course, this adjustment can also be upwards if market trends seem favourable.

This pricing policy leaves the Society somewhat vulnerable to fluctuations in calf price at each end of the age scale. Thus a sudden upsurge in demand of 7-day calves for export leaves a choice between reducing the volume of purchases and risking a loss if three-month calf prices do not also firm up in due course. In a scheme which operates without contractual links at each end it is, however, difficult to suggest any alternative course of action, with the possible exception of advising the Society to act purely as a cattle dealer—which would be beyond its normal scope of business and in conflict with its basic objectives.

Conclusions and Recommendations

In the course of the scheme the Society has, on occasion, lost money—mainly due to unexpected price fluctuations and inappropriate pricing policies. Problems remain on pricing, but due to the amendments in policy, the scheme is now less susceptible to losses. In its present form the scheme runs reasonably satisfactorily, although its throughput is much less than could be handled to advantage.

In recommending improvements, it is important to bear in mind the essential nature of the scheme. It is not an integrated marketing scheme; both in the acquisition of young calves and in the disposal of three-month-old stores, dealings must be at a competitive price. The best that can be achieved is a modicum of stability for rearers, which can be accommodated by offering a sure market, savings in time and inconvenience and some assurance of quality to calf-suppliers and/or fatterers. One important implication of these considerations is that prices must remain flexible, so officers in the Livestock Department will need to keep in touch with market trends and fluctuations. Unfortunately, from the point of view of the Society, calf prices tend to vary in sympathy with fatstock prices at the same time, so that from time to time losses may be inevitable. This would suggest that the Society's service charge should be set at levels which iron out losses, taking one year with another, and that the success of the scheme should not be judged on returns relating to too short a period.

It is obvious that the scheme would be more profitable for the Society if the throughput were increased to 10,000 calves a year or more. Officers of W.C.F. appreciate this and have made a number of different attempts to bring about an increase in volume of business, but to little

avail. The problem has two aspects, seasonality and total throughput. It can be seen from Table 9 that filling up the seasonal troughs could materially increase numbers. In the spring there is a potential unsatisfied demand from grassland fatteners for reared calves which might be met if the Society undertook such steps as advertising for week-old calves in the local and farming press three months in advance, employment of dealers or offering a slightly higher price for young calves. Certainly these steps should be considered. It is more difficult to suggest measures regarding total volume. One idea to explore is that of finding a number of large-scale intensive grassland fatteners, preferably within reasonable distance of Cumberland. The Society must count a number of such farmers among its membership and individual visits to these people, or local meetings, might establish a set of conditions under which these farmers were prepared to purchase stock and which would leave sufficient margin for the Society to operate. Consequent upon the recruitment of more, and preferably larger, fatteners (it is difficult to envisage many improvements until the fattening contacts are established), attempts should be made to find rearers who were prepared to specialise and/or prepared to handle large numbers of calves for the spring trade. This leaves the question of calf procurement which, however, is not likely to present insuperable obstacles especially if the area of recruitment is widened, dealers are employed where necessary and, importantly, prices shaded a little where necessary. All of which is likely to prove easier to recommend than to implement, but the Society must attempt to increase turnover and the logical starting point is the fatterer.

Progress towards a fully integrated beef marketing scheme has been imperceptible. Groups of farmers have been called together for discussion, but they have failed to demonstrate much enthusiasm. One suspects that the main reason for this lack of support is a suspicion that the full requirements of such a venture have not been established. If this supposition is correct, one must have some sympathy for the farmers' point of view, for as yet there are few commercially successful beef marketing organisations in this country. The recommendation for the Society is implicit in the preceding sentence, namely that it should undertake or commission research aimed at specifying a comprehensive beef-marketing operation. This will involve carcass evaluation related to particular retail outlets, examination of alternative production systems (such as the use of suckler calves in fattening systems, the fattening of Friesian or Friesian cross calves on barley, and/or semi-intensive systems of heifer-beef production), breed comparison work (which must be related both to market specification and production system), the economics of various stages in the systems and finally the definition of the discipline which would be required from participants in the scheme to translate the theoretical concepts into commercial success. This adds up to a sustained programme of research. It could involve an assessment

of all experimental and observational work being conducted elsewhere followed, at a later and developmental stage, by on-farm trials. There is a choice between commissioning this work from outside research bodies or recruiting appropriate personnel and undertaking the programme within the Society. While the former may be economical because it might be able to use existing facilities, the latter may be preferred in being more purposeful and more closely related to the needs of the Society. In either event many of the benefits from such work would accrue to the economy at large and farmer participants, rather than the Society. But in favour of such a proposal is that it could pioneer the way into beef marketing for agricultural co-operatives. It may be possible to obtain financial assistance for such an investigation.

D. THE LAMB MARKETING SCHEME

This scheme originated in suggestions that the Society should attempt to reduce the number of stages in the marketing of meat, thereby saving on costs and improving margins. Essentially any such attempt involves organising slaughtering facilities and this poses major problems for a co-operative society, the alternatives being to establish its own facilities or to utilise existing private or municipal abattoirs. Each of these possibilities presents difficulties with respect to both finance and administration. Furthermore, satisfactory arrangements still need to be made for marketing the meat when slaughtered.

In 1965 the Society was approached by a national firm with a proposal for it to operate a slaughterhouse near Dumfries which the company owned and had, hitherto, been operated by an agent on an independent basis. The slaughterhouse was designed to handle lambs at a maximum throughput of 650 per day. Under the arrangement with the agent operating the abattoir, he was responsible for procuring his own lambs at prices determined by himself, for slaughtering them and moving them to market. In the case of those carcasses meeting the firm's quality specifications, the market was the firm's own stores in the South of England and, for these 'quality' lambs the firm agreed on a price with the agent about a week prior to delivery. The agent based his price to farmers on this forward contract price. In the case of lambs not reaching the quality specifications, the responsibility for disposal rested with the operator. Under such an arrangement there were obviously two major areas of risk. First, the proportion of lambs that would not reach specification of quality, and the disposal price that might be obtained for them, and its relation to the cost of the lambs; secondly, the operator would at all times be buying in competition with other outlets for farmers' lambs and the price he paid, after prior consultation with the firm, might or might not, in the event, appear satisfactory to the farmer who supplied the lambs.

The Society saw the proposal as a promising opportunity to develop into meat marketing and entered into an arrangement with the firm that was basically similar to that between that firm and the agent who had previously run the abattoir. Under the scheme full responsibility for running the procurement and processing rested with the Society and the conditions for success were assessed by the Society before deciding to enter into the venture. In essence, it was a two-way forward contract scheme whereunder the firm agreed to take each week a quantity of lambs of a specified quality and at a specified price, the price being agreed with the Society on the Thursday prior to the week of delivery. In turn, the Society quoted forward prices to producers for the quality lambs on the basis of the price per lb. plus subsidy. Forward quotations were normally not given for lambs which failed to satisfy the firm's

requirements and such lambs were, in the event, mainly sold at Smithfield. In order to meet the firm's quantity requirements and to keep the slaughterhouse operating at a reasonable level of throughput, it was envisaged that, if insufficient lambs were not forthcoming from farmers, additional supplies would be bought in by the Society from other sources such as auctions or dealers.

The basic objectives of the scheme can be succinctly stated as being to provide a better price of lambs for farmers in the area, while at the same time covering the operational and administrative costs of the Society and leaving a margin to contribute to overheads. It was considered that these goals could be obtained with an annual throughput of 100,000 lambs, if 60 per cent reached the quality grade, providing good markets could be found for other carcasses and all the offals. As a long run objective, it was hoped to identify those factors on the production side which would help farmers to achieve higher grading percentages, and that it might, as a consequence, be possible to establish an integrated scheme with a selected group of farmers under contract to the Society.

The sections which follow comment on the scheme under the headings throughput and membership, marketing, the Society's operations, including transport, slaughtering and administration. There follows a brief report of a survey of farmers (a full report has been submitted separately to the Society) which throws some light on the characteristics of lamb production by farmers and their attitudes to the scheme. Finally, there is a section of conclusions and recommendations.

Throughput and Membership

Although the theoretical capacity of the slaughterhouse was 650 lambs per day, so that a six-day week and an eight-month season gave a maximum throughput of about 110,000, this proved to be over-optimistic. The operational capacity proved nearer 500 per day and in 1966-67 and in 1967-68 only a five-day week was worked. Moreover, the season was about seven months with a reduced volume at the beginning and the end of the season. A more realistic maximum throughput proved to be around 75,000 for the season—although by working a six-day week in the first season, this figure was bettered by nearly 10,000 lambs.

In any scheme based on trading it is both the total throughput and the graded throughput which count. Table 13 gives the relevant figures for the three seasons.

As can be seen the total numbers were well below target in all three years, but the total number of quality lambs has improved since the first season. In fact the first season proved disappointing despite the total volume, largely as a result of the low grading percentages. Attempts to be more selective in the procurement of lambs for slaughter in the later years have given better grading percentages.

TABLE 13**Total throughput of Lambs in each Month for three Seasons¹
1965-68**

Month	Monthly slaughterings of lambs			Percentage of quality lambs		
	1965/66	1966/67	1967/68	1965/66	1966/67	1967/68
July	5,643	3,344	3,603	21·03	57·03	70·44
August	10,325	9,822	8,952	29·00	58·71	68·04
September	12,681	10,832	9,764	41·48	69·76	71·50
October	14,011	11,520	10,715	52·04	73·08	63·89
November	12,510	9,144	9,638	51·77	67·75	61·04
December	10,029	5,869	7,234	45·77	58·39	60·46
January	9,064	7,334	8,308	38·39	51·01	50·95
February	7,276	2,274	2,347	42·67	47·67	48·10
March	2,755			36·01		
Total	84,294	60,139	60,561	41·97	63·34	62·89
				35,375	38,096	38,075

¹ Derived from the daily kill sheets.

An analysis of suppliers between farmers on the one hand and dealers, agents and auction marts on the other, as in Table 14, shows that the number of farmers declined in each season and that their percentage of total supplies fell—but not as rapidly as their numerical reduction. The proportion of lambs from farmers which reached the quality grade remained about the same.

TABLE 14**Sources of Lamb Supplies**

	1965/66	1966/67	1967/68
Total number of farmer suppliers	507	300	157
Number of farmers selling less than 100 lambs to W.C.F.	380	228	83
Number of farmers selling 100 quality grade lambs or more	48	41	51
% of total supplies from farmers	59·4%	45·1%	37·5%
% of total quality grade from farmers	57·5%	44·1%	39·8%
% of total supplies from dealers, agents and auction marts	40·4%	54·9%	62·5%
% of total quality grade from dealers, etc.	42·5%	55·9%	60·2%

The most significant change is the substantial decline in the number of farmers supplying less than 100 lambs per year. The total turnover of farmer members is shown in Table 15.

TABLE 15
Change in Numbers of Farmers by comparison with Previous Season

	1966/67	1967/68
Farmers ceasing supply	-334	-212
Farmers joining scheme	+127	+ 69 ¹
Net Loss	207	143

¹ Of whom 21 supplied in 1965/66.

Out of a total of 682 farmers from whom supplies were procured in the three years, 157 supplied lambs in the third year, and there were 68 farmers who had been in the scheme in all three years. These latter 68 farmers form an interesting group. In 1965-66 only 31 of them achieved better than 50 per cent quality grade; in 1966-67 this number had risen to 54, and by 1967-68 to 56.

As can be judged from Table 14, agents and dealers increased in importance as the scheme progressed. Although these men were all experienced buyers, the lambs purchased from them did not grade out significantly different from those supplied direct from farmers. Part of the reason for this may have arisen from the relatively short notice given to them and the price ceiling within which they had to work.

Table 16 shows how heavily dependent the scheme was on a handful of agents and the 68 regular farm suppliers.

TABLE 16
Supplies from Agents plus 68 Regular Farm Suppliers

	1965/66	1966/67	1967/68
% Total volume	63.3	75.7	84.5
% of Total quality supply	65.6	77.7	83.1

Marketing

The firm specified both the quality and quantity of lamb which it requires, but this leaves to the Society the decisions on how to market

lambs which do not reach the defined quality standard, as well as all the offals. These three separate marketing operations will be discussed in turn.

The quantity requirement and price offer of the firm for each week was agreed by the preceding Thursday, which established the primary target for procurement. It can be pointed out here that the firm had other sources of lamb so that there was some degree of flexibility in the requirements. All quality lambs were covered in stockinette wraps and kept under refrigeration. There were three quality criteria to be observed, viz. weight, conformation and dressing standards. The firm reserved the right to reject delivered carcasses if they were deemed not to conform to agreed standards. During the first season there were four weight ranges which were changed once as the season progressed. This was simplified in the 1966-67 season when there were two grades, up to 44 lb. and 45-48 lb.—although the bulk of requirements were for the lighter weights. Conformation and dressing standards were assessed subjectively. More recently, consultations between the firm and the Society took place on grading standards. These consultations served to maintain uniformity and went a long way to remedy the dissatisfaction of both parties on this vexed topic.

All carcasses rejected by the firm under any of the headings were sold at Smithfield, but unfortunately it proved impossible for the firm to let the Society have reasons for rejection for individual carcasses, although rejection losses were a significant contributor to the shortfall of the profits predicted by the Society. In the absence of national grades there are inevitable difficulties in running a selective marketing scheme. This has militated against the scheme's success.

Most non-quality lambs have been sold on Smithfield, because of the ability of this market to handle any volume of supplies without unduly depressing the price and because of transport economies. Some heavy lambs have, however, been marketed through the Scotch Quality Lamb Association, but with no recognisable price benefit. A super-market chain has also been found to take good quality heavy lambs and this arrangement could continue. Some other attempts have been made to operate on nearer markets but these have not been successful and have not been pursued in any sustained way.

The various offals are disposed of through a number of differing outlets. Although care is needed to obtain the best price, the abattoir is big enough to warrant competitive attention from potential buyers and there may be few significant economies to be achieved here. The average realisation price for all offals was just under £1 per lamb in 1967-68, of which the skin accounted for two-thirds.

Transport arrangements for lamb carcasses from the abattoir to the firm's depot in the South of England and to Smithfield presented some problems. After trying non-refrigerated rail containers and refrigerated

road transport, the Society finally turned to refrigerated liner trains. The firm agreed to accept carcasses in batches of whole containers, which led to considerable savings in transport costs. For the Smithfield market, road hauliers have been employed and here it was a question of finding one whose arrival in the market was predictably timely. Insulated containers were used on a shared-cost basis, with an agreed rate struck at the beginning of the season.

On the basis of the quality price, a forward producer price was calculated. Details of pricing follow in a subsequent section.

Farmers, who need not be members of the Society, notified the buyer of lamb numbers which they were willing to supply during the week. Although adequate numbers might have been forthcoming, some stock might not have been collected until the following week. The balance of numbers required to fulfil the weekly order for quality lamb was then sought from auction marts, within price ranges which took account of both the quality prices and trends in the markets. Because of day-to-day fluctuations in market price this could prove either expensive or advantageous to the Society. There was also a small amount of direct buying for the abattoir of live animals, but this was in the nature of a supplementary enterprise and could be regarded as outside the scheme proper.

The problem of maintaining required numbers without some reserve of stock on hand or at call, led to undue losses and in 1967-68 the procurement officer was given authority to obtain keep for lambs, which was then used to even out the difference between market demands and supplies on offer. This flexibility, however, had its price, namely the cost of keep which on this particular occasion proved high.

The Society has had to decide how to translate the combined realisation prices for the quality lambs, Smithfield lambs and offals into producer prices. There have been a number of changes in their policy in an attempt to reach a solution which would not only prove equitable, but also would provide adequate incentives to producers to offer sufficient quantity, of adequate quality, and at the same time leave a sufficient margin to cover operating and administrative costs.

In the case of non-quality lambs, in 1965 these were sold for what they could realise on the open market, and producers were paid this price less deductions for costs incurred. In 1966-67 producers were offered a flat price per lb. (up to 50 lb.) for the non-quality lambs, providing that at least 60 per cent (in 1966-67) or 70 per cent (in 1967-68) of their total consignment met the quality grades. Producers who did not reach these grading percentages obtained the realisation price less cost deductions, less also the losses to this fund arising from paying a flat rate. Lambs above 50 lb. were paid for on a per head basis. For the quality lambs, producers were paid on the basis of the abattoir grading, irrespective of whether they were finally accepted by the firm—

thus the Society was at risk for all grading errors. This provision could lead to substantial losses. Government guarantee payments are made direct by the Government to producers, except in the case of purchased store lambs, when the Society claims the subsidy. It should be added that one of the major disadvantages as far as price is concerned, and it has to be reckoned with, is that the area from which the scheme collects lambs is a traditional exporting area of good quality stock and is well supplied with competitive outlets.

Thus one might well expect pricing to be the key to the whole operation—and so it has proven to be. It is, however, extremely difficult to prove any relative price position from statistical material. In the first place the specification of stock classes in published sources is usually much too vague and the range of prices too wide to ensure that one is comparing like with like. Secondly the actions of the Society could, of itself, influence the market. For example the announcement of a forward price may provide a floor to the market or to the private treaty bargain. Or again should the Society decide to buy stock or sell carcasses in a local market this could well influence prices of that market. There is therefore some danger in interpreting figures in this field. With this cautionary note, two analyses are presented.

TABLE 17
1967 1st Quality Prices

	1st Grade Quality Lamb	Total	Standard Price	Payment above Standard Price
July 17th	3s. 0d. plus $7\frac{3}{4}$	$3/7\frac{3}{4}$	3/3	$4\frac{3}{4}$
July 24th	2s. 10d. $8\frac{1}{4}$	$3/6\frac{3}{4}$	$3/2\frac{1}{2}$	$4\frac{1}{4}$
July 31st	2s. 10d. $8\frac{3}{4}$	$3/6\frac{3}{4}$	$3/2\frac{1}{4}$	$4\frac{1}{2}$
Aug. 7th	2s. 10d. 9	$3/7$	$3/1\frac{3}{4}$	$5\frac{1}{4}$
Aug. 14th	2s. $9\frac{1}{2}$ d. $9\frac{1}{4}$	$3/6\frac{3}{4}$	$3/1\frac{1}{2}$	$5\frac{1}{4}$
Aug. 21st	2s. 9d. 10	$3/7$	$3/1\frac{1}{4}$	$5\frac{3}{4}$
Aug. 28th	2s. 8d. $9\frac{1}{2}$	$3/5\frac{1}{2}$	$3/1\frac{1}{2}$	4
Sept. 4th	2s. $5\frac{1}{2}$ d. $9\frac{1}{4}$	$3/2\frac{3}{4}$	$3/1\frac{1}{2}$	$1\frac{1}{4}$
Sept. 11th	2s. $5\frac{1}{2}$ d. $9\frac{1}{2}$	$3/3$	$3/1\frac{1}{2}$	$1\frac{1}{2}$
Sept. 18th	2s. 6d. 10	$3/4$	$3/1\frac{1}{2}$	$2\frac{1}{2}$
Sept. 25th	2s. 6d. $9\frac{1}{2}$	$3/3\frac{1}{2}$	$3/1\frac{1}{2}$	2
Oct. 2nd	2s. 6d. 9	$3/3$	$3/1\frac{1}{2}$	$1\frac{1}{2}$
Oct. 9th	2s. 6d. $8\frac{1}{4}$	$3/2\frac{1}{2}$	$3/1\frac{1}{2}$	1
Oct. 16th	2s. 7d. $7\frac{3}{4}$	$3/2\frac{3}{4}$	$3/1\frac{1}{2}$	$1\frac{1}{4}$
Oct. 23rd	2s. 7d. 8	$3/3$	$3/1\frac{1}{2}$	$1\frac{1}{2}$
Oct. 30th	2s. 8d. $7\frac{1}{4}$	$3/3\frac{1}{4}$	$3/1\frac{1}{2}$	$1\frac{3}{4}$

Table 17 shows that for most of the 1967–68 season the suppliers of first quality lamb were doing much better than the standard price. But

this, of course, is not the whole story, for the non-quality lambs have to be taken into account. Table 18 gives the quality range and the average price of the three non-quality grades for the same period as Table 17.

TABLE 18
1967 Prices Realised by Producers

1967	Quality grades		Non-Quality grades		
July	3/-	2/11	2/10	2/9	2/7
July	2/10	2/8	2/8	2/7	2/6
July	2/10	2/8	2/8	2/7	2/6
Aug. 6th	2/10	2/5	2/10	2/7	2/5
Aug. 7th	2/10	2/5	2/7	2/5	2/3
Aug. 8th	2/9½	2/5	2/7	2/5	2/3
Aug. 11th	2/9	2/5	2/7	2/5	2/3
Aug. 14th	2/9	2/4	2/6	2/4	2/3
Aug. 18th	2/8	2/4	2/6	2/4	2/-
Aug. 21st	2/7	2/3	2/5	2/3	2/-
Aug. 28th	2/5	2/2	2/2	2/2	2/-
Sept. 1st	2/5	2/2	2/1	2/2	£5 ea.
Sept. 10th	2/5½	2/2½	2/2	2/2½	£5 ea.
Sept. 22nd	2/6	2/3½	2/2	2/3½	£5 10s.
Sept. 29th	2/6	2/3½	2/3	2/3½	£5 10s.
Oct. 13th	2/7	2/4	2/5	£5 15s. each	
Oct. 31st	2/8	2/6	2/5	£6 5s. each	

A comparison of prices for the whole of the 1967-68 season is shown in Table 19.

TABLE 19
Costs for 1967-68 Lambs

		Cost per lb.	Cost per lamb
Within scheme	Lambs bought from farmers	2/8¾	£5 9s. 3d.
	Lambs bought in market	3/0¾	£5 17s. 2d.
Average overall price for lambs sold in live markets		3/1¾	n.a.

To translate Table 19 into returns to farmers, it is necessary to deduct from the second and third rows (i.e. from 3/0¾d. and 3/1¾d. a notional

amount to represent transport costs incurred and commission paid. Even so it is fairly clear that there will have been little or no advantage in belonging to the scheme on the basis of these figures, which are admittedly inadequate to support a completely firm conclusion.

However, perhaps the most telling arguments lie, not in the statistics, but in the attitudes of the participants themselves, all of whom are in business and have had a vested interest in the success of the scheme. Attitudes of farmers can be gauged from their willingness to supply lambs, which has declined substantially during the life of the scheme. Both the Society and the firm have had reservations about the scheme and, despite a number of changes which have led to material improvements in the economics of the scheme, they have not been able to evolve a mutually satisfactory basis for operating. Insofar as the organisations deal with each other quite successfully on other commodities, this cannot be attributed to a lack of communication or an unwillingness to co-operate.

In the light of this combination of quantitative and qualitative evidence it must be concluded that, for a variety of reasons, it has not proven possible to construct a pricing policy that is equally satisfactory to the firm concerned, the producers of fat lambs and to the Society itself.

The Society's Operations: Transport, Slaughtering and Administration

Under the scheme, producers could use their own transport, but most preferred to leave this for the Procurement Officer to arrange. In principle, transport was deducted from producers' returns, subject to a few qualifications given below. Each evening the Procurement Officer contacted hauliers to arrange collection in such a way as to ensure full loads and to minimise the mileage. In this way it was aimed to keep transport costs per head down to an average of 2/-, compared with about 3/6d. charged by some of the Society's competitors. The system could and did generate complaints. The most important of these was that supplies were not collected in the order in which they were notified. This conflict between cost and timeliness is very much a matter of judgment. The current arrangements seem on balance to be satisfactory, but the Society could have considered publicising the savings in cost more effectively, thus disarming criticism. This same recommendation would also relieve another minor irritation, which could arise when a farmer sending two identical consignments might be charged different terms for transport cost deduction, because of the differing nature of transport routes.

In order to maintain throughput, lambs have had to be drawn from farms some distance from the abattoir. To lessen the disincentive to distant suppliers, which full transport deduction might effect, a differential system has been evolved, whereby closer suppliers have to a small

extent subsidised others. In view of the next paragraph this is not a point of any great significance.

Not only have long distances involved extra transport costs, but they have also complicated collection and delivery problems. Since the first season the Society has taken steps to reduce the catchment area involved.

TABLE 20
Distances of Supplies from Abattoir

	% of lambs coming from farmers			Number of Auction Marts		
	1965/6	1966/7	1967/8	1965/6	1966/7	1967/8
Under 10 miles	16.6	23.4	21.8	0	0	2
„ 20 „	35.7	49.1	63.5	0	0	5
„ 30 „	58.6	61.9	81.2	1	0	—
„ 40 „	74.6	76.7	90.4	1	2	—
„ 50 „	—	—	—	5	6	—

As Table 20 shows, almost two-thirds of lambs from farmers travelled less than 20 miles in 1967-68, almost double the proportion in the first season. A similar reduction in mileage from auction marts' supplies has also been achieved. Thus regarding transport, a considerable and impressive operational economy has been brought about, to the benefit of the scheme as a whole and of producers.

The slaughterhouse which was designed for lambs only and was modified to Continental standards in 1966 is fairly modern and correspondingly efficient. The normal staffing comprised a manager and twelve people of various grades. Additional costs are incurred by the necessity of paying fees for the Fatstock Certifying Officer and the Meat Inspector. There appeared to be no difficulty in hiring men, providing competitive wages were offered. This scale of staffing is adequate to handle the 500 lambs a day previously referred to, but clearly when throughput declines costs per animal will increase. The slaughterhouse operation was not subject to detailed enquiry, but the average cost per lamb of a little less than 6/- seemed quite reasonable when compared with similar abattoirs elsewhere. It can be argued that access to an all-the-year-round general purpose abattoir would produce cheaper costs. But many of the components of the cost were direct costs, some of them on a piece-rate basis. Any economies from spreading overheads in a general-purpose abattoir, therefore, might be small and at least partially offset by the diseconomies of such an abattoir in contrast to a purpose-built one. Possible savings from an all-purpose abattoir might, in fact, be something under $\frac{1}{2}$ d. per lb. of lamb.

As in the case of pigs, administrative costs are better recovered with a large throughput. Although these costs may be relatively stable there are clear disadvantages in dealing with large numbers of small suppliers. Most of the day-to-day problems of the scheme are dealt with at the slaughterhouse by the Manager or the Procurement Officer, with reference back to headquarters when necessary. This arrangement seemed to work satisfactorily and insofar as the scheme can be improved this is likely to be as a result of a change in general strategy rather than from a tactical adjustment.

Survey of Farmers

Towards the end of the 1967-68 season a postal survey was conducted of all those farmers who had, during the three years, supplied lambs to the Society. The objectives of the survey were three: to describe the characteristics of the farm and sheep husbandry practices; to seek farmers' opinions concerning the scheme, and finally to try to determine the major factors influencing grading percentage. More than 60 per cent of farmers took the trouble to complete questionnaires, which is a fairly good response rate for this type of investigation and with 357 completed and relevant forms there was sufficient information for some statistical analysis.

In brief the farms and sheep husbandry practices were as follows: more than 50 per cent of farmers had more than 500 acres of crops and grass, while 11 per cent had less than 100 acres. In terms of Standard Man Days (as an indication of business size) more than three-quarters of respondents had more than 1,200 S.M.Ds. There was a small proportion of hill farmers, with about one-quarter of farms above the 700 feet contour. Some 23 per cent of the sample had a ewe flock smaller than 100 in 1967, 46 per cent had flocks of 100-300, while the remaining farmers had more than 300 ewes. In addition to size of farm and ewe flock, it is important to know the dependence of the farm economy on the sheep enterprise. One measure of this is the proportion of S.M.Ds. in sheep in relation to total S.M.Ds. In 1967 more than a third of the sample had less than 10 per cent of their S.M.Ds. in sheep, and a further half had 10-30 per cent. Only 15 per cent of farmers depended to a greater extent than 30 per cent on sheep as part of their farm businesses.

As might be expected there were almost as many breeds of sheep involved as there were farmers—and this, of course, is one of the roots of the grading problem. Half the farmers had more than one breed or crossbreed of ewe and only 146 of 357 confined their flocks to a single breed of ewe and single breed of ram (not necessarily the same as the ewe).

Several measures of managerial competence were devised although they must be interpreted with caution. Regarding lambing percentage, nearly half of the farmers achieved 150 per cent, while only 27 farmers were below 100 per cent. Three-quarters of the sample gave protection to lambs against pulpy kidney and a similar proportion dosed their flock at least twice a year against worms. There had been little expansion of flocks over the three years.

The general picture is one of largish farms, with reasonable sized (but rather mixed) flocks, achieving fairly acceptable standards, which did not, however, account for a major part of the farm business.

One significant item to emerge was the fact that of the farmers supplying the Society in 1967-68, two-thirds sold more than 50 per cent of their lambs elsewhere. What could not be discovered was whether the Society was getting the better lambs, the worse or some random selection, depending on prices in the particular week. But this relationship must be considered when considering the scheme as a whole.

A general question was put into the questionnaire to provoke farmers' opinions of the scheme. More than half the respondents made no comment whatever. Of those who did express opinions, nearly a quarter were satisfied with the scheme, but the remainder were dissatisfied. Most of the latter were not content with the price which they received; some 34 mentioned specifically the price obtained for the non-quality grades. It would be worth consideration whether the price-dissatisfied farmers used the scheme in the next year.

Any attempt to isolate the determinants of grading percentage is bogged by two issues. The first is that, in the case of this sample of farmers, there is no information regarding grades of lamb sold to outlets other than the Society. In the absence of evidence to the contrary, it has been assumed that sales to the Society can be used as an indication of grading quality. Low quality has been defined as a farm which supplied lambs, less than 40 per cent of which have attained the quality grades; high quality is where this figure is more than 70 per cent, while medium quality occupies the intermediate position. The second problem is that with the enormous variations in breeds within the farm and the lack of managerial attention which may arise in a minor farm enterprise, most of the differences may be actually due to the shepherd's skill in managing the flock and the drafting policy which is followed—neither of which is easy to evaluate, especially from a postal survey. For this reason it may not be surprising, although it is disappointing, to find no strong correlation, but only some suggestions which confirm commonsense notions. Table 21 presents the main results.

TABLE 21
Determinants of Grading Percentage

		Quality Category (number of producers)		
		Low	Medium	High
Farm Size	Small farms (less than 100 acres)	20	10	8
	Medium farms (100-500 acres)	78	81	60
	Large farms (more than 500 acres)	26	40	34
Ewe flock size 1967	Small less than (100 ewes)	444	19	18
	Medium (100-299 ewes)	52	67	42
	Large (300+ ewes)	28	45	42
Breed of flock	Hill rams × Hill ewes	23	21	10
	Intermediate longwool rams × Hill ewes	11	23	38
	Suffolk rams × Hill ewes	3	3	6
	Suffolk rams × Half-bred ewes or grey-faced ewes	41	36	22
	All others	34	32	12
Earliness of Lambing	Early	53	31	25
	Normal	41	52	39
	Late	32	48	38
Lambing Percentage	less than 120%	30	40	27
	120-149%	32	40	42
	150%+	62	51	33
Number of lambs sold to the Society in 1967/68	less than 50 (including none)	118	85	53
	50-149	5	24	26
	150+	1	19	23

In general, but with many exceptions, grading percentage is better on farms which are larger, have larger ewe flocks, and have flocks with an intermediate long-wool ram × hill ewe. Additional analysis is still being undertaken with this considerable body of data; in particular a more detailed examination of the 68 farmers who have been in the scheme for three years may throw up more information. However, given the inherent complexity of this problem, there is little likelihood of results which are of statistical significance.

Conclusions and Recommendations

The decline in the number of farmer suppliers, the reduction in total throughput, the general dissatisfaction of the firm and of the Society,

which has been occasioned mainly by the inability to devise a pricing policy acceptable to the three parties, all make it difficult to resist the conclusion that the scheme has not fulfilled its short-term objectives. In addition since it has not been possible to prescribe production systems which would give a consistently high grading percentage, little progress has been made in developing a viable long-run contract scheme for marketing lamb.

The first recommendation concerns the long-run problem of devising appropriate management techniques for consistent high-grade lamb production, about which it is asserted here that, whatever the Society decides in the immediate future of the current scheme, it would be in its own interests (and those of its members) to keep one foot in the door of lamb marketing development, if necessary making some contribution to its progress. Several possibilities exist. One would be to back experimental work at a research centre. On balance this may seem too remote from practical farming difficulties and only likely to produce results in the too distant future. A second possibility, which is perhaps more promising, would be for the Society, through its Livestock Department, to sustain a programme of trials on the farms of some of their regular suppliers. The first objective should be the determination of suitability of particular breeds of rams and ewes for the quality lamb market. To secure the co-operation of sufficient farmers—who would have to follow pre-determined breeding and management policies and sell all their lambs to an agreed slaughterhouse—it would probably be necessary to guarantee some level of profitability. Furthermore there would have to be continued field supervision and observation on the farms. At the slaughter stage some system of grading of individual lambs would be necessary (and here it is suggested that the existing quality classification may not be sufficiently precise). Finally, the whole trial would need competent supervision and analysis. Pursuing an experimental or trial programme would, of course, involve expense, but it may be possible to obtain assistance, since any results would be of considerable interest to the industry at large.

In the nature of things any recommendations concerning the current scheme depend on an assessment of the potential of a viable long-run contract scheme. Realistically it may be some years before an effective long-run venture can be formulated. In the interim the disadvantages of the current scheme remain. Not the least valuable achievement to date has been the fund of experience that has been acquired in the operational mechanics of lamb marketing. Although it may be possible to find minor or occasional savings in cost within the present system of operation, most of the obvious improvements have been incorporated into the scheme during the years of its existence. Within the limits of practical business the mechanics are fairly smoothly handled. The choice before the Society may therefore be one of abandoning the scheme or

of running the scheme at a material cost. Relevant to this decision is the length of time the development of a contract scheme will take, the losses which the current scheme would incur over this period and the fact that abandoning the present scheme may generate higher establishment costs for a contract scheme—when it arises—since there has been an accumulation of experience and expertise within the Society and the creation of a number of trading links.

The balancing of these factors is essentially a subjective matter in relation to the overall trading policy of the Society. It would have been the recommendation of the investigating team to attempt to continue the scheme—but built into that recommendation are some considerations beyond the interests of the immediate parties concerned. In the event, the Society and the firm decided in January 1969 that the lamb marketing scheme would be discontinued at the end of the 1968–69 season. It is difficult to quarrel with this decision to abandon the lamb scheme, although it is clearly a matter of regret that this became necessary.

E. SUMMARY AND GENERAL CONCLUSIONS

This report has considered in some detail three particular livestock schemes. Particular objectives were defined centrally and the schemes run in accordance with them. The key issue in this matter is the question of the objectives towards which schemes of this nature are directed. It is possible to categorize such schemes in two broad groups. First there is in effect a production-orientated type of scheme where existing production patterns are taken for granted and a scheme is introduced in order to facilitate transference of livestock from one stage of production to another, effecting economies in so doing, and eliminating some of the imperfections of the market inasmuch as the latter can operate in a highly adverse fashion for individual producers. The second type of scheme can be described as a market-orientated type of scheme. For such schemes the starting point is in effect the nature of demand in the market and consumer preference. In other words, the end-product is identified in respect of quantity, exact nature, quality and timing of supplies. From this information, each stage of the production organisation is defined and established in order to meet these needs. An integrated scheme of this nature becomes in effect a mechanism for communication of specific market requirements to producers who are prepared to accept the discipline of the market.

The schemes which have been examined in this study have largely fallen into the first category. The pig scheme has in effect dealt with the problem of the weaner pig leaving the farm of the breeder and going to the farm of the fatterer. While there is a presumption that the ultimate end-product will be a bacon pig, there is no certainty in this respect. To this extent, inevitably, objectives are bound to be blurred, especially if one asks the question, how far is the scheme helping to meet the requirements of the market? The calf scheme, which is on a much more modest scale, falls virtually into the same category and especially in this case there is a considerable degree of a service element insofar as the Society is helping some of its members with a particularly difficult marketing problem.

In the case of the lamb scheme, the situation was rather different insofar as the main objective was a comparatively tightly specified end-product in terms of weight and conformation, which had to be derived from a random population of fat lambs. In this case the Society was in a difficult position, certainly in the short-term, since the market strength achieved in meeting the objectives for quality lamb was almost certainly more than offset by the problem and weakness of disposal of those lambs which were not eligible for inclusion in the quality selection. In the longer term, of course, it might have been possible to envisage the procurement of fat lambs which were more closely geared to the requirements of the quality market. But this is something that cannot be done

overnight and involves considerable attention being paid to aspects of breeding and management of the product required. It would also require considerable discipline among farmers participating in such a venture.

Historically there has been a move towards the more market-orientated type of operation, as opposed to the production-orientated operation throughout the agricultural industry. The Society's own schemes for producing broiler chickens and eggs can be cited as an example. Equally other organisations have defined a particular type of livestock and set about determining the production conditions necessary to build up a supply. This has been the case with heavy hogs which have developed, virtually from scratch, into a significant proportion of pig production in the course of ten or fifteen years.

The indications are that the Society should think in terms of market-orientated schemes, as opposed to schemes purely designed to by-pass traditional marketing channels. It is necessary to think in terms of the existing and future distribution network, with retailing tending to become concentrated into fewer hands, with continuing development of national brands as well as company brands and the requirements of such outlets for a continuing supply of a tightly specified product. It is perhaps here where the marketing power of the Society can best be harnessed on behalf of its members in dealing with large organisations who are, in fact, able to exert a major influence on price formation according to the strength of their demand.

The development of such schemes by the Society would have far reaching implications as far as the management and staff of the Society was concerned. In the first place, it is suggested that the Society would need to have its own technical expertise working on the development side helping to define the end-product and translating this into production terms on behalf of the members. Secondly, there would be the need to consider the relatively rapid change which occurs in food marketing, as a result of which production needs to be responsive and adaptive according to the wishes of the market. Having regard to the complex and massive production potential of an organisation of the size of the Society, as well as the complex nature of the market for their products, there would seem to be a substantial case for the Society being equipped to cope with development problems from within its own organisation and staffing. This would call for use of food technologists, husbandry specialists and economists working as a team in the development of co-ordinated integrated activities to be undertaken by the Society.

There is little doubt that many of the traditional types of scheme for livestock have achieved only moderate success. This stems from the inevitable low input from the management side that is required in such schemes and the unpredictable changes in the general economic framework which can cause a major setback to a scheme. For instance, changes in the world prices for cereals can have a marked impact on the

economics of livestock feeding and greatly alter the relative position of, say, the pig fattener vis-a-vis the pig breeder. For example, the intervention of China in the world wheat market had a pronounced effect on cereal prices. Similarly the extent of additional supplies resulting from new breeds of wheat, as well as hybrids, can also be expected to exert a marked effect on future prices. The result of such external forces is to curtail the independence of action of producer-groups. In the long-term such production-orientated groups are likely to become less viable in the face of competition from the more market-orientated type of activity which is accommodating itself to some form of contract production.

Turning to the particular schemes which have been under review, it is possible to state fairly briefly the conclusions of this study. In the case of the pig scheme, the main weaner scheme is a relatively simple operation which should be kept in being but, at the same time, it should be kept under close review. It is suggested that there should be an attempt made to expand the size of the scheme by the inclusion of more breeders in it and, preferably, breeders with larger herds. Secondly, it is suggested that a more flexible policy be adopted with regard to weaner prices. While price stability is a desirable objective, total stability becomes a rigidity which can disguise or distort important underlying forces. Without implying that the present policy should closely follow the open market, it is suggested that it should reflect it and, at the same time, dampen the more extreme oscillations. Finally, by way of additional service to members, it is suggested that it should be possible to keep them better informed with regard to basic economic indicators affecting the pig industry. Appropriate information would include relevant prices for different types of pig, data of pig price/feed price ratios and trends in the pig population. Such an intelligence service, perhaps on a quarterly basis, could have a useful side effect in developing a better understanding among members and, at the same time, help to retain the loyalty of members as a result of their better awareness of the service.

Turning to the F.Q.W.P., it is suggested that the transport aspect of the present scheme is worth close observation since this could be a major inherent weakness in terms of overhead cost, especially since wide dispersion of members can militate against loyalty to the group. At the same time, the scheme should be consolidated and expanded where possible. It could provide a useful basis for transformation into a fully integrated scheme involving the production of fat pigs on contract for specifically determined market outlets. Also, as a further stage of integration, it would be worthwhile to consider the possibility of integrating the scheme with local cereal growers so that the whole complex chain of events from cereal growing, to pig breeding, to fattening could be brought under one umbrella, in order to achieve a degree of standardisation in the production of a particular type of pig for a particular

market. But, throughout this development it must be stressed that producers need to identify themselves with the aim and objectives of the scheme. Such identification can have an important bearing on discipline within the scheme and its acceptance.

The calf scheme provides a useful service for a relatively small number of calf rearers, who might well have difficulties if they did not have the Society intervening in this way. It is suggested that it should continue in its present form. At the same time, it should be borne in mind that the scheme ties up the Society's capital over a considerable part of the year and leaves the Society at risk regarding swings in price. This might well mean that the Society, as a co-operative, should be prepared to take the swings with the roundabouts and thereby take a long-term view of price trends rather than be unduly pre-occupied with the short-term fluctuations in the market.

At the same time, the question of an integrated beef production scheme should be considered. Again, it is suggested that the starting point for such consideration should be the ultimate market outlet in order to define what is wanted, when and where, and then to see whether the necessary production processes can be initiated on a profitable footing. It might well be that the result of such an inquiry would show that this type of scheme was a non-starter. If so, then some valuable information would be derived since the reasons for it being impracticable should highlight important areas of difficulty facing farmers.

Finally, in the case of the sheep scheme, which has now been abandoned, the Society was in a particularly difficult position in having to relate the widely diverse supply of animals to particular specifications with regard to weight and conformation. With fat lamb today being the least standardised meat product, there will inevitably be a large proportion of livestock falling outside tightly defined specifications. Since the particular specifications relate closely to market preferences, it follows that the ineligible production will be at a considerable discount. This dilemma has been exacerbated by the fact that trade buyers have been able to draw their supplies from national markets on a selective basis. What they have not done has been to find farmers who could, with the present state of sheep husbandry, produce their requirements with any degree of precision. As a retailer the firm concerned is entitled to state its requirements. The fact is, however, that this is only one part of the spectrum of market requirements which traditional trade channels have catered for, with a wide range of product quality, moving to different outlets. The expectation is that the trend will be more towards large-scale buying of a standard product. It is, therefore, a matter of urgency that the sheep industry should attempt to meet these needs.

There are indications that more intensive systems of sheep fattening are being developed, and it may well be that the Society would wish to

become involved in any new type of production being developed. If so, consideration should be given to starting at least a pilot scheme with those producers who wish to move in this direction. Such a scheme might approximate more closely to what was in mind when the Society took over the lamb marketing scheme.

It should be added that during the period of operation of the lamb scheme a considerable amount of experience was gained by officers of the Society and valuable improvements were made in day-to-day running of the operation. It is possible that this experience could be put to good use in any future integrated fat lamb scheme. At the moment there are many uncertainties in such a venture. These arise from the complexity of the market. There is a lack of readily available information nationally and regionally with regard to prices. Finally, there is difficulty of prescribing a system of lamb production which will ensure uniformity of product. It is in the latter area where much remains to be done at the research and development level. The expectation is that progress will be made here, and it is for the Society to watch these developments carefully since any break-through on this side might well be the starting signal for embarking afresh on an integrated fat lamb scheme.

Throughout this report attention has been concentrated mainly on selected aspects of the livestock schemes which have been run by the Society. More detailed aspects, many of which are domestic in nature, are dealt with more fully in a series of supplementary papers which are being submitted to the Society.

It might, however, be appropriate to end with some general comments concerning the valuable catalytic role which the Society has played, is playing and can continue to play in fostering better standards of production, coupled with more orderly marketing on behalf of its members. The ultimate test of success in such endeavours will be the responsiveness of the market and its continued interest in and demand for the end-product. In this respect the Society has been extremely successful and rendered a substantial service not only to its members but to consumers generally. For this reason it is suggested that the Society should consider the question of its future role and, particularly, how it might establish schemes which are integrated from the market back to production for those items which are at present subject to relatively antiquated marketing arrangements. The specified product of high standard can be the starting point of new lines of production which could add to the commercial strength and success not only of the Society's members, but also to the ultimate viability of domestic agriculture.

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