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GROUP GRAIN MARKETING USING ON-FARM FACILITIES

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Chris Mackel
Garth Entwistle

May 1981

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FOREWORD

Current trading conditions in the cereal market and the impact of intervention standards are forcing all concerned to seek ways of matching what is produced more closely to market requirements.

In this study, Chris Mackel and Garth Entwistle explore the possibility of improved marketing through groups. They show that in incremental terms the financial benefits of group membership may well be small, but that there are other substantial gains to be made. Specifically these relate to access to wider and more secure outlets, improved flexibility of marketing from a larger pool of grain and the avoidance of penalties for selling unconditioned barley off the combine. The 1980 harvest showed that the penalties for failing to present grain at or near intervention standards are substantial, particularly in areas with surplus feed grains and at a distance from alternative markets.

The original study, whilst specific to two groups of farmers in the North East of Scotland, contained information of more general interest. Therefore it has been decided to publish the report in a shortened form to provide guidance for farmers contemplating group marketing (with or without centralised facilities) as a means of combatting their marketing problems.

G E Dalton
Head, Economics Division

May 1981

SUMMARY

During the 1970s a period of high cereal prices, sustained by world shortages and important changes in price support, led to a rapid expansion in the barley area. The prosperity and marketing opportunities of the 1970s have now faded. Production of feed grains exceeds domestic demand, whilst the export market is now heavily dependent upon subsidies and credit lines. The malting barley market has also received a sharp set-back as the economic recession affects end-users. As a result cereal growers are facing a squeeze on profits as price rises fail to keep pace with inflation.

Improved marketing of cereals using groups is suggested as a way of getting a higher return from the market. Groups would offer the farmer the following advantages:

1. Direct access to buyers not normally available to the individual farmer *eg* sales to shippers or continental end-users.
2. Optimisation of total grain revenue by directing specific qualities to specific markets.
3. Improved market information and understanding.

However, to gain these advantages the group must have access not only to drying and storage facilities but to efficient screening equipment. Individual members must also be prepared to accept group discipline and centralised control over committed tonnage.

A minimum committed tonnage of around 4,000 tonnes appears to be necessary, and at this level the total cost of operating the group would be around £6 per tonne*. Comparison of current ex-farm and ex-group prices showed only marginal economic benefit for the group. Against this members would have to set the loss of control over their own grain plus the effort required to set up and run the group. Given the apparent semi-permanent nature of the feed grain surplus members may still consider group marketing worthwhile if it gives them a secure outlet for their feed barley. Particularly if, as in 1980, the intervention market offers the best available price for grain of the right quality.

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*Cost calculated September 1980.

1. INTRODUCTION

1.1 REMIT

This study, sponsored by the Scottish Agricultural Organisation Society (SAOS), arose out of their concern for farmers' ability to market grain successfully during a period of considerable market uncertainty. The remit was to look specifically at the problems of two groups, one in Moray and the other in Easter Ross. In both cases initial feasibility studies* had shown that the amount of committed grain was insufficient to justify the capital investment required to provide centralised handling and storage facilities. This study therefore assessed the feasibility of group marketing without centralised storage.

The original studies had concentrated on the malting barley market; while this study considered all barley but not wheat or oats. Although the study was directed at two groups, its findings have a wider general application for group marketing without centralised facilities.

The report will first describe the marketing background to the study, and then outline the benefits and requirements for successful group operation without centralised storage. The results of the study are summarised and the implications for group marketing discussed.

1.2 THE MARKETING BACKGROUND

The 1970s was a period of major expansion in the Scottish barley crop, with the area sown up from 287,000 hectares in 1970 to an estimated 444,000 hectares in 1980†. Annual Scottish production is now usually in the region of 1.9 million tonnes with a record 2.076 million tonnes in 1977.

The barley expansion in the North of Scotland has outstripped the national average. Between 1970 and 1978, cereal area in the Grampian Region expanded by three per cent, whilst the barley area increased by 53 per cent. Over the same period the wheat and oats area fell by 65 per cent and 73 per cent respectively. Table 1 shows the position in the counties directly involved in the study.

Table 1A Barley production in the North of Scotland

	Area (ha)			Production (tonnes)		
	1977	1978	1979	1977	1978	1979
Banff	18,782	19,113	19,516	85,836	71,864	77,479
Moray	11,389	11,684	12,126	53,983	44,166	48,142
Nairn	3,078	3,225	3,258	14,589	12,192	12,935
Ross	13,185	14,645	15,518	60,255	55,358	61,610

*Banff, Moray and Nairn Grain Group, Tracey Agricultural and Commercial Consultants Ltd.

Balaldie Grain Group, Feasibility Study: Final Report Thomas Fleming Associates.

†This compares with a fall in the England and Wales area from 1,906,000 hectares in 1970 to the 1,846,000 hectares harvested in 1980.

Table 1B Yields (t/ha)

	1977	1978	1979
Highland Region	4.57	3.76	3.80
Grampian Region	4.74	3.78	3.97

Source: DAFS Statistics

This expansion in barley may be attributed to several factors:

1. A sharp rise in the price of cereals, originating in the world shortages of 1972 to 1974 and sustained by increases in the EEC intervention price. The average price of barley rose from £24 per tonne in 1971/72 to £80 per tonne in 1976/77, before easing back slightly. Although trading at around £86 per tonne in August 1980, seasonal peaks in the last two years have pushed barley to £100. The intervention price for August 1980 was £96.44 and it will reach a peak of £106.85 in May 1981.
2. There has been a significant uptake of Scottish barley for malting and, since 1973, part of this barley has come from areas not traditionally associated with the malting trade *eg* Banff and Aberdeenshire. This development has been assisted by the expansion of local firms like Moray Firth Maltings and the establishment of specialist groups *eg* Mintlaw and Black Isle Grain Groups.
3. Exports have formed an important, if sharply fluctuating, outlet for the region's barley, as Table 2 shows.

Table 2 Exports of barley out of North of Scotland ports*

	Aberdeen	Peterhead	Fraserburgh	Macduff	Inverness	Total
1972/73	603	6,142	3,324	1,804	1,756	13,629
1973/74	3,544	18,593	6,571	3,209	7,806	39,723
1974/75	6,359	34,563	28,706	18,704	9,431	97,763
1975/76	1,179	72,698	51,191	22,646	18,098	165,812
1976/77	–	5,992	2,021	–	12,864	20,877
1977/78	–	90,152	50,140	7,397	24,540	172,229
1978/79	–	42,979	25,237	13,924	5,416	87,556
1979/80	–	89,800	9,716	5,322	21,061	125,899

Note *Includes malting barley but does not include shipments to Northern Ireland.

Source: HM Customs and Excise.

These exports have not only removed considerable amounts of barley from the region but also helped to sustain prices in the April/May period. The availability of EEC export refunds has been an important, if unpredictable, element in this trade.

4. Underlying these first three factors has been the recurrence of shortages creating a demand for Scottish barleys. For example, Poland has purchased significant amounts of feed barley over the last three years, whilst Germany and Belgium have been important markets for malting barley.

If these forces have created the environment for expansion in the 1970s there are now aspects of the marketing situation which must cause concern for the cereal grower. These are:

(i) The period of rapid price increase is over. Full transition to EEC price levels was achieved in 1978 and budgetary constraints will limit future annual price increases to around five per cent. The current buoyancy of the pound limits the potential for green pound devaluations. Also, unlike the early 1970s, UK prices are well above and isolated from all but the most dramatic rise in world prices.

As a result, at least until the mid 1980s, annual inflation will outstrip the increase in institutional prices.

(ii) The current recession, high interest rates and the switch from whisky to other spirits has caused a slump in the demand for malt. In the current season both the demand and premium for malting barley are down by about 30 per cent. For example Moray Firth Maltings were reported to have cut-back their 1980/81 contract buying programme by 20 per cent.

With the opening of the two new maltings in the north-east, this type of cut-back was the last development farmers in the area were expecting. It is not clear how long this market will be depressed, but it does illustrate the risks of growing barley in an area which is marginal for malting quality.

(iii) Given the potential of the North of Scotland to produce well in excess of 500,000 tonnes of barley, the cut-back in livestock numbers, the depressed demand for malting barley and the cost of road transport south, the export market will be critical in lifting prices above intervention levels. However, with Scottish prices well above world levels, it is only feasible to export to non-EEC destinations with the help of export restitutions. This fact introduces an element into the situation which it is impossible to anticipate from purely market considerations. In addition Poland, a major market for Scottish barley in recent years, is experiencing a political and economic upheaval, and can only purchase UK grain with the help of UK credit lines—a further uncertainty outside normal market experience.

Within the Community, France is our major competitor and is much better situated to sell in bulk to the Mediterranean countries.

In summary, the 1970s presented cereal growers with every encouragement to expand output. Substantial increases in institutional support prices were generally more than matched by strong markets and buoyant prices. Important developments in the malting and export markets more than compensated for any decline in the local feed market and rising costs were amply covered.

In the 1980s cereal marketing looks like being far more problematic with at least a temporary set-back in the malting market and exports increasingly dependent upon subsidies and credit lines. With the buoyancy in the cereal market, the implications for feed requirements of the reduction in livestock numbers in the late 1970s were largely ignored. If the export market does fail the full consequences of this reduction in local demand will now be felt.

Finally, it seems probable that increases in institutional prices will fail to cover the inflation in input costs until at least the mid 1980s.

2. THE GROUP MARKETING OF GRAIN

2.1 INTRODUCTION

This section is directed specifically at the marketing of grain through a group *without* centralised storage. It is assumed, however, that this group will have at its disposal certain facilities—particularly for drying, dressing and storage. Without these facilities it is inconceivable that grain can be *marketed* on a group basis, particularly in the North of Scotland where moisture and bushel weight can vary so much from farm to farm.

As a result of this assumption much of the initial discussion is equally applicable to groups with or without centralised storage. The basic requirements of a group operating without centralised storage are considered in section 2.3.

2.2 THE BENEFITS OF GROUP MARKETING

Given the problems outlined in section 1.2, group marketing of grain offers the following advantages to the farmer:

1. The bulking of grain into larger parcels of specific quality, means that sales can be made direct to customers not normally available to the individual farmer *eg* international shippers and Continental maltsters. However this may well require *minimum* quantities of 600—1,000 tonnes to fill boats.
2. A group should gain better utilisation of existing facilities, and the ability to dress grain to meet specific requirements *eg* intervention standards, futures or export contracts. This ability reduces the risk of rejections and arbitration claims and maximises the market potential of grain by fitting it to the appropriate market.
3. A managed programme of sales and pool pricing reduces the risk to the individual of seasonal price fluctuations.
4. By employing either their own manager or marketing agent, group members would hope to obtain better market information and take fuller advantage of market opportunities. This agent might be a co-operative or private company.
5. Finally, bulking of grain and pool pricing spreads the risk of a bad debt across the group.

An attempt to quantify the net benefits is made below by isolating the premia for:

- malting rather than feed barley at harvest
- presenting dried feed barley of good bushel weight
- being able to sell direct to shippers *etc*, and
- the premium from staged marketing

(i) The premium for natural malting barley.

The following premia have been calculated as an average of prices quoted in the HGCA Weekly Bulletin during the harvest periods *ie* mid-August to mid-September, for delivery within 28 days.

Average malting premium over feed (£/tonne)	
1977	4.15
1978	7.03
1979	4.96
1980	4.93

These prices represent the average value of the premium. To obtain this premium, grain must meet the maltsters requirements for nitrogen, screenings *etc* and usually be less than 20 per cent moisture. Farmers growing barley with malting potential would be able to meet these requirements without a group. The advantage that a group might offer is to bulk and grade otherwise substandard grain into malting barley plus feed barley screenings. However it is questionable whether this barley would ever make more than the lowest malting price—at an average premium of £2.80 in 1979. Not only would this premium have to cover the extra handling, drying and dressing charges, but also there is the added risk of handling malting barley in bulk with relatively unsophisticated equipment (see Section 2.3). In 1979 these charges were approximately £3.00 for grain at 19—20 per cent, which exceeds the average premium quoted above.

(ii) The premium for presenting dried feed barley of good bushel weight.

For a number of years the trade have complained that there were insufficient quality premia in the market. The advent of substantial intervention purchases, with a very weak physical market, has now created these premia.

A worked example is presented below:

September 1980 Intervention Price		£97.60
Premium for grain at 14.5 per cent		.96
Total Intervention Price (delivered)		£98.56
Drying dressing and handling charges to bring grain to above standards*	6.00	
Transport charges	3.50	
	£9.50	
		£89.06

*It is assumed that the grain is dried from 19—20 per cent moisture.

The farmer's price for intervention quality grain is therefore around £89.00 per tonne, compared with the then current open market quotations of £86.00. On an individual basis, farmers might either not be able to meet these quality standards or be unable to test grain rigorously enough. In this situation group marketing, with the necessary facilities, would offer an advantage—*although requiring discipline and centralised control over all testing, dressing and documentation.* The same facilities could also produce grain for futures trading if this were an attractive market.

(iii) The premium for direct sales.

As a necessary precondition to direct sales it is assumed that the group is able to present grain of the requisite standards. The costs of doing this are covered in (i) above. The premium from direct sales to shippers might result from:

(a) Missing out the local merchant

(b) Filling a complete boat

The premium to be expected from (a) is probably in the region of 80p to £1.00 per tonne. However it should be noted that not only is this margin relatively small, it is also a reward for market knowledge. If the group does not "buy" this information from a merchant it will have to be obtained in other ways.

The premium to be expected from (b) could be 75p per tonne on a 2,400 tonne cargo. However it must be pointed out that a considerable pool of grain is necessary to be able to guarantee such large tonnages. Also storage and handling facilities have to be well organised to ensure speedy loading.

The group may also benefit from direct sales to Continental maltsters. However they would still incur the problems of handling malting barley without truly centralised facilities (see (i) above). Also these buyers tend to accept higher levels of nitrogen rather than paying a premium over the local price.

Finally, groups entering into direct sales of this type open themselves up to arbitration proceedings if they fail to meet contract standards. Unlike most UK merchants, these international buyers are not slow to exercise their full legal claims. *Again the implication is the need for rigorous centralised control.*

(iv) The premium from staged marketing.

Table 3 shows the costs and premium for storing barley in the last three years.

Table 3 The costs and premia for storing barley

	Malting barley (4 months)				Feed barley (6 months)			
Year	Storage costs**	Conditioning costs††	Total costs	Price premium*	Storage costs**	Conditioning costs††	Total costs	Price premium†
1977/78	4.60	2.00	6.60	9.00	6.70	2.00	8.70	9.00
1978/79	4.70	2.50	7.20	5.60	6.80	2.50	9.30	17.00
1979/80	8.40	3.50	11.90	9.20	12.10	3.50	15.60	7.00
1980/81	8.00	4.25	12.25	12.90	11.65	4.25	15.90	9.40

Note:

*Premium shown by HGCA quoted prices for delivery at the end of January compared to September. Prices quoted in mid-September and mid-December.

†Premium shown by HGCA quoted prices for delivery at the end of March compared to September. Prices quoted mid-September and mid-March.

**The key assumptions for these calculations are:

Costs per tonne

		1977/78 (12%)	1978/79 (10%)	1979/80 (20%)	1980/81 (18.5%)
Interest charges per month	Malting	70p	68p	£1.50	£1.40
	Feed	67p	63p	£1.42	£1.34
Imputed opportunity cost of storage per month		45p	50p	60p	60p
Total cost for storage	Malt (4 months)	£4.60	£4.72	£8.40	£8.00
	Feed (6 months)	£6.72	£6.78	£12.12	£11.64

††It is assumed that the barley is at 16 per cent in September and a charge is imputed for drying by a further 2 per cent and for screening.

Only in 1977/78 is there a clear premium over costs for storing malting barley for January delivery. In 1978/79 and 1979/80 there is a sizeable loss and a marginal profit in 1980/81.

For feeding barley, 1977/78 was marginally favourable and the premium did in fact improve sharply in April. 1978/79 provided a net benefit of over £7.70 per tonne, whilst 1979/80 would have involved a net loss of £8.60 per tonne and 1980/81 a net loss of £6.50 per tonne. Therefore the benefit to be gained from storage is not clear cut and very much depends upon local supply conditions in April and May. In turn, these conditions are affected by the level of exports. In 1978/79 the aggressive export restitution campaign reduced availability and boosted prices, whilst in 1979/80 prices collapsed in the absence of substantial exports.

During the past two years it has not paid to store grain of intervention standard for later sale. The interest charges of around £1.40 per tonne per month have to be compared with the monthly increment in the intervention price of £1.16. In the crop year 1981/82 the return from storage may be more favourable. Interest charges have fallen to £1.15 per tonne per month on grain worth £95 per tonne at harvest, with the possibility of a further reduction to around £1 per tonne by December 1981. With the new monthly increment in intervention prices of £1.39 per tonne the profitability of holding grain will depend upon the imputed cost of storage.

To sum up the benefits, group marketing of grain offers the benefits of bulking, grading and orderly marketing into specific markets. The individual farmer thus hopes to optimise the price received for his different grades of grain. Scale of operation helps to reduce overhead costs and hopefully gives him access to improved market information and direct sales to consumers. However it has proved extremely difficult to show quantifiable net benefits which either appear on an annual basis or which he could not obtain by acting as an individual. The one exception is sales to intervention and, given the incipient surplus situation in the Community, *the importance of this activity should not be underestimated.*

2.3 REQUIREMENTS FOR SUCCESSFUL GROUP OPERATION

Even if it is assumed that a group can operate a successful marketing policy without purpose-built centralised facilities, the following basic requirements seem necessary:

- Adequate conditioning and storage facilities
- Centralised control
- Marketing expertise
- Adequate committed tonnage

1. Adequate conditioning and storage facilities

   Even if centralised facilities are ruled out, the group does require access to grain conditioning and storage. Without the ability to condition and grade grain, the group will have no facility to bulk up samples from separate farms or carry through a proper marketing policy *eg* sales to intervention, export or futures. Also conditioning and storage should take place at the same location to avoid double handling. Ideally storage should be concentrated in as few locations as possible to ease control problems.

   In terms of the study it was hoped to isolate farms with storage capacity well in excess of requirements, with matching drying and cleaning facilities. These farms would form the nuclei into which surrounding farmers would take their own grain. The grain would be sold out of the central farm store. This use of farm transport and single handling was considered necessary if handling

and transport costs were not to become prohibitive. It was hoped that stores of 500 plus tonnes would be found, though actual spare capacity was the critical factor. If a proliferation of small stores was to be avoided the ability to store at least an extra 200 tonnes seemed desirable.

2. Centralised control

If the group were to function properly as a marketing force then it would need full control over committed tonnage. Grain received from members would have to be weighed*, sampled and then dressed and allocated to pools accordingly. Payment should be based on the pool price less dressing and drying costs on the original sample. Whilst storage would be in separate locations on members farms these stores would be given over solely to the group's use, unless grain could be totally separated *eg* internal bins. Handling in and handling out of the grain and day-to-day store management may well be carried out by farm staff, but overall control would rest with the group. All trading and administration would be carried out centrally.

On this basis, it was hoped to find an acceptance amongst potential members of the concept of group discipline. Also those with storage facilities should be prepared to give these over for group use and control. Obviously the group would have to pay an economic rent for the use of all facilities and farm labour.

3. Marketing expertise

To gain the maximum benefit from collective action, improved and unified marketing decisions would have to be taken. Four alternatives were possible:

– A committee of members

– A member appointed by the group and answerable to a committee

– A professional manager, or

– A part-time agent acting on behalf of the group

Whilst an active committee was considered important for the overall direction of the group, it seems unlikely that this was the best way of taking day-to-day marketing decisions. The second option, however, did seem a real possibility if someone of the right calibre and commitment should emerge from the group. The employment of a professional manager offered an obvious answer but also considerable costs *eg*

Salary	£8,000
Office expenses	3,000
Secretarial help	1,000
Car	2,000
	£14,000

These are estimated costs but discussions with trade contacts suggest that they are realistic. Annual costs of £14,000–£15,000 imply a necessary throughput of at least 15,000 tonnes.

The fourth option would give the benefit of professional services at a lower cost. However, even here discussions with trade contacts suggested an annual tonnage in excess of 4,000 tonnes was required before it became worthwhile.

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*Access to a weighbridge for grain "in" or "out" would be important.

4. Adequate committed tonnage

The costs outlined above have underlined the importance of committed tonnage, particularly when employing professional staff. Even if the group were to be totally managed by its members, a committed tonnage in excess of 4,000 tonnes seemed desirable. The reasons for this are:

(i) The need for flexibility in the marketing policy *ie* to be in the market over a reasonable period of time with sizeable parcels of grain—a point of particular value if the export market is considered.

(ii) To spread risk.

(iii) To spread overheads.

(iv) To build up contacts and create a "presence" in the market.

A minimum size of 4,000 tonnes was also supported by discussions with the trade and, indeed, some suggested 8,000—10,000 tonnes.

However, it should be noted that if the group were simply to limit itself to intervention acitivities then a much smaller size would be acceptable, say 500—1,000 tonnes. However in this case it would cease to be a truly marketing group.

3. SUMMARY OF RESULTS AND IMPLICATIONS

3.1 INTRODUCTION

Section 2.3 set out the following basic requirements for successful group operation:

1. Adequate conditioning and storage facilities
2. Centralised control
3. Marketing expertise
4. Adequate committed tonnage

This chapter will set the survey results for one of the areas against these requirements, and assess the feasibility of establishing a group. The objective is not to give detailed survey information but to present an example of the type of exercise which those interested in forming similar groups should carry through. Essentially the stages in assessing the feasibility of operating a group are:

(i) Identify all potential members in the area and the location of their farms.

(ii) Obtain accurate figures for their total current and estimated future cereal production, including types of cereal and amount they are prepared to commit to the group.

(iii) Assess available on-farm facilities with regard to screening, drying and storage. It is important to establish how much of these facilities would be available for group use.

(iv) Determine willingness to accept group discipline and decisions over grain committed to the group.

(v) Determine willingness to contribute towards set-up and operating costs.

Estimates of the probable costs of the group will also be assessed. Finally, general conclusions for group operation will be drawn.

3.2 EXAMPLE AREA—BANFF, MORAY AND NAIRN

Of the total barley production of over 11,500 tonnes on the 25 farms surveyed, in excess of 8,000 tonnes (70 per cent) was sold off the farm of origin. 4,600 tonnes (57 per cent) of this barley was normally sold for malting purposes. In terms of total sales, therefore, this area meets the basic requirements of 4,000 tonnes set in Section 2.3.

However the following important qualifications must be introduced for *malting barley:*

1. Of the 4,600 tonnes of malting barley, only 2,300 tonnes (50 per cent) was available for commitment to the group.
2. Only 550 tonnes of the committed barley could be conditioned and stored on the farm of origin.
3. The remaining 1,750 tonnes is currently sold off the combine as unconditioned barley.

The following conclusions are drawn for malting barley:

(i) At 2,300 tonnes, the tonnage available for a specific malting barley group is well below the target of 4,000 tonnes.

(ii) The existing system of premium payments for natural barley contracted through merchants/co-operatives is well established. Interviewees were generally well satisfied with the arrangements, and hoped that the advent of new maltsters in the area would improve their premiums. Given the quantity of grain available it would be difficult for a group to improve upon the premium available to individual members.

(iii) If an extra premium were available it would only be payable for bulked grain sorted into specific levels of nitrogen. The bulking and holding of wet malting barley, even for short periods, would be an extremely hazardous and unwise undertaking.

(iv) Several farmers did dry and store their own malting barley. However to undertake this responsibility for a large group is a difficult and costly proposition. This view was supported by a number of the interviewees.

(v) Finally, Section 2.2 showed that the economics of the long term storage of malting barley in north east Scotland were highly questionable.

As a result of these findings, the setting up of a specialist malting barley group in the Banff, Moray, Nairn area was not recommended.

In terms of *feed barley*, farmers in the survey sold 3,535 tonnes of feed barley—of which there was a potential commitment of 3,375 tonnes (95 per cent). All of this barley could be stored on group farms. At 3,375 tonnes the amount of feed barley available is below the target of 4,000 tonnes. However the following observations, vis a vis malting barley, can be made:

1. This tonnage represents 95 per cent of the feed barley grown on the farms.
2. The level of concern over the future marketing of feed barley was much higher amongst interviewees.
3. There are fewer technical and managerial problems over bulking and storing feed barley.
4. Existing on farm storage was adequate for this tonnage, though screening facilities were not generally available.
5. One farm had a large store of over 2,000 tonnes available capacity, combined with the necessary conditioning facilities. This store would provide an ideal focal point, as described in Section 2.3.1. In addition, another store at the western edge of the area had 5,000 tonnes of space but no conditioning facilities.

Therefore there are grounds for suggesting that a feed barley group might be established in the area. For, although the committed tonnage was below the minimum target set, there existed a general concern amongst interviewees over the future of the feed grain market. If it is assumed that these views were representative of those generally held in the area then it can be assumed that a feed barley group might well attract wider support.

However, it must be noted that:

(i) *If* a premium can be gained through group marketing of feed barley it will often be less than £1 per tonne.

(ii) To meet the specifications the export market requires *centralised control* over conditioning and storage.

(iii) Centralised control is also necessary for the intervention market.

(iv) Potential group members are dispersed between Buckie and Nairn, whilst the one major storage centre is at Elgin. Therefore, if prohibitive transport and handling costs are not to be incurred, other centres with both *conditioning* and storage facilities need to be established. Weighbridges, which are accessible to the group, also need to be located.

3.3 THE IMPLEMENTATION AND ESTIMATED COSTS OF THE BANFF, MORAY AND NAIRN GROUP

The geographical distribution of the existing facilities is shown in Appendix 1. Given this distribution, the following method of operation is suggested. The group should consider renting the large store *with* conditioning equipment for at least six months every year to form a focal point. If the difficulty of the lack of conditioning equipment at the store near Nairn could be overcome, then this might also form another important storage centre. Farmers in the group would then have a number of options:

1. Fully screen and store dry grain on their own farm. *Grain would have to be conditioned to minimum specifications set by the group.*
2. Dry and store unscreened grain on their own farm. If grain met the group's minimum dressing specifications then it could either be:

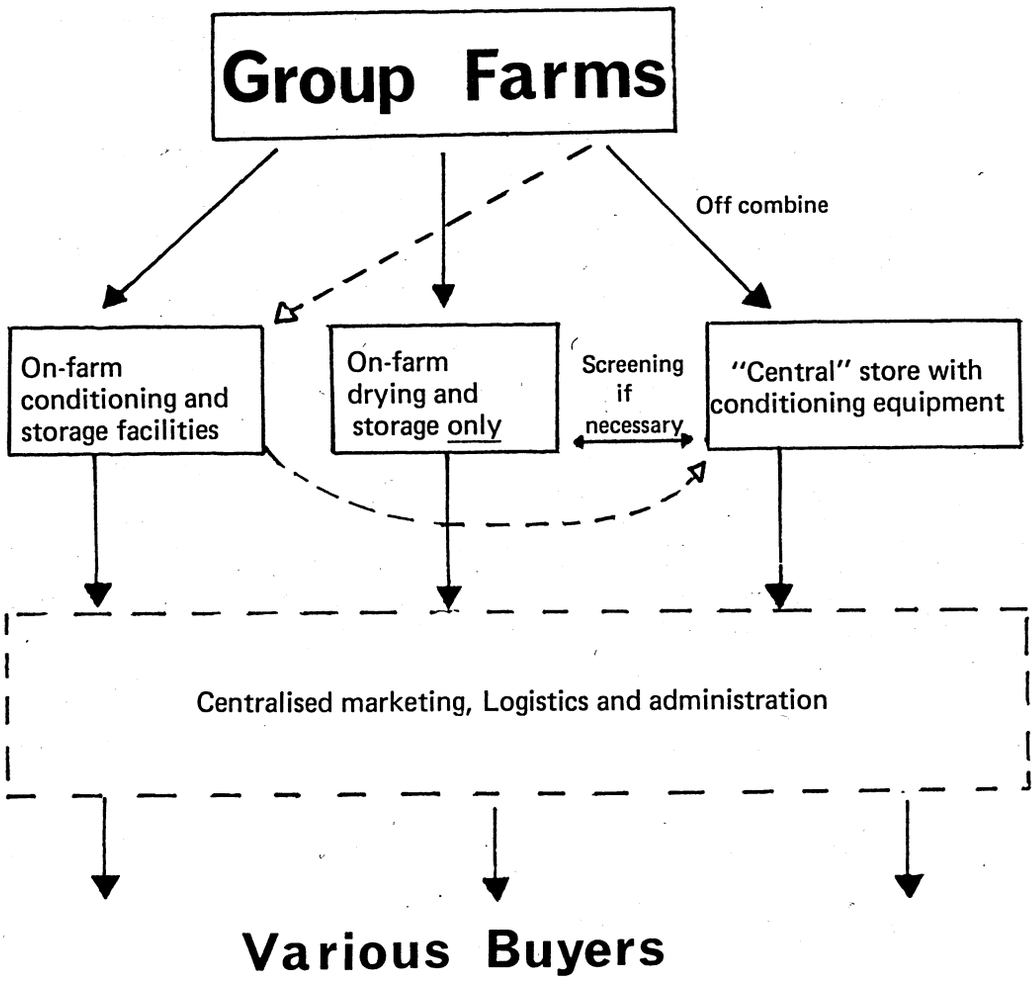
   (i) Marketed direct off the farm.

   (ii) Brought to the central store for bulking.

   If the grain required dressing, this could either be carried out on the farm of origin using a mobile dresser, or brought to the central store.

   (iii) Send grain direct off the combine, either to the main store or to the nearest farm store *with* conditioning equipment. Farmers exercising this option would be charged for screening, drying and storage. Income (less costs) from this service would be used to offset the group rental charges.

These options are shown below.



Individual members would be responsible for all transport and handling costs from combine to store, but thereafter these would be charged on a group basis. As far as possible grain meeting group specifications would be moved direct from on-farm stores to customers. If the group wished to move this grain to the central store for bulking up, then this cost would have to be met on a group basis. All quality standards, tests, marketing and administration would be handled centrally.

Individual group members would be responsible for all costs of bringing their grain to the minimum standards set by the group. These standards might be changed slightly from year to year but would generally represent the current standards in some major market *eg* export. If the group wished to dress grain beyond these standards for some specific market (*eg* intervention) then these costs would be met on a group basis.

At this stage it is difficult to present accurate costings since many issues remain to be resolved *eg* location and rent of extra facilities and possible use of mobile dressers. However the following estimates are presented as a guide. These costings are prepared on the basis of 3,500 tonnes of feed barley.

		Total cost
Adminstration[1]	80p/tonne	£2,800
Selling costs[1]	80p/tonne	2,800
Cost of additional dressing[2]	£2.50/tonne	8,750
Group transport[3]	£3.50/tonne	12,250
Rental of additional facilities[4]		3,600
		£30,200

Notes:

1. Covers office expenses, secretarial help, and agent's fees. If tonnage was increased then administration costs per tonne would certainly fall. Selling costs might also be reduced.
2. This cost might vary considerably from year to year and according to the chosen market. It represents the amount charged to the group for reaching specific dressing/drying requirements. In addition, individual members would probably face a charge of £6–£10 per tonne* to bring grain to the minimum standards set by the group.
3. Again a difficult costing to fix since some grain would be sold ex-store, export grain is usually sold FOB and grain for intervention receives a partial subsidy. This cost assumes that transport will average out at 30 miles.
4. Would depend upon negotiations between the group and interested parties.

A total cost of £30,200 is equivalent to a cost per tonne of £8.63. This cost would have to be subtracted from any selling price quoted to the group to give a net farm price. To give some measure of the net economic benefit to be expected from the group this cost per tonne is subtracted from current FOB and intervention prices to give an ex-store price.

Export market

October 1980 FOB	£95.00
Group costs	- 8.63
Ex store	£86.97

*Assuming an initial moisture content of circa 20 per cent and a reasonable bushel weight of circa 62 kilos per hectolitre.

This price ex-store is similar to October 1980 quotations for grain ex-farm. In both cases the interest charges for carrying grain into October would have to be taken into account. It is possible, however, that the group might increase its return by:

1. Reducing group operating costs.
2. Gaining a premium of up to 75p per tonne for shipping a large tonnage (Section 2.2).

Intervention

October intervention	£98.75
Moisture premium	0.96
	£99.71
Group costs	- 8.63
Ex-store	£91.08

Again this price is similar to prices being quoted by local merchants for grain of intervention standard for October delivery, but it is well above prices being offered for unconditioned barley.

In conclusion, this section has established a possible method of operation for a group in the Banff, Moray and Nairn area using existing on-farm facilities. The costs of running the group are substantial but these should be covered by the returns from the market. However comparison of the ex-store price with current quotations for ex-farm grain show that members can probably expect only a marginal improvement on the market price. The group may give extra benefit to members by:

1. Gaining a premium for larger parcels of export grain.
2. Reducing group running costs—this will probably be achieved most effectively by spreading overheads over a greater tonnage.
3. Providing facilities to enable a greater proportion of members' grain to reach intervention standards.
4. Through improved market information taking the best market opportunities and creating a presence in the market.

To conclude, the viability of a grain group in the Banff, Moray, Nairn area appears to be marginal on economic grounds. The premiums in the market are small, and the existing market participants appear to carry out their market activities at least as cost-effectively as the group could hope to manage. However, whilst group marketing will not provide an easy or quick route to improved market returns it would, if run properly, enable members to improve their presentation of grain. If intervention is to remain a semi-permanent feature of the feed grain market then this ability to dress and bulk grain is an attractive feature of group marketing. By itself it may well provide sufficient justification for group membership.

3.4 GENERAL IMPLICATIONS

Marketing conditions during the 1970s encouraged a rapid expansion in the production of cereals, particularly barley. This expansion was achieved by both an expansion of area sown and by improved yields. The buoyant markets of the 1970s have now disappeared because:

1. The production of feed grains far exceeds domestic demand.
2. The recession is affecting the demand for malting barley.
3. The market is increasingly dependent upon institutional support in the form of export subsidies and intervention. In addition to the uncertainty introduced by this institutionalisation of the market, concern is being expressed over the ability of the EEC funds to support the market adequately.

It is for these reasons that farmers are seeking ways to improve their marketing of grain. Group marketing of grain is suggested as one solution, and offers the following advantages:

(i) By the careful screening and then bulking of grain the group may gain access to markets not available to the individual farmer *eg* direct sales to shippers.

(ii) Careful screening and grading of grain for specific markets not only removes substandard grain from the sample, but optimises the total revenue from grain sales. For example, in September 1980 intervention grain was probably worth around £91 per tonne ex-farm, export grain £88 per tonne and f.a.q. feed grain £86 per tonne.

(iii) By gaining access to improved market information, the group members' understanding of the market would improve as would their returns.

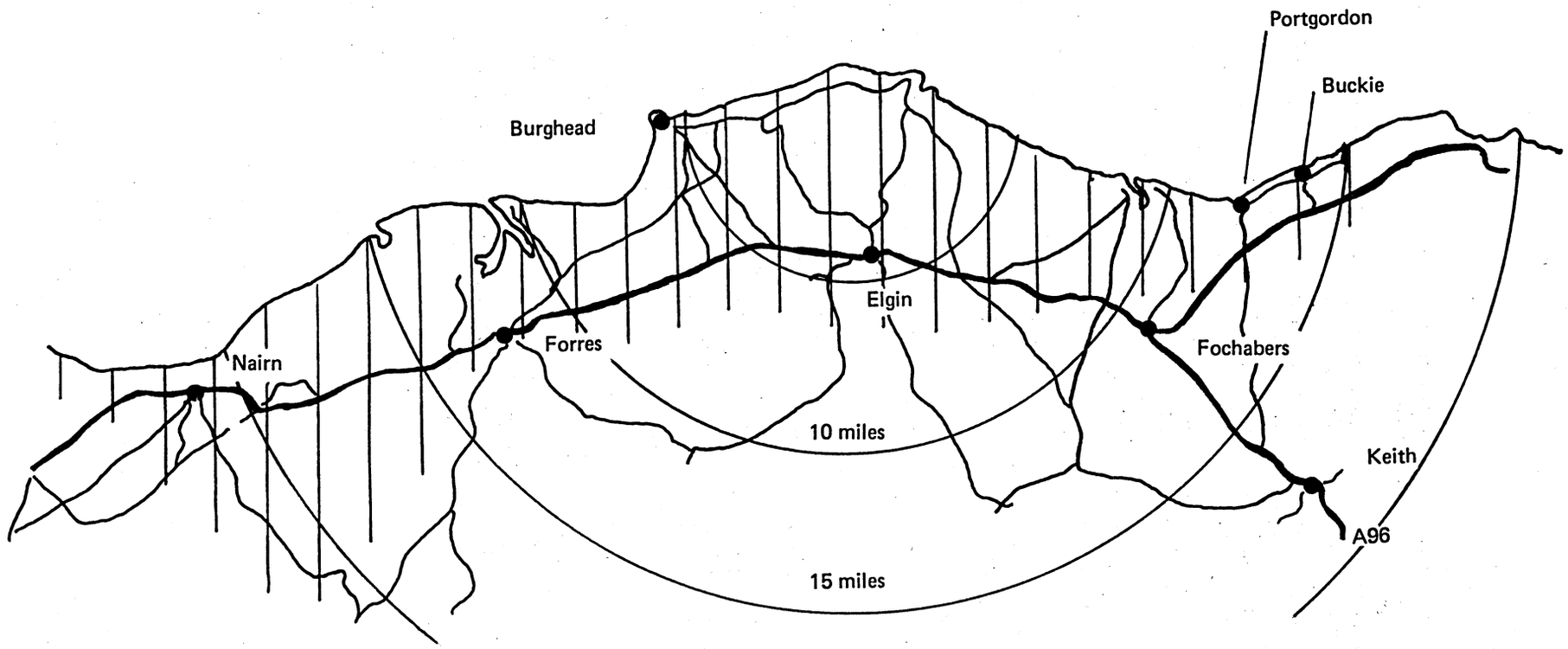
However, as Section 2.2 showed, the expected premiums from group activities are not only relatively small but vary considerably from year to year. Also these premiums may be more than offset by the costs of marketing small tonnages. Therefore, given the probable continuance of a surplus situation in feed grains, the benefits of group membership may have to be considered more in terms of the penalties avoided from selling substandard grain than in the premium to be gained over the average market price. To gain these benefits it is suggested that:

1. There is a minimum committed pool of 4,000 tonnes of grain.
2. There is a need for at least one major storage centre, with not only adequate storage but the facilities to properly condition grain.

   Given the present attractiveness of intervention, but the low monthly increment for storage, screening facilities are as important as storage space. If a group operates over a wide geographical area then several centres are probably ideal.
3. Marketing must be in the hands of a single individual. A group committee will obviously give overall direction, but cannot act on a day-to-day basis to take advantage of sudden market opportunities. It is probable that the person marketing the grain will be an outside agent acting on a fee basis. It is unlikely that marketing costs will be less than £1 per tonne. Total costs may well be in the region of £8 per tonne.

In conclusion, it must be noted there is one element of group grain marketing which, since it is not directly related to actual marketing was not part of the remit of the study. This involves the purchase of requisites on a group basis. Any group selling in excess of 4,000 tonnes of grain could obviously exert considerable pressure as a purchasing group. This pressure could be used to affect the sale price of its barley. The implications of this type of behaviour for existing farmer/co-operative and farmer/marchant relationships are far reaching. It is probable that if this type of policy were adopted it would produce considerable conflict not only of loyalties but of interests within the group.

Appendix 1 Location of on-farm storage facilities in Banff/Moray/Nairn



Key

Area in which farm facilities were found.

Concentric lines mark distance from major storage point.