

Marketing Channels & Marketing Practices: A Pilot Survey

Commissioned by the Economics (Farm Business) Division,
Ministry of Agriculture, Fisheries and Food

Prof. David Harvey

Charles Scott

UNIVERSITY OF
NEWCASTLE



Northern Region Commissioned Work Programme,
Dept. Agricultural Economics & Food Marketing,
The University of Newcastle upon Tyne,
NE1 7RU.

Tel: 0191 222 6900
Fax: 0191 222 6720

February, 1999

Acknowledgements:

This study was carried out under a research contract from the Ministry of Agriculture, Fisheries and Food, under the direction of Professor David Harvey. Preliminary work on design and testing the questionnaire was done by Dr. Fraser McLeay, now of Boulder, Colorado, USA. The authors gratefully acknowledge the help and assistance of the Newcastle Investigational Officers and staff of the Northern Region Commissioned Work Programme, and most especially the farmers who took both time and trouble to complete and return the questionnaire in a difficult and less than prosperous time.

Marketing Channels & Marketing Practices Pilot Survey

| CONTENTS | | Page: |
|-----------------------------------------------------------------------------------|--|--------------|
| 1. Introduction, Terms of Reference & Project Specification | | 1 |
| Background to the study | | 1 |
| Terms of Reference | | 1 |
| Research Objectives | | 2 |
| Research Method and Conduct | | 2 |
| Project Timetable & Mechanics | | 3 |
| 2. The Pilot Survey: Results | | 5 |
| I. Overview of Survey Results | | 5 |
| Responding sample compared with the FBS population | | 5 |
| General Farmer characteristics and Marketing Preferences | | 6 |
| II. Analysis of MC&P Survey results | | 8 |
| a) Recovery of a clean sample | | 8 |
| b) Adjustments to livestock sales data | | 9 |
| c) Farmers' attitudes to management: theoretical considerations | | 9 |
| d) Analysis of attitudes to management | | 10 |
| <i>Caveat</i> on the meaning of the classification | | 12 |
| Interpretation of the management factor analysis | | 13 |
| e) Marketing attitudes | | 13 |
| f) Marketing Performance | | 14 |
| 3. Discussion and Implications of the Pilot Survey | | 18 |
| a) General Considerations | | 18 |
| b) Specific discussion and conclusions from the pilot survey | | 19 |
| Indicative costs and resources for a national survey | | 21 |
| 4. Conclusions | | 22 |
| Appendices | | |
| I Pilot Questionnaire and Summarised Results | | 25 |
| II Accompanying Letter | | 35 |
| III Statistical Analysis details | | 36 |
| IV Draft National Survey Questionnaire | | 49 |
| Tables, Boxes & Figures in main text | | |
| Table 1. Comparison of means and variance between respondents and non respondents | | 5 |
| Box 1. Correlations between perceptions of performance and average responses | | 7 |
| Table 2. Comparison of means and variance between 'clean' & total MC&P samples | | 9 |
| Box 2. Factor Analysis of responses to question 3.1 - management statements | | 11 |
| Table 3. Factor Analysis clusters of management statement responses | | 12 |
| Figure 1. Distribution of livestock revenues per livestock unit | | 14 |
| Figure 2. Distribution of livestock costs per unit of sales | | 15 |
| Figure 3. Distribution of livestock margins per unit of sales | | 15 |
| Box 3. Determinants of livestock costs per livestock unit sold | | 17 |

INTRODUCTION, TERMS OF REFERENCE & PROJECT SPECIFICATION

Background

The future course of government policy for agriculture in the UK, as part of the European Union, is now clearly in the direction of less product-related support. Commercial farmers will be expected to adapt and adjust their businesses to become more competitive.

Future farming prosperity will increasingly rely on two key aspects of farm business management: (i) producing according to specific customer requirements; (ii) adding value within the farm gate or business. This Special Study sought to explore both present practices and current attitudes to these important elements of farm business management. In particular, the primary foci were intended to be : i) the differential revenues and costs associated with different marketing channels chosen by producers; ii) different attitudes and perceptions of marketing channel alternatives. These data were considered necessary to analyse and understand the possible future development of the food marketing chain and to identify potential bottlenecks and constraints on this development.

Agenda 2000 proposals by the Commission of the European Communities (1997, 1998) indicates that a major future direction of public support towards agriculture will be for development and adjustment assistance. Information on the need for assistance and development support for marketing activities is expected to be required for such a change in policy and support emphasis.

Previous special studies of enterprises and of marketing have concentrated on the costs of the production and marketing activities rather than on the choice of marketing channels. The purpose of this study was to explore the feasibility of collecting useful information from farmers on their choices of marketing outlets and on the possible constraints they face in adjusting their marketing practices, as well as to explore possible relationships between achieved returns and marketing practices amongst the sample of producers.

In considering the most appropriate means and approach for the collection and analysis of this type of information, it was concluded that a pilot survey of one region and of one particular commodity group would be a reasonable and potentially fruitful first step. The Northern region was chosen as the pilot region, and the focus was decided as beef and sheep marketing. The reasons for these choices were that the Northern Region provides a reasonably-sized sample of farms for such a pilot survey, and that the marketing of beef and sheep is sufficiently complex to provide a valid test-bed for the design and implementation of a marketing channels and practice survey. A contract for the pilot marketing channels and practices survey was signed between Newcastle and the Ministry on 9th. March, 1998.

Terms of Reference

To undertake a pilot study to explore the feasibility of mounting a national special study of farmers' marketing channels and marketing practices for beef and sheep enterprises.

Marketing Channels & Marketing Practices Pilot Survey

Research Objectives

1. To develop a postal type questionnaire to collect information on marketing channels and practices for beef and sheep enterprises;
2. to test the questionnaire by means of a survey of producers;
3. to provide various analyses using the data collected in the survey;
4. to review and refine the objectives for a study to be conducted nationally as part of the Commissioned Work Programme;
5. to provide information on a suitable sampling and data collection framework for a full special study which can be used to advise a Special Study Working Party;
6. to provide a structured estimate of the resource costs of undertaking a national special study.

Research Method and Conduct

The project was divided into two parts. Part 1 consisted of the design and pre-testing of a questionnaire suitable for postal delivery to cooperators and independent return of the completed survey. This development needed to take account of current practices and of possible alternatives as perceived by existing producers, so that the questionnaire covered the major factors and issues and proved intelligible to the majority of cooperators. The draft questionnaire was provided to the Ministry for their comment, suggestions and approval. Approval of the final pilot survey questionnaire was obtained from the government Survey Control Unit on March 9th, 1998.

The principal purpose of the questionnaire was defined in the contract to be to collect information on the following:

- marketing channels used by beef and sheep producers and the reasons for choosing a particular marketing channel;
- farmers' perceptions and information sources on customer requirements associated with marketing channels (including but not restricted to quality assurance schemes); including information on difficulties experienced with existing information flows and potential for assistance with information provision;
- farmers' estimates of costs and benefits associated with marketing activities and alternatives, including additional production costs associated with meeting particular market specifications;
- information on future plans and possibilities being considered and key factors likely to determine future developments.

Part 2 of the project consisted of distribution of the postal questionnaire, follow-up telephone contact to encourage completion and return, collection and coding of questionnaire information and analysis of results. The surveyed population was determined as the Farm Business Survey cooperators of the Northern Region. This population was considered to be appropriate since information on total marketings, receipts, and certain production and marketing costs and performance indicators are already available through the FBS main survey for these farms. Thus,

Marketing Channels & Marketing Practices Pilot Survey

restricting the questionnaire to this sample of farms would avoid unnecessary duplication of requests for information.

In addition to collecting information to inform research objectives 4, 5 and 6 above, the survey information was also intended to provide for:

- analysis of costs and benefits of different marketing channels in association with farm characteristics and conditions as well as with attitudes and knowledge base/information sources of farmers;
- analysis of apparent value-added through marketing decisions and practices - by means of comparisons between farm performance under different marketing channel usage;
- forward-looking analysis of marketing practices and development plans associated with key determining practices;
- suggestions for improved marketing practices and identification of potentially limiting factors and conditions, where farmers' marketing and management attitudes are likely to be critical pieces of information.

Project Timetable & Mechanics.

The initial work on determining the major factors and parts of the questionnaire was begun in October, 1997, led by Dr. Fraser McLeay, who had considerable experience developing and conducting similar questionnaires in New Zealand. Following a number of structured but informal focus-group type meetings between the researchers, a small number of farmers, investigational officers and knowledgeable and experienced students, a draft questionnaire was constructed for pre-testing by mid November, 1997. This draft was tested with four known and cooperative farmers on four separate occasions, with modifications and suggestions being incorporated within the draft after each occasion. The resulting draft was then subject to careful scrutiny by the investigational officer team at Newcastle, and their comments and suggestions incorporated in the final draft. According to the pre-tests, the draft questionnaire was estimated to take some 40 - 45 minutes concentrated time on the part of the farmer to complete. The final draft questionnaire was submitted to the Ministry for their comment and approval in early January, 1998, thus completing Part 1 of the project.

Following suggestions and minor modifications suggested by the Farm Business Division, and subsequently by the Survey Control Unit, the final pilot questionnaire was approved for use on March 9th., 1998.

159 questionnaires were distributed to all Northern Region FBS cooperators with beef and sheep enterprises during the remainder of the 1997/8 survey year. All questionnaires were delivered to farmers by the Investigational Officer (IO) responsible for the FBS records of the farm, with an accompanying letter (Appendix 2) explaining the reasons and rationale for the additional survey. Although some farmers chose to complete the questionnaire during the visit by the Investigational Officer, most chose to complete and return the form at a later date (as appropriate for a postal-type questionnaire).

Marketing Channels & Marketing Practices Pilot Survey

Two follow-up telephone calls or contacts were made to those cooperators who had not returned their questionnaires by the end of June and September, 1998 respectively. Nevertheless, it is apparent that the combination of: the length and complexity of the questionnaire; the particularly traumatic economic conditions facing many farmers during 1998; the timing of delivery of the questionnaire to coincide with the busier time of the farming year; all conspired to reduce the response very substantially from the target (of 80 - 90%).

The final response was 68 completed questionnaires, a 45% response rate. Although this poor response could possibly have been improved with more diligent follow-up requests, it was felt by the survey team that such pressure could easily have led to a substantial reduction in cooperation with the main Farm Business Survey, and that the consequent costs of improved survey response would not have been offset by the resulting improvement in MC&P survey results.

Processing the results of the survey began in October, 1998, though necessarily had to await completion of the main FBS survey processing and reporting to cooperators. In addition, the main researcher associated with this project - Dr. McLeay - had been offered and accepted a new post in Colorado, USA, and departed the Department in September, 1998. The consequent delay in processing and analysis resulted in an extension of the original completion date for the final draft report to February, 1999.

2. THE PILOT SURVEY - RESULTS

I. Overview of Survey Results

The final version of the questionnaire, complete with the average and ranges of responses recorded in each section, is reported in Appendix 1. The questionnaire is ten pages long (which is more typical of an interview questionnaire rather than a postal survey), and is in six sections. Section 1 (17 questions) asks for information of current farm/farmer characteristics and current marketing practices. Section 2 (3 questions) records information on marketing decisions and preferences. Section 3 (2 questions) records responses to attitudinal statements about farm management and marketing. Section 4 (3 questions) deals with the information sources used by farmers for their marketing decisions and their judgements about the quality and salience of this information for their decisions. Section 5 (5 questions) deals with farmers' estimates of the approximate costs and returns associated with their marketing practices. Section 6 (4 questions) briefly explores the future expectations about marketing channels, as well as obtaining general indication on the levels of formal qualification and education of the farmer/manager.

Responding Sample compared with the FBS 'population'

Since the response rate (45%) is well below that intended for this survey, it is important to establish the extent of the possible bias in the responding sample against the 'population' from which the information was sought. Table 1 compares some relevant summary statistics for the MC&P survey sample of 68 farms compared with the non-respondents in the FBS farm sample, comparing data obtained on each sub-sample from the main FBS data.

Table 1. Comparison of means and variance between respondents & non-respondents

| | MC&P Respondents (68) | | Non Respondents (91) | |
|--------------------------------------|-----------------------|--------|----------------------|--------|
| | Mean | SD | Mean | SD |
| Total sales (LSUs) | 99 | 104 | 82 | 77 |
| Fatstock sales per total sales (LSU) | 0.54 | 0.34 | 0.51 | 0.35 |
| Breeding stock sales per total sales | 0.17 | 0.19 | 0.19 | 0.19 |
| Cattle sales as ratio of total (LSU) | 0.507 | 0.307 | 0.468 | 0.295 |
| Revenues per LSU (£/LSU) | 662 | 104 | 686 | 146 |
| Total L'stack costs per LSU (£/LSU) | 2662 | 12,470 | 2697 | 18,273 |

These comparisons do not suggest that the poor response rate has resulted in any noticeable bias in the general characteristics of the responding farms versus the non-respondents. Thus it is safe to assume that the Marketing Channels and Practice survey sample is a reasonable reflection of the total FBS cooperator population of livestock farms in the region.

Marketing Channels & Marketing Practices Pilot Survey

General Farmer Characteristics and Marketing Preferences

The farmers responding to this survey can be characterised as generally 'traditional'. They are predominantly the owners of their businesses (Q.1.1) and have been so for an average of more than 20 years (Q.1.2), typically without any direct business connections with the downstream marketing or processing sectors (Q.1.3 & 4). They 'present' in the terms of this survey as being traditional stock farmers (Q.1.13 & 14), recognising that the personal satisfaction they get from raising stock is not the same as the contribution these enterprises make to farm profitability, and generally preferring breeding and finishing stock to production of store animals

These farmers tend to live close to auction markets, and to be presently well-served with alternative auction marts close to their farms (Q.1.5 & 6). They tend to use the local (or specialist) auction markets as outlets in preference to alternatives of direct selling, dead-weight or contract sales or electronic auctions (of which there is at least one well-established in the region) (Q.1.7, 8, 15, 16 & 17¹, and also Q.2.2). 70% of the respondents used only auction markets as their marketing channel, while none of the respondents ignored auction markets altogether for marketing their stock, even if they did use other channels. These farmers are generally, and as a consequence, frequent visitors to their local auction marts (Q.1.7, 8, 9 and 10), though each visit tends to be of short duration, though the response to Q1.10 suggests that this question may well have been misunderstood by a number of respondents.

85% of total sales (in LSU terms) were marketed through auction marts (from Q.1.16 & 17). Only 9 respondents used electronic auctions, and only 8 sold direct to the abattoir, although 16 (23%) used one of the other channels identified in the survey for at least some of their stock. Only 3% of total sales were made through either electronic auction or as dead-weight sales to the abattoir, and only 9% of total sales were made through other channels than these. Farmers using more than one type of marketing channel (typically those not favouring auction markets as predominantly as their peers) accounted for only 16% of the total sample.

Their main information sources are auction markets, their own farm records, family sources, and the farming press (Q.4.1). They generally think that their information is poor about final consumers and retailers needs, alternative marketing outlets, competing supplies or buyer confidence and commitments (Q.4.2 and 3), and see themselves as primarily market price takers (Q.4.2- 2), taking their market decisions primarily on their knowledge of market prices. Although nearly 40% thought that they achieved better than average market returns for their stock sales, only about 15% were prepared to commit themselves as to how much better than average they were doing (Q.5.3 and 4). In fact, correlations between these responses and the average recorded performance of these farms according to the FBS dataset are not strong, as Box 1 shows. Although the use of averages here no doubt conceals some different correlations for specific types of livestock sales, more disaggregated analysis of these data is not sufficiently meaningful in this sample size to be worth exploring here.

¹ Average responses to questions 1.16 and 1.17 do not reveal this information, but more detailed study of these responses confirms this conclusion.

Marketing Channels & Marketing Practices Pilot Survey

Box 1: Correlations between perceptions of performance and average responses.

Correlation Matrix

| | BTA1 | BTA2 | Marg+ | Rev+ |
|-------|-------|-------|-------|-------|
| BTA1 | 1.000 | .377 | .224 | .216 |
| BTA2 | .377 | 1.000 | .017 | .154 |
| Marg+ | .224 | .017 | 1.000 | .210 |
| Rev+ | .216 | .154 | .210 | 1.000 |

63 observations were used in this computation.

BTA1 is the response to question 5.3 ('I think I get better than average market returns because of the way I market them'); BTA2 is the average response to question 5.4 ('add the following approximate percentages to the selling prices of my stock'); Marg+ is the difference between the livestock revenues and livestock costs per LSU and the mean of this variable for the sample from FBS data; Rev+ is the difference between the farm livestock revenues per LSU and the mean for the sample, from FBS data.

The average responses to four statements in particular in question 3.2 ('marketing statements') are notable in the light of the responses on information needs and perceived quality. It is difficult to reconcile the general feeling of poor quality of information on final consumer or customer requirements, buyer commitments or alternative market outlets with a positive agreement (score 2) with the following statements:

- 'My business viability depends on my regular review of marketing opportunities' (average score: 2 ± 1.2)
- 'I deliberately choose market outlets where the quality of my stock will be best appreciated' (average score: 2 ± 1.0)
- 'I try to produce stock which best meets long term market requirements' (average score: 2 ± 1.0)
- 'It is important to me to know who is buying my stock and how satisfied they are' (average score: 2 ± 1.0)

It is not implausible to suggest that these responses betray a somewhat traditional perception of marketing - that habitual marketing practices have worked well-enough in the past in signalling buyer requirements, and can be regarded as reliable for the future. Given such reliance, it is, perhaps, rational to suppose that alternative opportunities need not be seriously explored and that long term market requirements will continue to be reflected in auction market trade. However, it is well known that several of the local auction markets in the region are facing considerable pressure and their future cannot necessarily be assured.

Six of the respondents (9% of the sample) do not expect that either they or their successors will be farming in five years time (Q.6.1), but the remainder do not expect their marketing practices to have changed very much in that time (Q.6.1) - with nearly 60% expecting to be using their local auction markets as now. Nearly three quarters of the sample have no plans for the development of specialist, niche or increased value-added marketing of their stock (Q.6.3). It seems that the apparent question-marks over the continued survival of at least some local marts in the region have not yet resulted in any strong concern amongst the farmers responding to this survey.

Marketing Channels & Marketing Practices Pilot Survey

II. Analysis of MC&P Survey Results.

The previous section provides an impressionistic overview of the survey results. These generally confirm a common perception of a rather traditional marketing system for livestock in the Northern Region (which might well not be characteristic of the rest of the country). It suggests that changes in marketing practices in the Northern Region will result largely from external pressures and changes (such as continual decline in buyers willing to base their business on local auction markets) rather than being generated by farmers themselves seeking alternative outlets, markets and marketing practices for their stock.

The degree of variation of marketing practice, or of management and marketing attitudes, exhibited in this sample is clearly rather narrow. As a result, more intensive analysis of the data to explore possible relationships between market returns, marketing practices and management attitudes may not prove particularly enlightening. However, this is an empirical question which cannot be resolved without further analysis.

a) *Recovery of a "clean" sample*

The summary statistics reported in Table 1 above for the livestock farms in the Northern Region do point up one rather obvious fact: that the revenues from livestock sales during the 1997/98 year are very substantially lower on average than the livestock costs as recorded in the FBS data. It is well known that the 1997/98 year was not a good one for livestock farmers. However, the size of the discrepancy between receipts and costs, and more particularly the range of variation as indicated by the standard deviation on these broad averages, suggested some further examination of the distribution of revenues and costs across the sample. Confining attention to the MC&P respondents, it is apparent from the raw data that a small number of farms (five of 68), are 'responsible' for both the wide discrepancy between revenues and costs, and for the particularly large standard deviations on these averages. These farms (for unexplored reasons) reported very low sales, yet incurred very substantial costs. They are regarded in the main analysis as uninformative outliers and are excluded from the analysis.

The effects on the general characteristics of the sample of farms of this exclusion of outliers are reported in Table 2. It can be seen from this table that exclusion of outliers hardly affects the general characteristics of the sample, with the single and notable exception of livestock costs per LSU, and hence on the resulting margin between revenues and costs. It is concluded that such an exclusion is fully warranted in the interests of obtaining sensible and more reliable correlations between marketing channels, practices and attitudes and market returns.

Marketing Channels & Marketing Practices Pilot Survey

Table 2. Comparison of means and variance between ‘clean’ & total MC&P samples

| | Total Sample (68) | | Clean Sample (63) | |
|--------------------------------------|-------------------|--------|-------------------|------|
| | Mean | SD | Mean | SD |
| Total sales (LSUs) | 99 | 104 | 106 | 110 |
| Fatstock sales per total sales (LSU) | 0.54 | 0.34 | 0.56 | 0.33 |
| Breeding stock sales per total sales | 0.17 | 0.19 | 0.18 | 0.19 |
| Cattle sales as ratio of total (LSU) | 0.507 | 0.307 | 0.48 | 0.29 |
| Revenues per LSU (£/LSU) | 662 | 104 | 669 | 101 |
| Total L’stock costs per LSU (£/LSU) | 2662 | 12,470 | 440 | 410 |

b) Adjustments to livestock sales data.

Notwithstanding the exclusion of outliers, there remained some discrepancy between the number of livestock reported as being sold from the farm in the survey (questions 1.16 and 1.17) and those recorded as sold in the main FBS survey data from these farms. It is more than likely that the records in the MC&P survey either relate to a different marketing year than the FBS data and/or that farmers understandably took the view that accurate responses to this survey question were ‘above and beyond the call of duty’. In the following analysis, total sales data from the full FBS dataset are used to ‘calibrate’ the sales in each livestock category and through each channel as reported in the MC&P survey. Thus, total sales data are made consistent with the FBS record for each farm, while the distribution of these sales over different market outlets for different classes of livestock are consistent with the response to the MC&P survey.

c) Farmers’ Attitudes to management: theoretical considerations

Farmers’ attitudes to management and marketing are central to current farmer practices and, thus, to potential future marketing developments, since it is these attitudes which underlie or reflect the reasons why they make their present choices and how they judge present market performance. Without information on or assumptions about these attitudes, it is difficult, if not impossible to assess present marketing practices or to suggest potential improvements and development of marketing channels. Thus, the central focus of this survey is contained in section 3 - the characters and attitudes of farmers as managers and marketers, which is information that cannot be inferred from that already collected under the FBS itself.

The conceptual framework for the design of the attitude questions is deliberately eclectic, since there is as yet no commonly accepted typology or classification of farmers’ managerial strategies or attitudes, nor of their potentially associated marketing behaviours. Nor are there established (replicable) attitude or behavioural scales for farmers. In any event, such typologies are likely to be highly contextual - depending critically on the circumstances in which farmers find themselves. However, there are some apparently sensible and useful dimensions which are used here, as follows.

Marketing Channels & Marketing Practices Pilot Survey

It is plausible to suppose that different farmers are farming for different reasons and with different ambitions. Previous sociological research has identified some apparently archetypal farm household types as : *expanders*; *consolidators*; *survivors*; *exiters* (planning on leaving farming as soon as or when circumstances permit). Overlaying these types, one can suppose that there are ambitions which are primarily profit or business success-driven contrasting with those which are more craftsman-like, more associated with the way of life and with pride in a job well done. Preferences between success and ambition versus more self-reliant fulfilment does seem helpful as providing potentially distinguishing characteristics. These outline concepts informed the design of the management attitudes question (3.1).

d) *Analysis of attitudes to management*

The responses to question 3.1 were analysed using factor analysis, the well-established statistical technique for classifying large numbers of interrelated variables into a limited number of dimensions or *factors*. The responses to each of the 26 statements in question 3.1 can be considered as potentially revealing an aspect of an underlying attitude towards management of the farm. The purpose of factor analysis is to identify any underlying pattern in these responses. These underlying patterns can be represented as clusters (factors) of closely correlated responses to particular sub-sets or groups of questions, where the statistical analysis seeks to minimise the within-group variation of responses and maximise the between-group variation. The results of this analysis are typically reported as the *factor-loadings* - the correlation between the responses to an individual statement and the group to which it 'belongs' (which lies between 0 and 1).

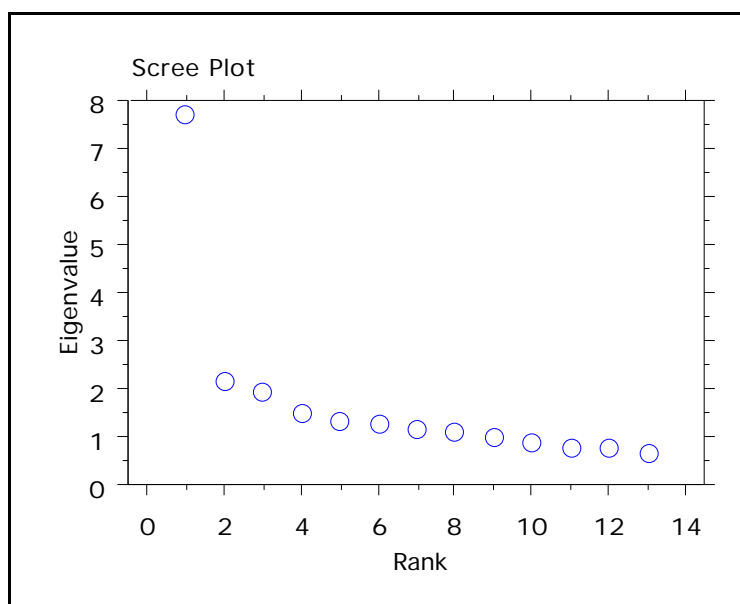
This technique is exploratory - the particular groupings of items (responses to specific statements) in one or another factor depends on the number of factors or groups one supposes to exist as an underlying pattern. In the limit, there are 26 different factors 'explaining' the variation in responses to the 26 management statements of question 3.1. However, describing these responses in this fashion adds nothing to the information content of the raw responses. 'Forcing' the responses to cluster in groups reduces the proportion of the total variation in response captured by the resulting factors. Reducing the number of groups into which the responses can be clustered will typically alter the factor loading relationships between the items and the factors. Hence, the technique obliges the analyst to use an element of judgement about the meaning and reliability of the factor patterns. There are no formal statistical tests to apply in this situation.

With no *a priori* information on the supposed underlying pattern, it is sensible to employ the statistical analysis to require each factor to be independent of the rest (technically for the factors to be orthogonal). In this case, the first factor will capture the largest proportion of the total variation exhibited by the responses to all the statements, and each successive factor will then capture declining proportions of the total variance.

The situation for the responses to the 26 statements of question 3.1 is shown in Box 2.

Marketing Channels & Marketing Practices Pilot Survey

Box 2: Factor Analysis of responses to question 3.1 - management statements



This plot shows the relationship between the factors identified from the variation in response to the 26 management statements of question 3.1. The first factor (rank 1) captures most of the variation compared with successive factors, as identified by the 'eigen value'. Factors 2, 3, 4 and 5 capture successively less of the total variation in the responses. It is a matter of judgement to determine the number of factors which most reliably represent the underlying pattern of responses. The rule of thumb typically employed in this technique is to ignore factors with eigen values of less than 1. In this case, 61.2% of the total variation is captured by 6 factors, with the sixth factor only adding 4.9% to the 'explained' variation. This analysis is further explained in Appendix III.

The implication of Box 2 is that there might be between five and six meaningful factors underlying the responses to the 26 management statements of question 3.1. However, the extent to which these factor groupings are meaningful depends on the extent to which association of individual question responses with particular factor groupings changes as the number of factors considered is varied. Exploration of the extent to which factor loadings change as the number of considered factors change (reported in Appendix III) suggests that in this case five factors (capturing 56.3% of the total variation in these responses) is the most robust representation of these response data. The addition of the sixth factor does not disturb the identification of 14 of the 26 individual statement responses with the previous five factors, but does disturb the grouping of another 10 of the statements (items). On the other hand, the grouping of the items (statements) within specific factors is robust for changes in the factor number considered between 3 and 5. On these grounds, it is argued that the five-factor representation of the responses to statements in question 3.1 is the most 'reliable' of the possibilities revealed by the factor analysis.

This grouping is shown in Table 3 below, based on the 'orthogonal' transformation of the response data, which assumes that each of these five factors is independent of the others². The resulting factors do appear to make plausible and intuitive sense of the possible aspirations and attitudes of these farmers towards their business and ways of life.

² The alternative ('oblique') assumption allows some inter-relationships between the factors identified. In some cases, such an assumption may be warranted. However, in this case the purpose of the analysis is to identify any independent structure (pattern) to the responses and there is no *a priori* ground for assuming the factors identified to be related to each other. Hence the orthogonal assumption is retained in this analysis.

Marketing Channels & Marketing Practices Pilot Survey

Table 3 Factor Analysis clusters of management statement responses

| No. | Statement | |
|-----|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 16 | I spend time and money improving the appearance and attractiveness of my farm | FACTOR 1 “Social Responsibility & Care” |
| 19 | I think of my farm partly as a public asset, to be preserved and enhanced for the general good | |
| 20 | I like to plan my business by working out problems in my head before trying them in practice | |
| 23 | My farm-business success depends on understanding the needs of the final consumers | |
| 5 | I get satisfaction from farming which outweighs some loss in income and returns | FACTOR 2 “Way of Life” |
| 11 | My business will not be worth doing if I cannot afford to keep livestock | |
| 13 | I go on farming because the way of life is important to me and my family | |
| 14 | Producing high quality stock, regardless of the market, is important to me | |
| 25 | Practical farming is more important to me than office and book work | |
| 1 | Maximising farm profits is my most important farming goal | FACTOR 3 “Means of making a living” |
| 9 | If an enterprise doesn't make money as part of the farm business, it is not worth doing | |
| 10 | I am running my business so that I can afford to retire as soon and as well as possible | |
| 15 | Ideally, I would like to change farms so that I can reduce my dependence on livestock | |
| 6 | Long term survival of my business is more important than short-term profits | FACTOR 4 “Sustainable & Respectable Livelihood” |
| 7 | Personal relationships with my suppliers and buyers are very important to me | |
| 8 | General public perceptions about my farm and business are important to its success | |
| 17 | What my non-farming neighbours think about my business is important to me | |
| 18 | I rely a lot on other farmers experiences in making my farming decisions | |
| 2 | My principle long term goal is to increase the size of my business | FACTOR 5 “The Family Business” |
| 4 | Passing on my farm in a healthy state to my successors is a vital business goal | |
| 22 | I see myself as farming leader and entrepreneur in the way I manage my farm | |
| 3 | The size of my business is less important than becoming better at what I do | Non-discriminating statements, revealing nothing systematic about underlying patterns. |
| 12 | I think production and sales decisions are inseparable - they have to be taken together. | |
| 21 | I rely heavily on instinct and judgement rather than careful research and analysis | |
| 24 | I frequently go to markets even when I have nothing to buy or sell | |
| 26 | If I wanted to be rich, I would do something else than farm | |

A caveat on the meaning of this classification

It is vitally important to recognise that these suggested classifications or factors are not classifications of farmers. They are groupings of ‘characteristic statements’ exhibiting some plausible and statistically identifiable *strands* to farmer attitudes and management ‘principles’, with each and any farmer likely to represent a unique combination and ‘length’ of these character strands. Furthermore, it is entirely possible that such a pattern of characteristics is unique to the particular sample from which it is derived and from the particular circumstances and contexts surrounding the sample at the time of the survey. The generality of this character identification is a matter for further empirical observation over a larger and more diverse set of farmers. However,

Marketing Channels & Marketing Practices Pilot Survey

there is little reason to suppose that these findings are not generally representative of the sort of commercial farmers in the Northern Region who frequently cooperate with the Farm Business Survey.

An Interpretation of the Management Factor Analysis

Consideration of the context and circumstance of the farmers surveyed in this sample suggests that the following interpretation of the meaning of these factor clusters is sensible. Livestock farmers in this sample have a considerable history in their businesses and way of life, with an average 'length of service' approaching twenty-five years. In their formative phase of business and life-style development, farm policy and associated social and market signals clearly suggested that farming was considered as an important, socially respectable and socially responsible activity, worthy of social and economic support. The characteristic culture such a socio-economic and political context generated is well-identified in the primary factor strand - labelled 'Social Responsibility & Care' in Table 3. The survival of this community of farmers is plausibly well identified in the remaining four character strands: "Way of Life"; "Means of making a living"; "Sustainable and Respectable Livelihood"; "The Family Business".

Their farming and management practices have grown out of this culture and context. Marketing their products, in these circumstances, simply means taking the products to market and being proud to do so. However, the socio-economic and political culture surrounding these farmers has now changed substantially. To the outside observer, it is clear that historically well founded and justified practices may not be sufficient to sustain these ways of life and business practices. New cultures and a different set of farmer characters will emerge over time which are better suited to the new climate of public and market opinion. But there is no guarantee that the newly encouraged set of characters (which are not identified in this sample) will provide the rural land use culture which the existing set has produced. To explore the sorts of characteristics a more world-competitive and market-oriented production system might generate requires extended research over a wider range of farmers than this survey has tapped.

e) Marketing Attitudes

The responses to the marketing statements (question 3.2) were subjected to the same sort of factor analysis in an attempt to identify characteristic strands to marketing behaviours. As might be expected from the lack of variation in marketing behaviour exhibited by this sample, the factor analysis does not reveal any robust grouping or classification (Appendix 3). The initial factorisation of the 31 statements generates a higher fraction of the total variance being attributed to the first factor than in the case of the management statements, and attempts to refine the classification into a smaller number of factors than the initial (unrestricted) set results in very considerable instability in the factor loadings. In short, these responses do not reveal any systematic patterns of association.

This result is entirely consistent with the interpretation offered above of the characteristic management strands of the sample. No particular marketing character (other than tradition and well-trained, historically justified and respectable habit) has yet emerged amongst this group of farmers.

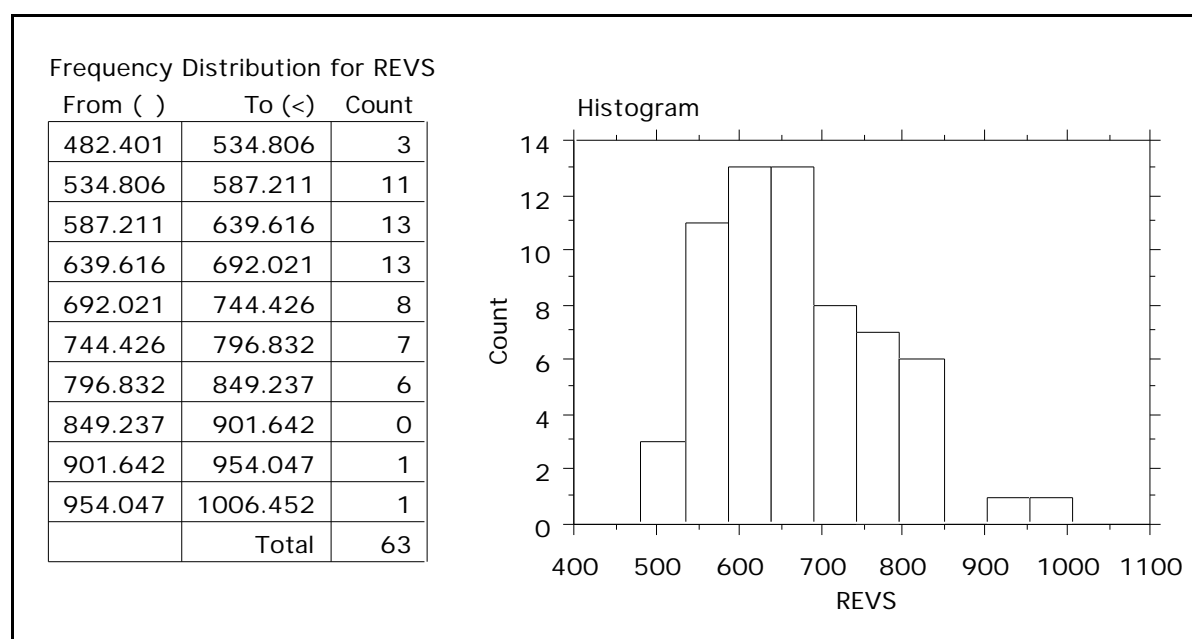
Marketing Channels & Marketing Practices Pilot Survey

f) Marketing Performance

The data collected in the MC&P survey, in conjunction with the related data for each participating farm already collected through the FBS, allow the commercial performance of marketing strategies to be statistically examined. In particular, both the variation in livestock receipts and the approximate margin these revenues generate over identified livestock production costs, can be related to the choice of marketing channel, conditioned by the size and type of farm (as represented by the livestock operations) and by the character strands of the farmers as revealed in the management factor analysis.

The frequency distributions for FBS recorded revenues per livestock unit (LSU) for FBS recorded livestock costs per LSU and for the implied margin per LSU are shown in the following Figures

Figure 1. Distribution of livestock revenues per livestock unit of sales



Marketing Channels & Marketing Practices Pilot Survey

Figure 2. Distribution of livestock costs per livestock unit of sales

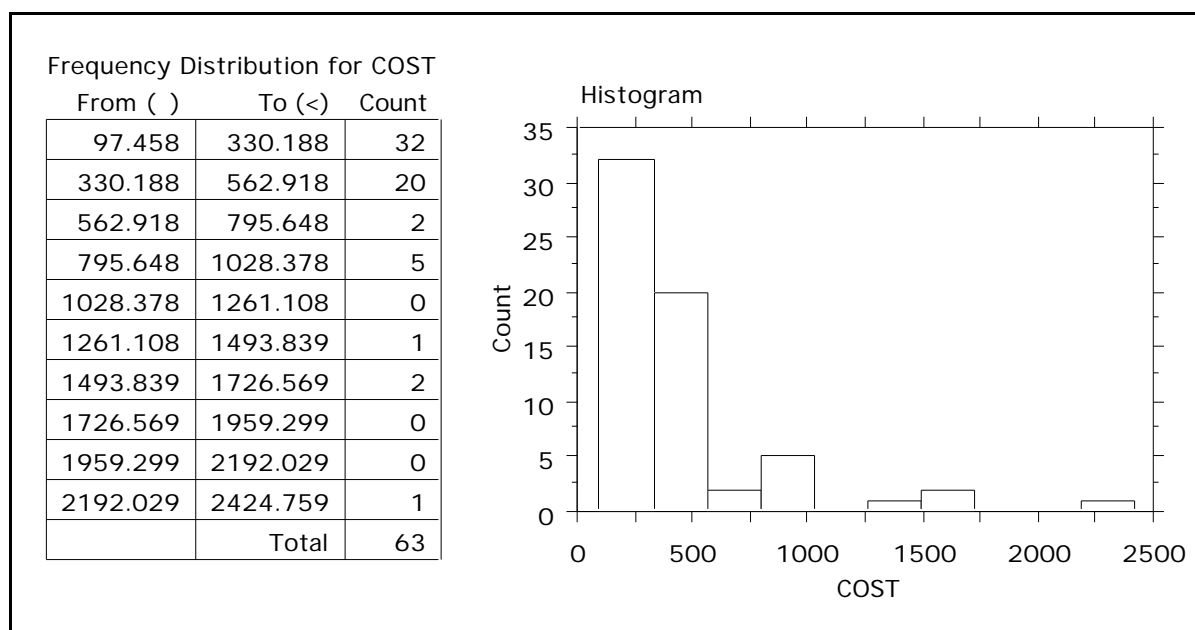
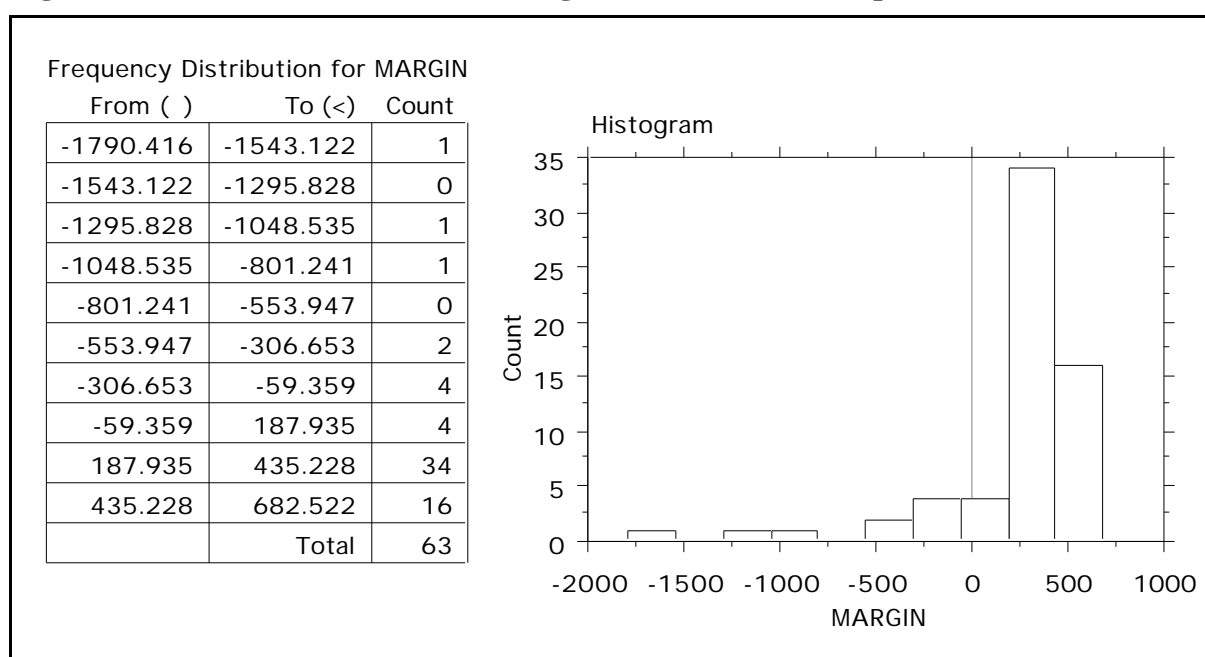


Figure 3. Distribution of livestock margins (revenues - costs) per livestock unit of sales



As indicated in Figure 3, a substantial number of these farms were showing an accounting loss on their livestock operations during the survey period, with their recorded livestock costs substantially exceeding their market returns from sales over this period (the 1997/8 year). It is plausible to suppose that production costs might reflect the choice of marketing channel and marketed output rather better than market revenues - the latter being highly subject to external

Marketing Channels & Marketing Practices Pilot Survey

influence of market trends which were particularly adverse during this period for many of these farmers. Thus, attention is concentrated here on the relationship between livestock costs and marketing practices.

The possibilities available to the analyst for representing possible relationships or ‘determinants’ of livestock production and marketing costs (the two being barely distinguishable in the data) are limited only by the resources and ingenuity of the analyst. However, some respect needs to be paid to the meaning and possible interpretations of the underlying data in such statistical explorations. As far as this project is concerned, it is judged sufficient to report only the most straightforward of the possible relationships - a linear approximation to any underlying relationship, incorporating those variables most ‘obviously’ candidates for explaining cost differences.

Box 3 below reports the basic regression equation used to identify the statistical relationships with livestock costs per livestock unit. The statistics of this relationship are outlined in the Box. The implication of this statistical relationship is that the reliance on auction markets typically exhibited by this sample of farmers tends to lead to a reduction in livestock costs and thus, other things being equal, to an increase in margins. Examination of the statistical determination of revenues per LSU (reported in Appendix 4) did not identify any relationship between revenues and marketing channel choice. The only significant determinant of revenues found in this project was the proportion of breeding stock in total sales (which tends to be associated with an increase in revenues per LSU, as might well be expected). Otherwise, the implication is that variation in revenues per head is largely determined within the farming year by the good fortune or otherwise of marketing stock at the right time. Again, the extent to which these results are a reliable indication of associations to be found throughout the farming industry is an empirical question which can only be resolved with further study of the marketing practices and channel choice in other regions.

The regression equation does suggest some economies of size - greater volume of sales being associated with lower per head costs. Cattle are generally slightly more expensive to produce and market per livestock unit than sheep according to this estimated relationship. It also suggests that costs are typically higher per livestock unit for the production of store animals rather than fatstock of breeding animals on a livestock unit basis.

Also included in this equation ‘explaining’ the variation in livestock costs are the five management character strands (factors) identified in Table 3 above. Three of these factors turn out to be statistically significant in accounting for cost variation. It appears that the strongest of these strands or factors - the “Social Responsibility & Care” factor - tends to be associated with a higher level of livestock costs per LSU. On the other hand, farming as a “Way of life” or to preserve and grow “the Family Business” tend to be associated with lower costs. Interestingly, as noted in Box 3, the conventional economic description of farming (as a way of making a living, sustainable or otherwise) does not appear here to be reliably associated with variations in costs.

Marketing Channels & Marketing Practices Pilot Survey

Box 3. 'Determinants' of livestock costs per LSU sold

Regression Summary COST vs. 10 Independents

| | |
|--------------------|---------|
| Count | 63 |
| Num. Missing | 0 |
| R | .672 |
| R Squared | .451 |
| Adjusted R Squared | .346 |
| RMS Residual | 331.960 |

ANOVA Table COST vs. 10 Independents

| | DF | Sum of Squares | Mean Square | F-Value | P-Value |
|------------|----|----------------|-------------|---------|---------|
| Regression | 10 | 4708723.325 | 470872.332 | 4.273 | .0002 |
| Residual | 52 | 5730282.606 | 110197.742 | | |
| Total | 62 | 10439005.930 | | | |

Regression Coefficients COST vs. 10 Independents

| | Coefficient | Std. Error | Std. Coeff. | t-Value | P-Value |
|-----------|-------------|------------|-------------|---------|---------|
| Intercept | 1413.411 | 275.441 | 1413.411 | 5.131 | <.0001 |
| C/TOTR | 359.712 | 187.556 | .252 | 1.918 | .0606 |
| SALES | -1.635 | .549 | -.399 | -2.976 | .0044 |
| AUCT% | -518.567 | 199.541 | -.338 | -2.599 | .0121 |
| FATR | -193.378 | 208.719 | -.157 | -.927 | .3585 |
| BREEDR | -242.887 | 388.659 | -.110 | -.625 | .5347 |
| FM1 | 34.893 | 16.128 | .311 | 2.163 | .0351 |
| FM2 | -31.786 | 12.284 | -.348 | -2.587 | .0125 |
| FM3 | .061 | 12.905 | .001 | .005 | .9962 |
| FM4 | -14.997 | 13.571 | -.149 | -1.105 | .2742 |
| FM5 | -26.203 | 15.258 | -.226 | -1.717 | .0919 |

The regression equation 'explains' 45% of the variation shown in livestock costs per LSU (Figure 2 above). In this sample, it cost a basic average of £1,413 per LSU to produce and sell all livestock (the intercept). For every percentage point increase in the cattle LSU to total LSU sales (C/TOTR), it costs an additional 36 pence to produce the livestock. Increasing the volume of sales reduces costs by £1.6 per LSU of sales. A percentage point increase in the proportion of sales through auction markets reduces costs by 52 pence. Increases in the proportions of fatstock sales (FATR) and of breeding stock sales (BREEDR) reduce costs by 19 and 24 pence per percentage point respectively. The final five variables (FM1 - FM5) are the management factors identified in Table 3

above. The implication of this regression equation is that stronger exhibition of "social responsibility and care" increases costs, while the "way of life", the "respectable and sustainable livelihood" and the "family business" character strands of this group of farmers tends to reduce costs. Interestingly, the statistics do not suggest that the conventional economic description of farming (as a "way of making a living" - FM3) has any effect on the costs of producing and marketing livestock in this sample.

If the t-value is greater than a critical value of about 1.65 for this equation, then there is a 95% chance that the coefficient is significantly different from zero in the direction indicated (positive or negative). Hence the proportions of fatstock and breeding stock in the total sales, and the management factor 4 are not reliably significant.

3 DISCUSSION & IMPLICATIONS OF THE PILOT SURVEY

a) *General considerations*

The concept of marketing as opposed to selling implies some underlying product, production or producer/supplier differentiation. In the case where such distinctions are impossible, the products are being sold as commodities, where recognisable quality differences are the only differentiating features. Most farm products are still more like commodities than products, though the potential for genuine product differentiation is rather higher amongst livestock products (including breeding animals) than for (e.g.) cereals.

In commodity marketing, the conventional economic argument is that efficient markets will not produce any sustained or reliable commercial advantage for one channel over any other - the additional revenues to be earned from one channel will be offset by additional costs of meeting the requirements of the channel. Efficient (competitive) channels will survive, and any others will disappear. However, in the event of innovation (such as electronic auctions, for instance) such competition might take time to occur, in which case there might be some commercial advantage to the new marketing channel (presuming it is destined to survive). Nevertheless, conventional economic competition manifests mostly as opportunistic behaviour, through arbitrage - this being the mechanism through which the efficient markets survive at the expense of the inefficient.

The implication is that traditional marketing practices such as are exhibited in this group of Northern Region livestock farmers will only survive as long as there is a market demand for such marketing services. The indications, both from the reported difficulties being experienced by some of the local auction marts in the region and from the decrease in such auctions elsewhere in the country, are that market demands for this form of marketing are in decline. If this trend continues, then it is to be expected that marketing practices amongst northern livestock farmers will have to change in the future, regardless of the present apparent expectations of this sample (question 6.1).

Product marketing, on the other hand, implies some product differentiation, where either the nature of the product or of its production and supply processes distinguish the product from its near competitors. Kay and others suggest that this differentiation can be understood as a combination of product competitive advantages (stemming from their value to users or consumers coupled with their comparative rarity - lack of close substitutes or imitations in the market place) and the distinctive capabilities of the suppliers (their architecture - as the ways in which the production and supply processes are integrated; their reputation; their innovation and their strategic assets (if any)).

Introspection strongly suggests that livestock products are capable of differentiation mostly through the distinctive capabilities of the suppliers rather than through the competitive advantage of the products themselves. Although products can be differentiated through quality differences, 'high' quality products will not be rare or scarce, nor difficult to substitute or imitate. Reputation (especially), however, can be used to differentiate products (most obviously for breeding stock - the specialist ewe and ewe lamb sales characteristic of the Northern Region being outstanding examples).

Marketing Channels & Marketing Practices Pilot Survey

This study has identified some potential characteristics of the northern livestock producer - especially the sense of social responsibility and care - which could form the basis for marketing a distinctive capability. Because this character, especially exhibited in the context of a socially distinctive and potentially valuable landscape and culture, can be made practically specific to particular sorts of farming practice and behaviours in particular localities, it can be made sufficiently distinctive to prevent imitation or easy substitution in the minds of consumers and enjoyers of the countryside. However, capturing and developing these potentials will require both considerable individual and local initiative and the socio-economic infrastructure and connections to allow such initiatives to survive and prosper.

It is not clear (though not specifically part of this research project) that the necessary socio-economic infrastructure and architecture will necessarily emerge in a world increasingly driven by purely commercial interests and commodity (as opposed to product) marketing. It is possible that the continued development of large-scale commodity sourcing systems, coupled with rigorous and increasingly uniform (undifferentiated) regulation of marketing processes and practices, will lead to the erosion of the socio-economic infrastructure necessary to support differentiated and necessarily rather small-scale initiatives to capture the potential distinctive capabilities of the Northern livestock producer. If so, then the specific characters identified in this study will become an historical artefact. On the other hand, it may be that the innate skills and inherent survival instincts of these farmers and their successors will be sufficient to overcome these pressures for conformity and uniformity.

b) Specific discussion and conclusions from the Pilot Survey.

The Research Objectives of this study (as specified above) were as follows:

1. To develop a postal type questionnaire to collect information on marketing channels and practices for beef and sheep enterprises;
2. to test the questionnaire by means of a survey of producers;
3. to provide various analyses using the data collected in the survey;
4. to review and refine the objectives for a study to be conducted nationally as part of the Commissioned Work Programme;
5. to provide information on a suitable sampling and data collection framework for a full special study which can be used to advise a Special Study Working Party;
6. to provide a structured estimate of the resource costs of undertaking a national special study.

On the basis of the experience outlined in the previous paragraphs of this report, it is now possible to address the final three objectives of the research - the implications for a national survey of marketing channels and practice.

The pilot survey was quite deliberately ambitious. The survey questionnaire was clearly too long and complicated for a reliable response rate by post, and would consume considerable scarce resource if conducted as an interview-based survey. While these difficulties do not seem to have seriously compromised the pilot survey (which does portray the underlying FBS sample of farmers reasonably accurately), they do need careful consideration before such a survey could be conducted nationally.

Marketing Channels & Marketing Practices Pilot Survey

Analysis of the pilot survey results strongly suggests that quite a lot of the detailed information sought in the pilot is either unnecessary or too detailed and specific to be of use to analysts and researchers, especially if collected over the whole national sample.

Thus, although of some passing interest, the information obtained from questions 1.9 to 1.17 has not proved particularly useful in the detail in which it was sought. For instance, it would be quite sufficient to ask farmers for the approximate proportions of fatstock, store animals and breeding stock (by sheep and cattle) sold through various possible marketing channels, rather than ask for specific numbers. These approximate proportions could then be applied to the FBS records of livestock sales to gain a reasonable picture of the volume of marketing through different channels at considerably less expense in terms of data collection.

The information on timing of sales is only useful if it is to be correlated with local movements in market prices (which has not been attempted in this project because of resource constraints). In practice, such correlations would require considerably more information than is currently easily available on the precise specification of the marketing or financial year for each producer. It is difficult to imagine what useful information would be gained from such an expensive addition to the data collection exercise.

While Section 2 (marketing decisions and preferences) did not yield any particularly useful information from this rather traditional pilot sample, it is quite possible that such information would prove more useful from a more widely differentiated sample as might be expected from a national survey. However, the question design could usefully be simplified in this section.

Question 3.1 (management statements and attitudes) has proved rather informative in this pilot - a finding which needed empirical testing and verification and which now deserves wider application to see if the specific findings here are replicable at a more general level. It is possible that question 3.2 might also generate more information if conducted over a sample exhibiting more diverse marketing practice than the northern region sample. According to the comments on the returned forms, farmers do not find this section particularly onerous to complete (though many would no doubt wonder about the point of it).

Similarly, section 4 (on information sources, salience and quality) has not been extensively analysed here, but does provide corroborative evidence on other parts of the survey and also provides additional information on the perceptions of the marketing activity by the responding farmers. Section 5 (marketing costs and returns) has not proved useful in this pilot. The information sought falls between two stools - it is not sufficiently detailed to provide an accurate picture of particular marketing costs or benefits, and it is too detailed to provide a simple and easily analysable data product. Given that the basic FBS data can be used (as here) to provide reasonable information on costs and revenues, this section could reasonably be omitted from a national survey.

Although Section 6 has not provided other than corroborative evidence in this pilot sample, it is possible that these data would be more informative of future trends and intentions at the national level. Since, again, there is no evidence that this section caused any major difficulties for the cooperators, this section could be included in a national survey, although coding and processing these data is a non-trivial task.

Marketing Channels & Marketing Practices Pilot Survey

On the basis of this discussion, a revised draft questionnaire is shown as Appendix 6 (88888), which could be used at the national level in conjunction with the existing sample of FBS cooperators. Such a draft would, of course, need to be discussed and refined by a Special Working Party and would need some pre-testing amongst known farmers. In addition, it is recommended on the basis of the experience with the pilot survey that care and attention is paid to the particular problems of coding and analysing the data at the design and drafting stage. Not enough time or care was taken over this important practical detail in the development of the pilot survey.

Indicative costs and resources for a national survey

On the basis of an initial draft questionnaire as outlined in Appendix 6, it is suggested that the following resources would be needed to conduct a useful national survey of marketing channels and practices for sheep and cattle.

| Activity | Researcher time/Resource cost | IO time |
|-----------------------------------------------------|-------------------------------|-------------------------|
| Questionnaire design and coding protocols: | 10 days | 5 days |
| Questionnaire pre-testing: | 1 day | 5 days |
| Questionnaire production & delivery: | £1.50 per questionnaire | with FBS or postal cost |
| Coding, data preparation & collation with FBS data: | | 45 mins/questionnaire |
| Data analysis and report writing | 20 days | 5 days |

No discussion is offered here on the possibilities or the desirability of extending such marketing surveys to other commodities. It is arguable that the marketing changes and potential difficulties are more immediate and more problematical for the red-meat sector than for other major sectors of the national farming sector. In any event, the particular character and nature of livestock marketing makes the experience of surveying and analysing it rather different from other sectors. In particular, analysis and survey of marketing of cereals, for instance, would seem to need some account being taken of the marketing of grain through livestock feeding, and hence include as a pre-requisite, the marketing practices for the livestock.

Based on experience with the pilot, extension of this survey to the national level should be explicitly linked and related to the current Farm Business Survey sample. This survey provides very considerable factual data on the performance and production circumstances of the farms, especially the costs, revenues and volumes of livestock production and sales. Without this factual data, the usefulness of a national survey of marketing channels and practices would be seriously limited. Even if the scope of the marketing survey were to be extended to include separate collection of cost, revenue and volume data in accurate detail (which would entail very considerable cost and resource use), the absence of comparable data on any non-respondents would weaken the conclusions that might be drawn from such an independent marketing survey.

4 CONCLUSIONS

The major results of this pilot survey are as follows. First, the Northern Region livestock producers represent a rather traditional group of farmers, relying heavily on auction markets rather than the available alternatives: direct to abattoir or butcher for fatstock; electronic auctions (of which there is at least one well-established system in the region); or direct sales to known purchasers through specific contracts or contacts. Second, analysis of the responses to statements about management reveal an apparently robust 'structure' or pattern which is consistent with common informed knowledge of such farmers. In particular, it is plausible that a strong sense of social responsibility and care dominates these farmers' attitudes, although direct elicitation of this sense would likely prove rather difficult. In addition, the structure of responses to management statements can be identified as containing reasonably well identified strands of farming as: "a way of life"; a "means of making a living"; a "sustainable and respectable livelihood"; a "family business". Of these separate strands, only the means of making a living accords closely with conventional economic understandings of business or supply decisions. Third, the choice of marketing channel does not, amongst this sample, reveal any consistent association with the relative levels of returns achieved for sales. Reasons for this lack of association have been advanced, to the effect that farmers returns relative to their peers depend more on timing of sales and on the relative quality of the stock as perceived by the buyers. Neither of these conditions has been measured in this survey, and the data necessary to explore these relationships would be extensive and costly to collect and analyse. Fourth, however, there is some statistical relationship between livestock costs (as recorded in the FBS accounts) and the choice of marketing channel, with auction market choice being associated with slightly but significantly lower livestock costs. This association is consistent with cost being more under the control of the farmer than revenues, and more reflective of the specific or target market outlet for the production.

The outline explanation of these results offered in this report is that the evolution of this population of farmers has been such that, to date, no discernable differentiation to the patterns of their marketing practices or underlying management attitudes has yet emerged. They are generally and typically representative of a traditional pattern of farming, relying largely on traditional methods of both production and marketing. However, the socio-economic environment in which they are trying to survive, prosper and replicate their ways of life and business are now changing from that which generated and 'bred' this population. There is, on this account, a serious question about the survival of this group of farmers. Their practices, and thus their attitudes, will almost certainly need to change in the future if they and their successors are to survive.

It is also plausible to argue that their characteristics (as identified in the strands to their management statement responses) are potentially valuable and worth preserving. It is possible to imagine that these farmers could take advantage of these traditional characteristics in the marketing of their products. These characteristics could, in principle, be converted into distinctive and non-replicable capabilities, lending a genuine and sustainable competitive advantage to their production and making their particular outputs into distinctive products rather than simple commodities. However, to achieve this transformation in practice requires both individual enterprise and an appropriate socio-economic infrastructure to allow the specialised

Marketing Channels & Marketing Practices Pilot Survey

and 'original' marketing chains to develop and compete with the growing dominance of centralised bulk channels and chains. These factors and considerations are not explored in this research, but it seems possible that the potential extinction of the traditional systems of livestock farming and marketing will be accompanied by the extinction of the socio-economic infrastructure (the 'architecture' of traditional marketing chains) which would otherwise form the basis for the development of new and differentiated product marketing. In other words, there seems a danger that opportunities for development of these systems could be denied through lack of sufficient integration and coherence between the individual farmers and their changing environment.

Nevertheless, evolutionary principles also suggest that individual and specific chains of producers and buyers with consistent understandings of the marketing of products will emerge. These chains will grow so long as they develop the marketing of specific and inimitable products - as unique combinations of the commodity, the character of the producer and marketing chain, and the circumstances and structures of their production and interaction systems - and so long as they can link to the appropriate buyer and consumer segments. If such specialist product chains do emerge, they are likely to re-invent and re-create many of the traditional characteristics of the present group of farmers and their habitual marketing chains. It seems an unnecessary waste to rely on natural evolution to lead to the destruction of one set of relationships simply to encourage the eventual development of an essentially similar set of relationships in more modern guise. Intelligent people really ought to be able to do better than this.

In conclusion, this pilot survey of marketing channels and practices amongst Northern Region livestock producers has proved a rewarding and enlightening experience for the researchers involved. There is good reason to suppose that it could usefully be extended (in shortened form) to the national level. Such an extension would allow the propositions suggested by the pilot and the analysis of these results to be confronted with a wider and probably more varied range of experience and behaviours elsewhere in the country. In so doing, however, it is considered critically important that the explicit link between such a survey and the FBS data-base is retained and exploited. A stand-alone survey could not possibly produce the same level of information and understanding without a very considerable increase in the data requirements and consequent costs of collection and processing.