# A CRITICAL APPRAISAL OF THE SOCIO-ECONOMIC EVALUATION OF AGRI-ENVIRONMENTAL POLICY. THE CASE OF ESAs.

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For Iain,

who also enjoys knowing that

"there are more things in heaven and earth than are dreamt of

in our philosophy"

(Hamlet, Act I, Scene V).

I hereby declare that this thesis has been composed by myself, and is the product of my own work.

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#### ABSTRACT

The UK programme for Environmentally Sensitive Areas (ESAs) began its implementation in 1987/88 with the designation of 19 ESAs. Since then, 18 more ESAs have been designated to date. Concurrent with this programme has been the legislation concerning the monitoring of ESAs (Agriculture Act 1986, Section 18[8]) "designed to identify any significant changes to wildlife, landscape or historic features which occur after designation" (Hooper [1992]). In addition to the monitoring of ESAs, MAFF commissioned a series of Socio-Economic Evaluations. The Thesis comprises a Critical Appraisal of this evaluation programme, with reference to a specific case study: The Socio-Economic Evaluation of Breadalbane ESA.

The Critical Appraisal builds on government-published guidelines for policy evaluation, and upon farm-level research from a number of disciplines which highlights the complexity of the policy recipients' contexts. The discussion also examines the development of the ESA policy as an indicator of the significant shift in norms of environmental obligation faced by individuals and institutions within the farming industry.

Further, the MAFF Evaluation of Breadalbane ESA is examined in detail in the light of specific farm-level data gathered through the 1993/4 Fieldwork, subsequent to the MAFF Evaluation itself. The discussion points to data omissions, concealment and inaccuracies, as well as the underlying conceptual emphases and assumptions consistent with overall government guidelines.

The primary conclusion is that the conventional approaches and methods applied within the MAFF Evaluation have resulted in poor analysis. When the specific implications of a continued adherence to this dominant tradition are outlined, it becomes evident that such an Evaluation scenario can no longer be justified. The thesis concludes with methodological and conceptual imperatives for an accurate socio-economic evaluation of agri-environmental policy, and highlights areas of associated further research.

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### CONTENTS.

I	PAGE NUMBER
List of Contents.	i
List of Figures.	vii
List of Tables.	viii
List of Prints and Photographs.	xi
CHAPTER ONE: Introduction.	1
<b>1.1.</b> BACKGROUND TO THE RESEARCH.	1
CHAPTER TWO: The Context for ESA Development.	6
<b>2.1.</b> INTRODUCTION.	6
2.2. AGRICULTURAL FUNDAMENTALISM.	8
<b>2.3.</b> THE SHIFT.	11
2.3.1. The beginnings of change.	. 11
2.3.2. Agricultural support policies and their effects.	11
2.3.3. The early 1980s.	13
2.3.4. Public awareness.	16
2.3.5. Responses in the farming industry.	19
2.3.6. Legislative developments.	21
2.3.7. The Broads Grazing Marshes Conservation Scheme.	22
2.3.8. The Agriculture Act 1986.	25
2.3.9. The designation of ESAs.	26
2.3.10. ESAs in Scotland.	26
2.4. ESAs: A COMMENT.	28
2.5. ESAs AND THEIR IMPLICATIONS FOR POLICY RECIPI	IENTS. 29
<b>2.6.</b> CONCLUSIONS.	35

~

<b>CHAPTER THREE:</b> Government Guidelines for Policy Evaluation, and the MAFF Evaluation of Breadalbane ESA.	36
<b>3.1.</b> INTRODUCTION.	36
<b>3.2.</b> POLICY EVALUATION: OFFICIAL GOVERNMENT GUIDELINES.	37
3.2.1. Facets of government guidelines on evaluation.	38
<b>3.2.2.</b> Conclusions concerning government-published Evaluation literature.	44
<b>3.3.</b> THE MAFF EVALUATION OF BREADALBANE ESA.	45
3.3.1. Introduction.	45
3.3.2. Breadalbane ESA.	46
3.3.3. The Socio-economic MAFF Evaluation of Breadalbane ESA.	55
3.3.4. Overall Assessment of Breadalbane ESA.	71
<b>3.4.</b> CONCLUSIONS.	77
CHAPTER FOUR: The Complexity of the Farm-level Context.	78
4.1. INTRODUCTION.	78
<b>4.2.</b> FARMING AND THE FARMER.	79
<b>4.3.</b> THE FARMER AND OTHERS.	84
4.3.1. Family farms.	85
4.3.2. Farmers within a 'network'.	88
<b>4.4.</b> UK RESEARCH INTO FARM-LEVEL ADOPTION OF AGRI- ENVIRONMENTAL POLICIES.	92
4.5. CONCLUSIONS.	101

CHAPTER FIVE: 1993-1994 Fieldwork in Breadalbane ESA.	103
5.1. INTRODUCTION.	103
5.2. FIELDWORK IN BREADALBANE ESA: 1993-1994.	104
5.3. METHODOLOGY:	104
5.3.1. Sample selection.	104
5.3.2. Interviewing.	106
5.3.3. Issues discussed.	107
5.3.4. Data management, analysis and interpretation.	109
5.4. SUMMARY OF RESULTS FROM 1993/4 FIELDWORK.	111
5.4.1. Introduction.	111
<b>5.4.2.</b> Interviews with farmers, estate factors and landlords, and farmers' wives.	112
5.4.3. Interviews with advisers.	121
5.5. METHODOLOGICAL COMMENT.	122
<b>5.5.1.</b> The financial aspects of the ESA and their place in the adoption/non-adoption 'trade-off'.	123
5.5.2. Rumours concerning the ESA.	125
5.5.3. The ESA and 'good' or 'poor' farming practice.	125
5.5.4. Adapting to future agricultural policy developments.	126
5.5.5. Incidence of neighbour influence.	127
<b>5.5.6.</b> Notions of 'traditional' and 'progressive', in association with the ESA.	129
5.5.7. Concluding points.	130
5.6. CONCLUSION.	132

CHAPTER SIX: Critical Appraisal of the MAFF Evaluation.	134
<b>6.1.</b> INTRODUCTION.	134
6.2. THE BREADALBANE ESA MAFF EVALUATION PROCESS.	135
6.2.1. Curtailing of the MAFF Evaluation Issues.	136
6.2.2. Evolution of the MAFF Evaluation objectives.	137
<b>6.2.3.</b> Application of conventional methods within the MAFF Evaluation.	138
<b>6.3.</b> EXAMPLES OF THE EFFECTS OF THE MAFF EVALUATION PROCESS UPON RESULTS AND ANALYTICAL ACCURACY.	146
<b>6.3.1.</b> ESA adoption/non-adoption was represented in the MAFF Evaluation simply as a dichotomous decision.	146
<b>6.3.2.</b> ESA adoption was represented within the MAFF Evaluation as synonymous with other similar, but different decisions.	151
<b>6.3.3.</b> Reasons and Factors associated with ESA adoption were interpreted (within the MAFF Evaluation) as being structured around predetermined issues.	154
6.3.4. Factors affecting adoption seen in terms of the individual.	164
<b>6.3.5.</b> Farm and Farmer characteristics were simply retrospectively correlated with ESA adoption/non-adoption, within the MAFF Evaluation.	172
<b>6.3.6.</b> Attitudinal change of the policy recipients towards conservation and the environment was anticipated as a direct result of implementing the ESA.	184
<b>6.4.</b> EVALUATION METHODOLOGY: EXAMPLES FROM THE RESEARCH LITERATURE.	187
6.4.1. The focusing of the MAFF Evaluation remit.	187
6.4.2. Methodological specification.	189
6.4.3. Evaluation methodology: concluding comments.	193
6.5. CONCLUSIONS.	193

.

v

<b>CHAPTER SEVEN:</b> Conclusions and Recommendations.	1 <b>97</b>
7.1. INTRODUCTION.	197
<b>7.2.</b> CONCLUSIONS CONCERNING THE CRITICAL APPRAISAL OF THE BREADALBANE ESA MAFF EVALUATION.	1 <b>98</b>
7.2.1. The omission of context: 'policy environment'.	201
7.2.2. The omission of context: 'social environment'.	203
<b>7.2.3.</b> Focus upon financial criteria as the ESA-related behavioural determinants.	204
<b>7.2.4.</b> The compartmentalised approach resulting from the sole application of 'etic' (Evaluators') analytical divisions and the exclusion of 'emic' (farmers') understandings and decision processes.	205
7.3. CONCEPTUAL AND METHODOLOGICAL IMPERATIVES FOR THE SOCIO-ECONOMIC EVALUATION OF AGRI-ENVIRONMENTAL POLICY.	208
<b>7.3.1.</b> The influence of MAFF upon the Evaluation process and ongoing remit.	208
<b>7.3.2.</b> The conceptual emphases and assumptions within the MAFF Evaluation.	209
<b>7.3.3.</b> The methodologies used in data collection within the MAFF Evaluation.	213
<b>7.3.4.</b> Summary of imperatives for future socio- economic evaluations	215
7.4. FURTHER RESEARCH.	217
7.5. CONCLUDING COMMENT.	220

# **BIBLIOGRAPHY.**

}

221

APPENDICES:	234
II (i): The Agriculture Act 1947: Rules of Good Estate Management and Good Husbandry	234
II (ii): Legislation specific to ESAs.	235
II (iii): Individual Designation Orders.	239
II (iv): Map of ESAs in Scotland [1994].	241
III (i): Map of Breadalbane ESA [1987-1992].	242
III (ii): Map of Breadalbane ESA [post April 1992].	243
III (iii): Changes to Breadalbane ESA [post April 1992].	244
III (iv): Map of Breadalbane ESA and control area	245
<ul><li>V (i): Letter to farmers in Breadalbane ESA [1993/4 Fieldwork].</li><li>V (ii): Information on The Ethnograph.</li></ul>	246 247
V (iii): Data from Interviews with Local Area Advisers.	252
VI (i): MAFF Evaluation Questionnaires.	256
VIII: Abstract: Skerratt, S.J. and Dent, J.B. [forthcoming].	277

.

# LIST OF FIGURES

Figure 3.1. Diagram outlining the approach for the appraisal of non-marketed outputs.	41
<b>Figure 3.2.</b> Application curve: Numbers and percentage of all eligible ESA farmers, 1987-1990.	58
Figure 6.1. 'Evaluation' and 'Research'.	188
Figure 6.2. Mixing methods.	192

# LIST OF TABLES

# PAGE NUMBER

2.1. Oliver Walston (1988) "Outbursts".	20
3.1. Attributes of, and threats to, the Breadalbane Area.	52
3.2. Summary of Breadalbane ESA Management Guidelines.	53
3.3. Conservation work funded under the ESA.	54
3.4. Actual and Projected Uptake to 1992.	57
3.5. Scheme Participants: Distribution within Age Category.	59
<b>3.6.</b> Primary Sources of Information concerning the Breadalbane ESA Scheme.	61
<b>3.7.</b> Adequacy of Information and Advice Concerning Breadalbane ESA.	62
3.8. Advantages of the ESA Scheme.	63
3.9. Disadvantages of the ESA Scheme.	64
<b>3.10.</b> Suggestions for Improvement in the ESA Scheme.	65
<b>3.11.</b> Farmer Involvement in each of the ESA-funded Conservation Activities.	67
3.12. Labour Inputs for each ESA-funded Activity.	68
3.13. Projected Expenditure on Labour and Materials to 1996.	69
3.14. ESA and Control Area Conservation Activity - ESA type work.	70
3.15. ESA-induced Attitudinal Change.	71
4.1. Objectives of the farming occupation.	81
4.2. An example of the scales of farmer's self concept.	83
5.1. Core Issues discussed within the interviews.	107
5.2. Core Issues discussed within the interviews with farmers' wives.	109
5.3. Categories of data.	110
5.4. The importance of financial factors.	123
5.5. Variations in the importance of financial factors.	124
5.6. Rumours concerning Breadalbane ESA.	125

I AUE NU	WIDE
5.7. 'Good' and 'poor' farming.	126
5.8. The ESA and 'good' farming.	126
5.9. Responses to the changing policy context.	127
5.10. The changing 'neighbourhood' context.	127
5.11a. Responses to ESA-related neighbour influence.	128
5.11b. Comments on individual responsiveness to ESA-related neighbour influence.	128
5.12. Diverse views on the farming 'tradition'.	129
5.13. Diverse views on the ESA and 'traditional' or 'progressive' farming.	130
6.1. Initial ESA Considerations.	147
6.2. Farmers' ESA assessment over time.	147
6.3. Process of assessment.	148
6.4. Responses to FWAG farm visit.	148
6.5. Farmers' responses to survey content.	149
6.6. Importance of agricultural adviser's input.	150
6.7. Establishing compromise within the ESA farm plan.	150
6.8. The ESA in context.	152
6.9. The ESA and risk.	153
6.10. The public nature of farming.	154
6.11. Factors considered in relation to ESA adoption.	156
6.12. Farmers' responses to ESA grant levels.	156
6.13. Farmers' trade-offs associated with the ESA.	157
6.14. ESA congruence with earlier intentions.	157
6.15. Previous experience of the ESA.	159
6.16. Concerns over the ESA and conservation input.	160
6.17. The impact of non-ESA issues.	160
6.18. Perceived nature of ESA work.	161

6.19.	Landlord influence on ESA adoption.	161
6.20.	The ESA and farming standards.	163
6.21.	Shifting policy objectives.	164
6.22.	Farmers' discussions of the ESA.	166
6.23.	Limits on neighbour influence.	166
6.24.	Variations in farm household decision making arrangements.	167
6.25.	Two generational farming and the ESA.	168
6.26.	The extent to which farmers are involved with the farm.	168
	Variations in the involvement of farmers' wives in farm-related on making.	169
6.28.	Types of farm-related decisions.	171
6.29.	ESA decisions.	171
6.30.	Tenureship.	174
6.31.	Farm size.	175
6.32.	Age.	176
6.33.	ESA-induced change.	185
6.34.	ESA and conservation interest.	186
6.35.	Summary of reasons associated with ESA adoption.	186
	Summary of imperatives for future socio-economic tions of agri-environmental policy	216

.

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# LIST OF PRINTS AND PHOTOGRAPHS

#### PAGE NUMBER

Photograph 2.1.	Hovis Advertisement: an example of nostalgia.	33
Photograph 2.2.	MAFF Advertisement: "Balance in the Countryside".	34
Photograph 3.1.	The higher altitudes of Breadalbane ESA in winter.	48
Photograph 3.2. Breadalbane ESA	The lower lying arable carse land within	49
Photograph 3.3. Breadalbane ESA	The seat of one of the largest estates within	50
Photograph 6.1. Breadalbane ESA	Dyking work being carried out with ESA funding in	158
Photograph 6.2.	An estate owner within Breadalbane ESA.	162
Photograph 6.3. within Breadalban	A tenant farmer on an upland estate e ESA.	162
Photograph 6.4. Breadalbane ESA	A young tenant family on one of the upland estates in	170
Photograph 6.5.	A diversified farm within Breadalbane ESA.	170

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#### **CHAPTER ONE**

#### **INTRODUCTION**

Environmentally Sensitive Areas (ESAs) were introduced into EU and UK Legislation in the mid 1980s, with the First Round of ESAs being implemented in 1986/87. Contemporaneous with their implementation was the UK Legislation (within the Agriculture Act 1986) requiring the monitoring and evaluation of the ESA Scheme. The Ministry of Agriculture, Fisheries and Food (MAFF) instigated an internal programme of monitoring, and commissioned a series of Socio-economic Evaluations through its Chief Scientist's Group. Breadalbane and Loch Lomond were designated within the First Round of ESAs in Scotland (see Chapter Two for more detail). MAFF then commissioned the Socio-economic Evaluation of Breadalbane ESA, Perthshire, which was carried out over the period 1987-1990, by the Scottish Agricultural College (SAC).

The literature review associated with the early stages of the Breadalbane ESA MAFF Evaluation was indicative of a level of complexity at the farm-level which needed to be addressed in order to assess accurately the impact and uptake of a scheme such as the ESA. The issues, seen by many authors as fundamental to representative analyses, included, for example: the process of adoption decision making; the range of economic and non-economic factors involved in such decision making; and the place of the individual within his/her networks, as compared with the individual farmer as the sole unit of analysis. The arguments presented in the literature also examined the necessity for considering *appropriateness* of data types and data collection methods.

However, the above concerns over detail, and suitability of methods, were at variance with the overly-focused emphases inherent within the MAFF Evaluation. Concerns over the quality of the socio-economic MAFF Evaluation were determined by different sets of criteria: for the funders of the Evaluation (MAFF) the criteria appeared to emerge as timeliness, value for money, statistical representation of key issues, and quantification of the anticipated positive impact of the ESA Scheme. This parsimonious approach contrasted with the emphases initially envisaged by the MAFF Evaluation team, which included: the presentation of a fuller understanding of ESA impact and uptake than provided by

purely production- and financially- orientated questioning to individual farmers; and the addressing of issues concerning the norms of farmer responsibility towards the environment placed within the context of the farming community.

The extent of these differences between MAFF Evaluation funder and MAFF Evaluation team led to frustration on the part of the latter in terms of the quality of the end product (the Report), 'quality' having been defined in the light of previous research literature, and a growing understanding of the issues that the ESA was raising for farmers and landowners within Breadalbane.

At the time of the MAFF Evaluation, it was difficult to pursue the implications of this divergence. However, the experience of this particular socio-economic Evaluation, the knowledge that legislation binds government departments to continue with similar policy evaluations, and that these policy assessments feed into policy development decisions, led to the sense that further investigation was imperative. The arguments and observations presented in this Thesis represent the culmination of research into the issues cited above. They are discussed with the understanding that although 'research' has different priorities from 'evaluation', the latter must still remain rigorous, with its inherent preconceptions, assumptions, and associated methodologies being investigated in terms of their appropriateness to the evaluation setting.

The focal points of the Thesis are represented by the following hypotheses:

\* That the current underlying concepts, and associated heuristics and methods, applied within conventional socio-economic evaluation of UK agri-environmental policy, are inappropriate, and lead to inaccurate and partial results.

\* That conventional, government-funded socio-economic evaluations of agrienvironmental policy, comprise a *poor* evaluation of the impact and uptake of such policies.

\* That, through a case study, it is possible to isolate key facets of these conventional evaluations which lead to the inadequacy of the results.

\* That future socio-economic evaluations of agri-environmental policy must comprise a broader data set than currently employed; and that the data must comprise qualitative and quantitative components, as appropriate to the issues concerned.

\* That a revised set of criteria and methods are necessary both to replace and complement existing socio-economic evaluation procedures.

In order to address these hypotheses, current policy evaluation methodology is examined, both through government-published guidelines, and from the case study of the MAFF Evaluation of the Breadalbane Environmentally Sensitive Area (ESA). As argued elsewhere in the Thesis, this case study, although unique, is not the sole example of a government-funded socio-economic evaluation of agrienvironmental policy. Rather, it exemplifies the norms and heuristics prevalent within the (government-funded) evaluation field, and as such is extremely significant in elucidating specific facets within the overall discussion.

In examining the underlying concepts, and associated process and methods of the MAFF Evaluation, the discussion touches upon the use of qualitative and quantitative data. The premise here is that appropriateness is the key criterion in That is, although quantitative data are sufficient for determining data type. representing quantitative facets of the farming business, they are not appropriate for drawing out and explaining the complex milieu of the farm level context. The issue being addressed therefore, is not quantitative versus qualitative, since "the dichotomy between quantitative and qualitative data (is) seen ... as a false one, and something that inhibit(s) rather than enhance(s) progress ... " (Marsden and Oakley [1990], p.8). Rather, "the crucial issue is what importance is attached to the numbers, and knowing how they might be used and abused" (Marsden and Oakley This tenet underpins the arguments presented within the Thesis. [1990], p.9). However, since the MAFF Evaluation of Breadalbane ESA comprised solely quantitative data and structured methods for its collection, the discussion comprises a Critical Appraisal of these quantitative methods, and an analysis of the qualitative data and methods which become imperative - particularly when the complexity and significance of the policy-recipients' context is demonstrated.

The case study within the Thesis comprises the Socio-economic MAFF Evaluation of Breadalbane ESA. The discussion therefore begins with an outline of the

development of the ESA policy. In addition to being a chronological account, Chapter Two examines the shift in the norms of environmental responsibility of the agricultural industry, from the 1940s to the 1990s. Further, the MAFF-produced image of the ESA - as the promulgator of "traditional farming" - is highlighted as significant to its reception in both farming and non-farming arenas.

Concurrent with the implementation of the ESA programme was the legislation ensuring its monitoring and evaluation. Although the government have not produced evaluation guidelines specific to agri-environmental policy, the three government publications concerning evaluation and appraisal are discussed (Chapter Three) as exemplars of the underlying premises and methods informing evaluations such as the ESA. Chapter Three concludes with the presentation of the case study: "The Socio-economic MAFF Evaluation of Breadalbane ESA: 1987-1990".

Chapter Four comprises a review of the literature which demonstrates the complexity, dynamism and importance of the farm-level context (alluded to above). The motivations of farmers, the existence and significance of the farm household, and the role of neighbouring farmers in affecting behaviour (what Phelan has termed the "cultural sanction"; pers. comm. October 1993) are addressed. The nature of adoption decision making, in the context of UK agri-environmental policy, is also discussed. These examples emphasise the partial nature of current evaluation methods, due largely to their focused remit. Further, they point to the necessity for a broadening of the data set beyond the conventional boundaries illustrated in the Breadalbane ESA MAFF Evaluation.

Having established the need for recognising the context of policy recipients, Chapter Five outlines the data gathering subsequent to the MAFF-funded Evaluation (referred to as the 1993/4 Fieldwork). Farmers, farmers' wives, landowners and factors, and policy advisers were interviewed in the winter of 1993-1994, in order to examine the issues outlined above. The semi-structured interviewing in Breadalbane ESA focused upon ESA adoption/non-adoption decision making, with the aim of elucidating the processes and factors involved. The rationale and methodologies are outlined, together with a resume of the interview results; there is also a methodological comment concerning the use of the data in the Critical Appraisal. These data are then applied to the Critical Appraisal (Chapter Six) of the MAFF Evaluation. The input from MAFF and from the Scottish Office Agriculture and Fisheries Department (SOAFD) to the government-funded Breadalbane ESA MAFF Evaluation is examined in Chapter Six. This comprises a key aspect of the discussion, since it determined the approaches and results of the whole MAFF Evaluation, and thus put into question the supposed 'objectivity' of this contracted research (see also McDermott [1987]). The specific implications of the underlying heuristics and methodologies of the MAFF Evaluation are then assessed. Examples of conclusions reached through the MAFF Evaluation are compared directly with those from the subsequent period of interviewing (the 1993/4 Fieldwork). This comparative Critical Appraisal clearly demonstrates the partial and erroneous nature of data ensuing from an Evaluation such as Breadalbane ESA, and the subsequent dearth in understanding of the socio-economic impact and uptake of this agri-environmental policy. The Chapter concludes with an assessment of the Critical Appraisal in its wider methodological context.

The Thesis concludes with a review of the clear implications of maintaining the conventional assumptions, methods and data types, illustrated through the government evaluation literature and through the MAFF Evaluation. Further, the discussion highlights specific conceptual and methodological imperatives demanded by the observed scenarios inherent within the MAFF Evaluation. As stated, emphasis is upon appropriateness of assumptions, data types and methods, rather than on prescribing an equally restrictive alternative evaluation programme. Such a stance encompasses the following pre-requisites: a recognition of the heuristics themselves; and the incorporation of policy-recipients' evaluation criteria and decision making processes into conventional approaches (particularly since agrienvironmental policies will apparently remain voluntary for the immediate future; see Whitby and Lowe [1994]). The following quotes echo these requirements for future policy evaluation; further, they comprise the overall dual foci of the Thesis:

"A major difficulty posed by ... reliance on paradigms and heuristics for problem solving is not just their existence, but our general lack of awareness of their existence ... Yet it is possible to become aware of our paradigms and heuristics, and in that awareness take hold of (the) decision process" (Patton [1981], p.271).

"Evaluation is .. much more than providing useful information to decision-makers; it is learning from people about their own methods of evaluation and incorporating that learning into a redesigned practice" (Marsden and Oakley [1990], p.14).

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#### **CHAPTER TWO**

### THE CONTEXT FOR ESA DEVELOPMENT

### 2.1. INTRODUCTION.

The aim of this chapter is to examine the emergence of the Environmentally Sensitive Area (ESA) policy as an indicator of the trend towards increased environmental obligation of the institutions and individuals within the agricultural industry. It is not therefore intended as an outline of the development of agrienvironmental policy since the 1940s *per se* (see Evans [1992]; Bishop and Phillips [1993]; Whitby and Lowe [1994] for excellent discussions). Rather the objective is to set the ESA in its policy context.

The chapter therefore examines the period described by Wibberley (1985) as "agricultural fundamentalism", and the subsequent shift from the 1960s onwards, the trend being particularly significant in the late 1970s and early 1980s. The concerns and debates of these periods are outlined, and the issues relating particularly to the development of the UK ESAs are discussed.

Further, the discussion focuses on the implications of these changes for the policy recipients - primarily farmers - as they adjust to government policy and support 'signals' which encourage them to broaden their objectives and remit beyond those of agricultural production. These shifts in expectations towards the agriculture industry in terms of responsibility for the environment - 'stewardship', 'husbandry' and so on - may well be establishing a new set of norms of farming behaviour.

In addition, agri-environmental policies such as the ESA represent a 'debunking' of much of the mystique associated with the agriculture industry; they open a door, and thus legitimise, the continued questioning of the methods and extent of support for agricultural production. This is significant, in that the culture of production is being increasingly challenged by the culture of environmentalism.

Thus, the ESA policy must be viewed within its legislative, cultural and historical contexts. These aspects are therefore discussed within this chapter.

It is necessary to outline briefly the nature of the ESA policy. Environmentally Sensitive Areas (ESAs) were introduced into EU and UK legislation in the mid 1980s, with the first Designation Orders being implemented in 1987 (England) and 1988 (Scotland). Their origin is in part accounted for in Governmental, non-governmental and research literature as being related strongly to the environmental impact of "modern" farming practices on rural areas, and the effects of agricultural intensification (see MAFF [1989], p.5).

Their aim therefore, is: "to help conserve those areas of high landscape and or wildlife value which are vulnerable to changes in farming practices by offering payments to farmers willing to maintain or introduce environmentally beneficial farming practices" (MAFF [1989], p.3). Issues of public access are also now on the agenda within the ESAs (SOAFD [1992]).

ESAs comprise designated areas within the UK within which farmers are eligible to voluntarily join the Scheme for a period of 5 or 10 years. During that time period, they agree to farm, and manage specific areas of their land, in ways which are seen by both legislators and their conservation advisers as being environmentally beneficial. For this, farmers receive annual payments on a per ha/per annum basis (in England and Wales and Northern Ireland) and additionally for conservation works highlighted in a Farm Conservation Plan (Scotland). Eligibility for joining the ESA is outlined by The Working Party for Scotland's ESAs: "the generic term 'farmer' is used to refer to those who might make agreements with DAFS (sic). In practice they might include, inter alia, owner/occupiers, tenant farmers, partnerships, crofters (including grazing committees) and landlords" (SOAFD [1986], p.2). After their ESA agreement is completed, the farmers and landowners are then free to continue with, or change, the specifics of their farming systems which had formerly been agreed under the ESA.

The UK ESAs are in their eighth year, with increasing funding and designation (see below) being seen each year. It is not possible to comment on their future beyond the next decade, but the sense is that ESAs are indicative of the trend towards the apparent "greening" of UK agricultural policy (with the development, in 1992, of the Agri-Environment Regulation). Opinions vary concerning the motivations, depth and conviction of such a policy shift.

#### 2.2. AGRICULTURAL FUNDAMENTALISM

"The beauty and pattern of the countryside are a direct result of the cultivation of the soil and there is no antagonism between use and beauty" (The 1940s Scott Enquiry; Pye-Smith and Rose [1984] p.18).

"The notion of the farmer as the custodian of the rural landscape was increasingly seen (in the 1980s) to be at variance with reality. Rather, it was often a case of protecting the environment from the farmer" (Wathern, [1992], p.210).

The above quotes are indicative of the shift (from 1940s to 1990s) in fundamental viewpoints concerning farmers, the agriculture industry and rural land use. Such shifts have had their implications for agricultural policy within the UK, of which ESAs are one example. The cessation of other methods of agricultural support (see below) is a complementary illustration of the change in emphasis which has occurred over the past 50 years. The focus of this section is therefore upon those shifting expectations towards, and obligations of, the farming industry, in the specific context of farming methods and the environment. The aim of such a discussion is to examine how and why ESAs came into existence, and what they represent in terms of both policy development and behavioural norms.

The Agriculture Act 1947: The aim of the Agriculture Act 1947 was to create a stable and efficient agricultural industry; this was to be achieved through the Guaranteed Prices and Assured Markets outlined in Part I of the Act. The following quote highlights this stance:

"The following provisions of this Part of the Act shall have effect for the purpose of promoting and maintaining, by the provision of guaranteed prices and assured markets ... a stable and efficient agricultural industry capable of producing such part of the nation's food and other agricultural produce as in the national interest it is desirable to produce in the UK, and of producing it at minimum prices consistently with proper remuneration and living conditions for farmers and workers in agriculture and an adequate return on capital invested in the industry" (Part I[1], p. 1053).

From this point onwards, a system of support for production was set in motion with subsidies for both inputs and outputs (see Part I of the Act; and Part V "Administrative and General" where contributions towards 'cost of drainage, water supply and application of lime' are outlined (V[96&97], p.1134-1136), together with legislative provisions for 'Experimental schemes for re-adjustment of farm boundaries' (V[87], pp.1126-1128) - this including field amalgamation; and for 'Pest and Weed Control' (see also the Second, Third and Fourth Schedules of the Act)).

Further, Part I of the Act contains a recurring phrase, in the context of Ministerial decisions within the Act, that is, "... to represent the interests of the producers of the product in question" (see, for example, I [4], p.1056), and indeed, the Act itself re-established landowners and farmers as rightful custodians of the land. This was further evidenced in Part II of the Act, where Rules for 'Good Estate Management and Good Husbandry' are outlined. These Rules aimed to *ensure* that owners and occupiers of agricultural land fulfilled their responsibilities towards the land which they managed or farmed (Part II[9], p.1058).

The focal point of the definition of 'good management' and 'good husbandry' comprised maintaining efficient production (see II[10 & 11], p.1059); Appendix II (i) sets out the details of these Rules as outlined in the Act. They comprise an insight into definitions of 'good' estate and farm practice as recognised in the immediate post War (II) period. Their inherent emphases upon maintaining land in a highly productive condition, in a good state of cultivation and fertility, upon efficient stock management, and upon the maintenance of crops and livestock free from disease, reaffirmed the primary aim and function of rural land as being for the production of food, irrespective of the environmental consequences (see also Bishop and Phillips [1993], p.316; and Evans [1992] for further discussion).

The Rules outlined in the Agriculture Act 1947 could further be subject to Supervision Orders from the Minister of Agriculture and Fisheries, in order to enforce their implementation (see Part II[14], p.1063). The Minister possessed the necessary legislative powers to impose requirements, restrictions or prohibitions, and if an owner or occupier was found to contravene the Rules whilst under a Supervision Order, they could receive a conviction to a fine not exceeding £100.00 (see Part II[14], pp.1063-1064), and even Dispossession (see Part II[16], pp.1067-1069).

Thus farmers who lived and worked during this time knew nothing but unquestioning support (both financial and 'cultural') from the Ministry of Agriculture and Fisheries, since the legislative emphases, as outlined, comprised, first and foremost, the establishment of a secure supply of temperate agricultural products, and the encouragement, through research and development, of the increased modernisation and efficiency of the farming industry. The political and policy stance throughout this period is seen by a number of authors as a time of "agricultural fundamentalism" (Bishop and Phillips [1993], p.316), defined by Wibberley (1985) as "an uncritical acceptance of the activities and methods of those who hold agricultural land (and) a belief that the countryside is dominated by people and groups who inherently conserve rural land in the long-term interests of society" (Pye-Smith and Rose [1984], p.18). This interpretation reflected the sense that the Agriculture Act 1947 enshrined the ethos of landowners and farmers as "the friends, the benefactors and the conservationists" (Evans [1992], p.199) (1).

Evidence suggests, therefore, an inbuilt respect for the farming methods employed at this time, and an assumption that farmers were doing their best to tame an otherwise hostile environment for agricultural production for the nation. Biblical texts and poetic quotations were used at the preface to texts on the agriculture industry - reflecting Man's calling to dominate and control nature for the common good. For example, Duckham's text gives an account of the modernisation of farming: "Man has so harnessed the forces of nature that he can make 'alien' or 'exotic' communities of plants and animals fruitful ... But he has only done so at the price of complexity ... (this) calls for skill of a high order ... to make use of the gifts of modern science and engineering..." ([1958], p.14) (2).

<sup>(1)</sup> In addition, the fact that the Town and Country Planning Act 1947 included planning restrictions on all rural land uses *except* agriculture is itself an indication of the status which the industry enjoyed at this time (pers. comm. T.J. Perkins April 1994).

<sup>(2)</sup> This contrast with the views in the late 1970s and 1980s, concerning, for example, the error of reclaiming inhospitable land for agricultural production.

# 2.3.1. The beginnings of change.

In contrast with the entirely praiseworthy image of modern farming presented in the late 1950s, came Carson's U.S. study (1962) of the ecological and environmental effects of the chemical inputs associated with such farming methods. Her book, *Silent Spring*, was published in the UK in 1963, and sent waves through the farming and non-farming sectors of society (Evans [1992]). It led to a major backlash from the leading chemical companies whose products Carson had highlighted as particularly damaging (Evans [1992]). Nicholson (1970) sees the book as "probably the greatest and most effective single contribution hitherto towards informing public opinion on the true nature and significance of ecology" (Evans [1992], p.109). The MAFF subsequently instigated a voluntary ban on Aldrin and Dialdrin in 1962 (3). This polemical text (Carson [1963]) exemplifies a facet of the burgeoning trend which was to involve, over the next two decades, significant changes in the 'popular' view of both the agriculture industry and of farmers themselves (see Whitby and Lowe [1994] p.5).

# 2.3.2. Agricultural support policies and their effects.

However, in spite of the above interruption to the previously perceived sacrosanct and 'well-deserved' nature of agricultural support, similar policy measures continued well on into the 1970s and early 1980s. In 1972, the EU Farm Structures Policy Directives introduced Farm Modernisation Grants, and the Agricultural and Horticultural Development Scheme (AHDS). In 1975, the EU Less Favoured Area (LFA) Directives were implemented. In the UK, LFAs were defined as "land inherently suitable for livestock production but unsuitable for growing crops materially in excess of those necessary to feed livestock (and where) the range of agricultural production is restricted or severely restricted" (Hughes, [1992], p.25). The LFA schemes were "to compensate for the difficult physical conditions... and to help ensure the survival of agriculture in these areas" (Hughes [1992], p.25). These were identified as development schemes which aimed to raise farmer incomes to a level comparable with average urban incomes and were channelled through capital investment aimed at increased agricultural production (see Mowle [1986] p.16; see also the reference to this concept within the Agriculture Act 1947, Part I[1], p.1053, cited above). One of the direct

<sup>(3)</sup> Although Evans (1992) questions the efficacy of such a ban in practice.

repercussions of these policy developments comprised significant financial support for the reclamation of increasingly marginal lands, for example in upland, moorland areas. These financial incentives were increasingly under the spotlight such that, in 1978, the extent of reclamation in Exmoor led to "the first formal recognition, within the policy arena, of the interplay between farming, the ecological environment and the landscape ... with the introduction of a Scheme by the National Parks Authority to protect areas of heather moorland from conversion to grassland" (Wathern [1992], p.201; see also Bishop and Phillips [1993], p.317).

In Scotland also, similar concern was being expressed over the implications of incentives provided under AHDS and LFA payments, since farmers were becoming involved in this same process of intensification. As Mowle (1986) observed: "farmers were obliged to engage in reclamation and intensification ... because this was the agriculture department's chosen path to support rural communities" (p.16); (see also Whitby and Lowe's [1994] comments concerning high rates of capital investment and associated environmental damage; p.4).

Examples such as these prompted the beginnings of a process of examining the long-held assumption (reflected in the Agriculture Act 1947, and subsequent associated legislation) that farmers and the agricultural industry were acting in the best interests of the land. This newly-established stance was echoed, in 1978, in a Statement from the Advisory Council for Agriculture and Horticulture in England and Wales: "(there is) a widespread feeling that agriculture can no longer be accounted the prime architect of conservation nor farmers accepted as the natural custodians of the countryside" (Pye-Smith and Rose [1984], p.19). Such a statement would have been unthinkable even two decades earlier, but, as Evans (1992) highlights:

"the public outcry over loss of wildlife habitat through farming increased with intensity. It was something to which the public could relate... The politicians began to listen and the farmers came to realise that their thirty-five years in clover were coming to an end" (p.191).

Indeed, Soper and Carter (1985) observed that the mid-1980s represented a time of unprecedented public interest in the countryside, and questioning of the methods used by farmers in the production of food (4).

<sup>(4)</sup> See also Bishop and Phillips [1993] discussion of the debate concerning planning controls within agriculture (p.317). Similarly, Whitby and Lowe (1994) highlighted what they term

### 2.3.3. The early 1980s.

The next decade began with the publication of the World Conservation Strategy (WCS), and also of Shoard's (1980) The Theft of the Countryside (see Mowle [1986], p.46). The WCS was commissioned by the United Nations Environment Programme (UNEP) and was partially funded by the Worldwide Fund for Nature The Strategy represented a policy concensus concerning conservation (WWF). efforts in the context of world development (Johnson [1983], p.7) and was viewed as "the product of a formidable collection of international wisdom and expertise ... (it was) a political manifesto seeking a completely new order" (Mowle [1986], p.12). It is mentioned here because, although it is difficult to assess its direct impact on the agri-environment policy process (5), it did raise, in the arena of public discussion, the possibility of designating areas considered to be of particular conservation and landscape value (IUCNNR [1980]) as a policy option; and the UK's response to the WCS comprised a series of documents (6) which throw some light on land-use policy recommendations of the time. The WCS and the UK response therefore, certainly informed debate.

The relationship of WCS to agricultural land-use, and therefore its importance to ESA development, lies in its recommendations for, firstly, anticipatory environmental policies, defined as those actions which ensure that conservation and other environmental requirements are taken into account at the earliest stage of the decisionmaking process (IUCNNR [1980], Section 9); and secondly, recommendations for *cross-sectional* conservation policy to encourage integration of otherwise conflicting objectives between, say, agriculture, forestry, fisheries, and wildlife (IUCNNR [1980], Section 9.5). Of particular relevance here is the Strategy's statement that the policy goals of agriculture should include:

<sup>&#</sup>x27;corporatism', "... Where control has been necessary within agriculture, the farming and landowning community has been anxious both that it take a permissive form and that the control remain within the industry" (p.19).

<sup>(5)</sup> Although Mowle (1986) comments that since the Strategy's stand on so many issues is different from that of Britain and Western Europe it is therefore "not too surprising that no attempts have since been made by Government to translate the WCS creed of 'living resource conservation for sustainable development' into practical measures appropriate to the UK" (p.12).

<sup>(6)</sup> Seven Sector Reports were produced, which included one entitled 'The Rural Sector'. These seven reports comprised "The Practitioners' Debate".  $^{\circ}$ 

"to supply food and other agricultural products in sufficient quantity and of acceptable quality, consistent with the maintenance of the resource base and maintain and enhance the quality and attractiveness of rural areas" (IUCNNR [1980], Section 9.12).

In 1983, "The Conservation and Development Programme for the UK" was published (in response to the WCS) in which was prepared a "national conservation strategy tailored to ... particular problems and characteristics, cultural and economic conditions..." (Johnson [1983], p.1). The Rural Sector Report, *Putting Trust in the Countryside*, emphasised the use of resources to ensure permanent production while keeping negative externalities to a minimum; and conserving visual beauty. The Report introduced a three-fold classification, a New System of Countryside Categories comprising (i) Heritage Sites; (ii) Conservation Zones; (iii) Agriculture and Forestry Landscapes. Within this framework, it was proposed that "conservation investment should be encouraged according to the principles of sustainable utilisation ... and landscape enhancement through appropriate incentives" (Johnson [1983], p.244). Alongside this, the author recommended a number of "carefully monitored (land use policy) experiments in the UK" recognising that the task would be a formidable one (Johnson [1983], p.257).

The WCS, the response from the UK, and the Countryside categories have all been variously criticised (for example, Bishop and Phillips [1993]). The purpose here is not to evaluate the efficacy of the Strategy; but rather to point to it as being indicative of the policy-related proposals and changing policy context of the early 1980s, since it formally introduced the concepts of designated areas and financial incentive systems to encourage environmentally-favourable rural land use.

It is worth noting, however, that 1980 was also the year of the Rayner Review, which meant that there was no longer the need for prior approval by MAFF for grant aid to be provided to farmers for investment, except in 'sensitive areas' (7). According to Colman and Traill (1984), the Review removed a policy mechanism for imposing conservationally-oriented constraints on publicly supported agricultural investment" (p.37). Further, it built on the view established through the Agriculture Act 1947, that "farmers have a *right* to investment grants, which in turn conditions acceptance that where this 'right' is withheld (for whatever reason)

<sup>(7)</sup> Colman and Traill (1984) also state that "the procedure has been 'streamlined' so that farmers are ... able to carry out work and claim retrospectively for the grant" (p.37).

farmers should be compensated for its loss" (p.37). This stance, re-emphasising the 'rights' of farmers, was indicative of the ways in which agri-environmental policy in the UK continued to develop in a piecemeal fashion during the decades from 1947.

The theme of the interaction between environment and agricultural land-use was continued through the Wildlife and Countryside Act 1981. The Act aimed to safeguard Britain's natural heritage, and focused on individual species, habitats and their management, and (see Evans [1992], p.180). 'Habitats and their Management' comprised Part II of the Act 1981, which set out the procedure for dealing with Sites of Special Scientific Interest (SSSIs). The Wildlife and Countryside Act 1981 gave the Nature Conservancy Council (NCC) the responsibility for supplying owners and occupiers of SSSIs with lists of potentially damaging operations (PDOs) along with site maps and citations of the scientific interest (Mowle [1986], p.23). The owners and occupiers, in turn, had to notify the NCC concerning any PDOs. Mowle (1986) comments that "the really significant development was that, for the first time, development controls were placed on rural land-use, albeit geographically limited within SSSIs covering less that 10% of the land area" (p.23; emphasis added). Indeed, Soper and Carter (1985) echo this latter point that, although the restrictions existed within SSSIs, outwith such designated areas, that is, in the majority of the countryside, the Act had moral implications for farmers and landowners (see pp.88-89) (8). The Wildlife and Countryside Act 1981 therefore, resulted in conflict in the countryside being clearly recognised (see Mowle [1986], p. 7) with legislation developments aiming at its reconciliation.

Thus two issues of importance were emerging: firstly, the initiation of a measure of limited planning controls within the realm of agriculture (9); and a shift in society's expectation of increased responsibility, on the part of the agriculture

<sup>(8)</sup> As a consequence, its effectiveness as a tool for encouraging greater nature conservation within farming has been questioned due to its potentially piecemeal approach, and reliance upon voluntary co-operation. In addition, issues of abuse of the system have been highlighted: whereby a farmer may notify the NCC of a PDO (and subsequently receive payments for loss of profit foregone) even though the individual had no intent of initiating a PDO (see Pye-Smith and Rose, [1984]; Colman and Lee [1988]).

<sup>(9)</sup> Although the persistence of the *voluntary* nature of such agreements has been criticised as an approach which still panders to "agricultural fundamentalism" (Bishop and Phillips [1993] p.317); see also Whitby and Lowe (1994), pp. 19-20.

industry, for the environmental well-being of the land (see Colman and Traill [1984]). In addition, the relevance of Wildlife and Countryside Act 1981 to the subsequent development of ESAs is, firstly, its provisions to discourage environmentally-harmful agricultural changes, through Management Agreements (see Colman and Lee [1988], pp.12-13); secondly, the emphasis upon *management* of habitats and agriculture's role in this; and, thirdly, the voluntary emphases which were felt to be crucial to farmer uptake.

However, contemporaneous with the establishment of the Wildlife and Countryside Act 1981 and indeed subsequent to it, production grants were still readily available for drainage and reclamation. Thus, it appears that lip-service was being paid to conservation on farmland (within policy), but that the bulk of agricultural policies were still geared towards increasing or maintaining production and efficiency (see Potter [1984], p.11); that is, conservation regulation of farming practices were still "swimming against the tide of agricultural support" (Whitby and Lowe [1994], p.8; see also Colman and Traill [1984], p.38). The mid-1980s therefore, witnessed an increasing awareness of this apparent policy dichotomy; this was to have direct implications for the establishment of ESAs.

### 2.3.4. Public awareness.

The above, and subsequent, legislative developments of the 1980s were parallelled by the publication of a number of texts significant to the ongoing debates concerning modern farming methods (10) and the environment. These include Body (1982) Agriculture: The Triumph and The Shame; Body (1984) Farming in the Clouds; Bowers and Cheshire (1983) Agriculture, the Countryside and Land Use (see Evans [1992], p.192). Pye-Smith and Rose (1984) also published a critique of modern rural land-use and of the support that the agriculture industry had received from the Ministry. They comment, for example, that:

"the farmers and the foresters are a tiny minority of the British people, yet in their quest to turn the countryside into a food and timber factory, they have been aided and abetted by successive governments which have been loath to impose any sanctions on their destructive activities" (p.10).

<sup>(10) &#</sup>x27;modern' being interpreted as post Second World War, and comprising, primarily, increased mechanisation, reclamation and draining, and the almost exclusive use of non-organic chemical inputs.

This period saw the questioning of issues that had previously been regarded as sacrosanct, such as: agricultural subsidies; the ability and willingness of farmers to manage the rural landscape; and in fact, criticism of specifics of the industry which, prior to this, had received only support (both tacit and overt). Whitby and Lowe (1994) observed that: "with the growing appreciation of the totality of agricultural change, the whole system of agricultural support came under attack as the root cause of intensification ... and pressure built up for general powers to regulate the environmental impact of agricultural and forestry development" (p.6); (see also Evans [1992], p.189). In a Penguin publication (and therefore of potentially wider circulation than only those individuals concerned with agriculture or conservation), Pye-Smith and Rose (1984) stated further that the Wildlife and Countryside Act 1981:

"has done one good thing, albeit inadvertently, it has ... drawn out into the open the unjustifiable level of public subsidy which *some* farmers and foresters enjoy, both directly through grant-aid and indirectly through price support. Indeed the CAP is under attack from so many different quarters that it is difficult to see it surviving in its present monstrous form" (p.157).

Furthermore, they conclude their polemic with the argument that "the British taxpayer should no longer tolerate farmers taking his or her money to produce most of what already exists in surplus at the expense of the remarkable beauty and richness of the countryside" (p.159).

Another example of disquiet is cited by Colman and Traill (1984) in the Centre for Agricultural Strategy (CAS) publication concerning policy support strategies for farming:

"From the point of view of conservation and environmental concerns, the impact of such policy instruments as drainage grants, capital grants and tax allowances are more directly obvious and damaging ... (These policies) have the taxpayer contributing to the costs of investment and thus increasing the profitability of private farmers' investments. The underlying rationale of this type of policy is, however, far from clear; why should government transfer taxpayers' money to farmers in order for them to make profits? ... " (pp.36-37).

The above examples illustrate that the 1980s was witnessing an unprecedented upheaval (11) in the *status quo*, in terms of both agricultural legislation at EU and UK levels, and public opinion. Further, it is argued that any move towards

<sup>(11)</sup> Perhaps with the exception of the publication of Carson's Silent Spring (1963).

conciliation (between agriculture and conservation) was as much due to factors within the farming industry (Bishop and Phillips [1993]). There were, in the mid-1980s, surpluses ('mountains and lakes') of a number of products, for example, butter, wine, milk - which were seen as a result of UK/EU intervention (Pye-Smith and Rose [1984]). Bishop and Phillips (1993) comment that:

"Change came suddenly in 1984. The abrupt introduction of milk quotas signified a crisis in European agricultural policy and the dawn of a new era of continuing agricultural policy reform. Increasingly, the prevailing concern was to cut food surpluses and the costs of the CAP" (p.317).

Such costs and surpluses were now in the awareness of non-farmers, and taxpayers. A further strand of this shift in society's expectations towards rural land use was the reinforced call, amongst the predominantly non-farming public (for the reasons outlined) for a *return* to *traditional* ways of farming, 'traditional' being implicitly interpreted as pre-1947, the aftermath of which was seen as 'modern' farming with all its inherent evils and destructive implications. This is a key point, reflected later in the information accompanying the introduction of the ESAs (see below).

Further, Carson in *Silent Spring* had brought chemical inputs out into the public arena; the NCC 1984 "census" of destroyed habitats (12) had similarly pushed agriculture's environmental, landscape and ecological impacts into the open; the quota systems of 1984 (and subsequent years) had opened the debate on levels of production and associated subsidies; the state of Exmoor threw light on the potential effects of reclaiming marginal areas for production, and the fact that this was financially supported by agricultural subsidies; and the Halvergate Marshes (see below) had exemplified the differing objectives and agendas of a number of farmers and conservationists in what was seen as an area of national ecological value (see also Wathern [1992], p.200).

<sup>(12)</sup> Whitby and Lowe (1994) highlight the publication: "A survey of habitat losses conducted by the NCC and published in 1984 revealed the following grim chronicle: over the previous 35 years, the nation had lost 95% of lowland herb-rich grasslands, 80% of chalk and limestone grasslands, 60% of lowland heaths, 45% of limestone pavements, 50% of ancient woodlands, 50% of lowland fells and marshes, over 60% of lowland raised bogs, and a third of all upland grasses, heaths and mires" (p.6).

#### 2.3.5. <u>Responses in the farming industry.</u>

O'Riordan, writing in 1984 concerning the barrage of public opinion, states that "... dozens of reports have been produced, at least five major books written, countless magazine articles and even more letters to press published plus at least five major television programmes - all in the last four years...." ([1984], p.46). The above criticisms were seen by many farmers as a new national sport of "farmer bashing" (Evans [1992], p.192). Many in the farming industry felt cheated and misunderstood, having worked for four decades since the Second World War to produce a reliable and high quality food product (as outlined with reference to the Agriculture Act 1947). Many could not understand what they felt to be a turn in public opinion - some of which was particularly vehemently expressed (see below). Elliot (1984), representing the NFU within a debate on agricultural support and the environment, stated that "the farming community has for many months now been subjected to a barrage of media criticism in respect of its purported privileges and alleged mindless devastation of the countryside..." (p.24).

In addition, individual farmers retorted to the apparent injustices of these criticisms. One example is that of Oliver Walston (1988), a Cambridgeshire arable farmer, whose writings from the mid 1980s were published in a volume entitled "Outbursts"; extracts are presented below (Table 2.1.).

"Farmer-bashing is the latest national sport and, as a result, I'm beginning to sympathise with foxes, partridges and electric hares at greyhound stadiums ... we are fast becoming The Men They Love To Hate. In public, I pretend I don't care. In fact I make jokes at my own expense and hope the rest of the world will leave me alone.

But when faced with a continual barrage from every newspaper and television station in the land ....

They (public) should realise that we are not avaricious destroyers of the countryside who plaster the fields with chemicals, put sows in farrowing crates and rip out hedges when we are short of amusement..."

Excerpts from: "Open your farms to the Public" (May 1984); pp. 191-193.

"... The Age of Balanced Farming ... is not very long ago. These were the days when there were no grain mountains, when farmers were loved by an adoring public ... and when we could do no wrong. Of course, we did not use inorganic fertilisers, herbicides consisted of one man ... with a hoe, fungicides were unheard of and tractors were rare. Everything was in perfect balance and harmony ...

... There is a small (but noisy) body of opinion in (and outside) Agriculture today which thinks that all our problems would be solved if we could once again return to The Age of Balanced Farming ... the landscape will become prettier as the "prairies" (bad) are replaced by the "patchwork quilt" (good)...

Excerpts from: "Noble Savage" (July 1986); pp.264-266.

"You've been pretty rude about farmers during the past few years. You've called us all sorts of names and have lost no opportunity to go on telly and remind the rest of the world what an unpleasant bunch we are. This activity is called farmer-bashing ... It is, of course, true that some of us have deserved your attentions. The man who bulldozes a hedge to convert a one hundred acre field into a 200 acre field deserves no sympathy ... But these types are far from typical - even though you have given the impression that they are normal ...

... So when you and your colleagues are girding your collective loins for yet another bout of semi-hysterical but wholly self-righteous farmer-bashing, it might be wise if you paused for thought. Restrain your baser instincts even though this approach may lose you friends ... in the muesli belt".

Excerpts from: "Open letter to Jonathan Porritt - Friend of the Earth" (April 1987); pp. 293-296.

TABLE 2.1. OLIVER WALSTON (1988) - "OUTBURSTS".

Further, the institutional farming response involved the National Farmers Union (NFU) and the Country Landowners Association (CLA) publishing reports in 1984 which tended to suggest that there might be a place for conservation in the activities of their members (see Evans [1992]). Whitby and Lowe (1994) observed that, at this time, the NFU and CLA were determined to preserve "two cherished and related freedoms" in responding to environmental criticisms in modern farming; first, the autonomy of MAFF and the farming community in the administration and implementation of agricultural policy; and second, the

autonomy of the farmer and the rural landowner in making production and land-use decisions (see pp. 6&7). *This* therefore, paved the way for the development of *voluntary* rather than *regulatory* policy, with the NFU actively engaging in discussions with environmental groups in order to influence policy development and present themselves as custodians of the land.

# 2.3.6. Legislative developments.

Within this context of intense debate and publicity concerning conservation and farming, 1983-84 proved to be key years for legislative development. In the summer of 1984, 170 MPs signed a motion concerning agriculture's threat to the heritage and wildlife of Britain. They called on the Government "to ensure that agricultural policy, and the structure of public funding, is widened so as to take full account of the need to protect and enhance the environment" (Whitby and Lowe [1994], p.9). In addition, The European Farm Structures Policy was being reviewed (having been in place since 1972); of direct relevance to the development of ESAs was EU Regulation 797/85 which concerned support for agriculture. At the beginning of the debate, MAFF (represented by Lord Belstead) argued very strongly that they (MAFF) were not empowered to make payments to farmers other than for production. However, MAFF came under intense pressure from the House of Lords Select Committee (13), who had taken the almost unprecedented step of recalling the Ministry to account (the Committee being sympathetic to the UK-wide pressure concerning agri-environment measures). The 'Opinion of the Committee' is outlined, at the beginning of the debate, in the following statement:

"The Committee consider that the draft (EU) Regulation (797/85) is too closely production-oriented, despite its gestures in other directions. MAFF, by their narrow interpretation of the few innovative features it contains, reinforce this *backward-looking* tendency. What is required instead is a greater emphasis on the new elements of the proposal, which would help to diversify rural activity and enhance the environment, and the Committee recommend that MAFF should regard this proposal not as a continuation of existing legislation, but as the start of an improved approach to agricultural structural policy" (HMSO [1984]; emphasis added).

The official MAFF response to the Chairman of the Committee (sometime later in the debate) was made by Lord Belstead:

<sup>(13)</sup> on the European Communities Agriculture and the Environment.

"It has, I realise, been argued before this Committee that the proposed structures measures (797/85) ought to include greatly strengthened environmental provisions, well, there are, and I rejoice that there are, considerably more references in the draft of the new Regulation so far as the environment is concerned. I would like to make absolutely clear before the Committee this morning that so far as the Ministry is concerned I would certainly value, and we shall work towards, trying further to strengthen those references" (HMSO [1984]).

This above response represents MAFF's capitulation to pressure, not only from the Select Committee, but also from lobbying on the part of the Council for the Protection of Rural England (CPRE), the Royal Society for the Protection of Birds (RSPB), the Nature Conservancy Council (NCC), the Countryside Commission for Scotland (CCS), and the Countryside Commission (CC) at this time (the Report of the 1983/84 Session gives verbatim accounts of the input from these groups and organisations). Mowle (pers. comm. April 1994) argues, however, that what followed did not comprise a tackling of the wider agenda which remained traditionally largely subordinate to MAFF, that is, the role of the DoE and planning regulations as they relate to agricultural land use.

# 2.3.7. The Broads Grazing Marshes Conservation Scheme.

As a result of the above debate concerning Regulation 797/85, MAFF were forced to respond in policy terms; they therefore applied a recently-instigated experimental scheme in the Halvergate Marshes. The Marshes were an area in the Norfolk Broads, considered to be of extremely high conservation value of national importance (Bishop and Phillips [1993]; Colman and Lee [1988]). They had been perceived as under increasing threat of conversion from grazing land to arable land (Bishop and Phillips [1993] refer to the 'economic sense' and therefore attraction of 'arabalisation' at that time [p.325]; also see Colman and Lee [1988], p.10). O'Riordan (1984) outlines the two major components of the situation: firstly, "a phase of dispute and resolution that was triggered off by proposals for MAFF grants aid for arterial drainage" (p.53); and secondly, "four landowners had voluntarily approached the Broads Authority to indicate their intention to convert their lands from grazing to arable with no alteration in arterial drainage or access" (p.53). Such land-use proposals, however, were being made within a sensitive political context and under an intense spotlight of publicity. "Parallel to this specific controversy, the need for closer linkages in general between agriculture and environmental policies was receiving increased public and political attention, and the Halvergate issues therefore assumed potentially wider significance" (Colman and Lee [1988], p.15). Bishop and Phillips (1993) recall that efforts by

one of the farmers to go ahead with his proposed drainage scheme encountered demonstrations by Friends of the Earth (see p.325). One confrontation which captured much publicity, is described by Evans (1992):

"In June 1984, a Norfolk farmer (with) his land in the marshes of the Norfolk Broads (which) was a haven for birds, dragonflies and plants .... But for him, its potential was in cereal production, after he had drained it with the help of lucrative grants. Aware of the concern of the conservationists - aware also that they were completely and utterly powerless to stop him - he ploughed a large 'V' across one of the fields as a first step in the operation. He left the conservationists to interpret the sign as they saw fit" (p.194).

Such publicity was not welcomed by MAFF (Bishop and Phillips [1993]) - particularly when they were under pressure within the EU Structures Debate (above). Colman and Lee (1988) state that "it should be appreciated that, in the conditions of 1984/85 ... the threat to plough generated an intense political debate and a solution had to be found quickly..." (p.xviii). The government therefore rapidly introduced an experimental scheme for three years (under Section 40 of the Wildlife and Countryside Act 1981) which had the overall aim of maintaining the traditional livestock farming and conserving the landscape (see Colman and Lee [1988], p.x). MAFF's information for the farmers and landowners in the area included a statement of the (then) current situation:

"The Broadland countryside has evolved through many centuries of human activity. None has had a greater impact than farming. Indeed, the grazing marshes of the Broads are a landscape of farming with a special character and atmosphere. They are part of the diversity of the English countryside. Their future value to livestock farming and to conservation depends on the continuation of traditional grazing management..." (Colman and Lee [1988], p.8).

The Scheme covered an area of 5,030 hectares (1986) of which 4,735 hectares were eligible grazing land. Through a voluntary, standard incentive structure (a payment of £50/ha/p.a) farmers were required to manage specific aspects of their grazing in ways which were considered environmentally beneficial: the use of fertilisers, the maintenance of water levels, and dates for the first cut of grass. In addition, farmers were eligible for higher levels of payment if they chose to convert land back from arable to pasture (Bishop and Phillips [1993], p.325).

The Grazing Marshes Conservation Scheme (1985-88) is important in the development of ESAs in a number of respects. Firstly, it was used as the policy model by MAFF immediately following the EU Structures Regulation 797/85

Debate. In April 1985, Michael Jopling MP (then Minister for Agriculture) introduced Article 19 into the EU legislation (see Appendix) which "permits Member States to pay aids to farmers in suitable designated areas of high conservation value in order to encourage farming practices favourable to the environment" (MAFF [1989], p.6; see also Haigh [1987] p.311; also Bishop and Phillips [1993]). Thus, environmentally sensitive areas were introduced for the first time within the CAP (14); Article 19 had brought together a number of unrelated agricultural support measures which were intended to alleviate some of the 'structural problems' of community agriculture (see Haigh [1987], p.309). Secondly, the ESA objectives, mechanisms, and systems of payment (in England, Wales and Northern Ireland) had their origins in this experimental scheme. More specifically, the introduction of a fixed-rate management contract was seen by Colman (1989) as a prototype for the first 19 UK ESAs: "It supplemented the variable-payment Management Agreement (MA) option available under the Wildlife and Countryside Act 1981 with a simple 'take it or leave it' alternative which obviated the need for the individual negotiation required to arrive at the level of compensation paid for each MA" (p.1). Thirdly, its voluntary nature is a significant element which has been maintained within the ESA mechanism.

It is worth noting that, around the time of the instigation of the Broads Grazing Marshes Conservation Scheme, and the debate on EU Regulation 797/85 (with the subsequent introduction of Article 19), the Wildlife and Countryside Act 1981 was also being debated in an all-party House of Commons Environment Committee. In January 1985, the Committee reported on Part II of the 1981 Act and suggested a government review of the overall use of 'the rural estate' (Evans [1992], p.191), proposing that conservation should be given *comparable status* with food production and that the Ministry of Agriculture should act accordingly when awarding grants (see Evans [1992], p.191).

The policy developments and recommendations outlined above represented the beginnings of the "dethroning" of agriculture (Bishop and Phillips [1993]); further, ESAs specifically comprised the first crack in the edifice of the support for agricultural production (Mowle, pers. comm. April 1994). Other commentators wrote of the unprecedented "sea change" in agricultural support which was being witnessed at this time (see Colman and Lee [1988]). Shucksmith (1993) talks of

<sup>(14)</sup> under the CAP Guidance Fund.

the era of 'post-productivism', and Bishop and Phillips (1993) commented that, from the mid 1980s onwards, "farm policy was going to be less about growing more and more about growing less" (p.324); (15).

# 2.3.8. The Agriculture Act 1986.

With the Agriculture Act 1986 came a further shift in emphasis within MAFF towards a remit encompassing a broader range of rural issues. In contrast with the Agriculture Act 1947, MAFF was no longer solely concerned with the promotion of a stable and efficient agriculture industry. Rather, the Ministry had within its remit the aim of balancing: agricultural concerns; the economic and social interests of rural areas; conservation and enhancement of the natural beauty and amenity of the countryside; and the promotion of the enjoyment of the countryside by the public (see Bishop and Phillips [1993] p.318 for further comment) (16).

It has been argued, however, that such moves within the Ministry were intended as token gestures at a time when a new 'Ministry for Rural Affairs' was being mooted (Evans [1992]). Thus if the Ministry were to incorporate some environmental measures, this would reduce the pressures for more drastic changes. As Winter (1990) has noted, the Agriculture Act 1986 provided MAFF with "a new, and politically acceptable rationale for supporting agriculture" (Bishop and Phillips [1993], p.318). The argument therefore is that, although consideration was being given to the agri-environment debate, production support still continued, and claimed a much greater proportion of the national agricultural budget than did contemporaneous agri-conservation measures (Mowle [1986]); (17). O'Riordan commented in 1984 that: "... already there are signs that much political mileage is to be gained from reducing the burden of agriculture expenditure *per se* and for making agriculture more sensitive" (p.58).

<sup>(15)</sup> such policies are viewed by some as "conservationist by default, not by design" (Evans [1992] p.193); see also Whitby and Lowe (1994), pp.10.

<sup>(16)</sup> This shift had also been reflected in 1985 when MAFF launched the new Agricultural Improvement Scheme (AIS) to replace earlier grants associated with encouraging environmental degradation (see Whitby and Lowe [1994], p.9).

<sup>(17) 1992/93</sup> figures for agricultural support in Scotland show agri-environmental measures receiving only 1.6% of the total budget (Mowle, pers. comm. April 1994).

#### 2.3.9. The designation of ESAs.

However, the Agriculture Act 1986 did introduce the necessary legislation (18) for the designation of Environmentally Sensitive Areas in the UK (see Wathern [1992], p.203). As a direct result of the Act, the first nine ESAs were designated within the UK (19) in the Autumn of 1986, and even before the Scheme came formally into operation, the Secretary of State announced a doubling of the available budget (see Wathern [1992], p.203). The second round of ESAs was designated within the ALURE (Alternative Land Use and the Rural Enterprise) programme. These ESAs were all renewed in 1992 and 1993 following their first five years of operation. MAFF published proposals concerning a further six ESAs to be designated in 1994, as a result of the EU Agri-Environment Directive (see Appendices II(ii) and II(iii)).

#### 2.3.10. ESAs in Scotland.

The ESAs in *Scotland* were established and designated through the EU and UK legislation outlined above. However, it is necessary to note the approaches adopted uniquely within Scotland concerning ESAs, from 1985/86 onwards. On 2nd April 1985, MAFF called a meeting in London to discuss ESAs and possible candidates for designation. Representatives from the various agriculture departments were present, as were individuals from NCC, CCS, and CC. Following this briefing, a Working Party was set up in Scotland to discuss potential Scottish ESAs and a possible policy mechanism north of the Border. The Working Party comprised officials from: DAFS (now SOAFD), SDD (Rural Environment and Nature Conservation Division and the Historic Buildings and Monuments Directorate), the CCS and the NCC.

The model for ESAs in England was the Halvergate Marshes, where standard per hectarage payments were made to a farmer or landowner who agreed to abide by certain management guidelines. The view of the Working Party, however, was that such a mechanism would not recognise the land-use complexity inherent within typical farming systems in much of Scotland. This heterogeneity was felt to

<sup>(18)</sup> Mowle (pers. comm. April 1994) comments, however, that this level of legislation was superfluous since ESAs had already been included in an EC Regulation and therefore Member States were obliged to implement them. Rather, the introduction of ESAs into the Act 1986 allowed the concept and budget of ESAs to be debated further in Parliament.

<sup>(19)</sup> The Broads; Somerset Levels and Moors; West Penwith; North Pennine Dales; South Downs (East); Cambrian Mountains; Mourne Mountains (N. Ireland); Breadalbane; Loch Lomond.

contrast sufficiently with the English farming situation as to require a different management approach. Thus, within Scottish ESAs, farmers were to draw up a five (now up to ten) year Farm Conservation Plan in which they identified particular parts of the farm to be managed, and outlined the procedures they would follow. These may include stock control measures, dyke (wall) repair, heather regeneration, muirburn, underplanting, and so on. Payments received for these activities were to be in addition to the per hectare payments - which are themselves differentiated in terms of 'inbye' and 'rough grazings'.

However, the policy mechanism proposed by the Working Party (Scotland) was initially rejected at EU level since it was not considered sufficiently restrictive - rather, it appeared to be seeking to pay many farmers to continue farming in the same manner, which the EU judged as being unacceptable. The Working Party replied with a Stocking Density limit which was set at 1.5 Livestock Units per hectare (20). In addition, it had been normal custom for the Scottish Office AFD to fall into line with agricultural policy propositions emanating from London (MAFF); (pers. comm. Mowle, April 1994). However, in the instance of ESAs, the Working Party was recommending a radically different mechanism (the Farm Conservation Plan). There were subsequent attempts from MAFF to put pressure onto SOAFD to conform, but eventually the Scottish model for ESA was approved at EU level and was thus allowed to be implemented (21).

The Working Party assessed five potential sites from a total of 20 recommended areas, over the period February to May 1986. The criteria involved in this assessment are outlined within the Working Party's Report: "... In considering priorities for the selection of areas, account was taken of the relative environmental quality of the area, the extent of interaction between farming practice and environmental issues, the level of existing protection, the existence of other initiatives in the area which might conflict with the ESA and the likely administrative complexity of an ESA in each area" (SOAFD [1986], p.7). The

<sup>(20)</sup> This was in fact higher than the majority of the LFA farmers' stocking densities.

<sup>(21)</sup> This is significant to the Evaluation of Breadalbane ESA, which was funded by MAFF, and was therefore regarded with both suspicion and hostility by SOAFD, to the detriment of the Evaluation (this last comment being the view of the author).

Working Party recommended the initial designation of Breadalbane and the Machair of the Uists and Benbecula (22).

The underlying reasoning behind ESAs in Scotland is outlined in the Working Party Report (SOAFD [1986]):

"Potential ESAs in Scotland are likely to be classified as 'Less Favoured Areas' (LFAs) in agricultural terms. Traditional farming practice has contributed to the environmental quality of such areas, but the poor returns from farming can lead to general deterioration in many features of interest and may create pressure for agricultural intensification, where this is feasible" (p.1).

The official aim of ESAs in Scotland was therefore:

"... to encourage positive conservation measures and traditional farming practice, while protecting sensitive habitats from agricultural intensification" (SOAFD [1986], p.1).

The ESAs represented an opportunity to recognise the financial difficulties of LFA farming (with many such farms barely breaking even [Mowle [1986], p.16]), through an alternative, agri-environmental remit. Those farmers wishing to join the ESA had to "stipulate at least that there (would) be no further intensification of agricultural production and that the stock density and level of intensity of agricultural production (would) be compatible with the specific environmental needs of the area concerned" (SOAFD [1986] p.8). The chronology and location of the ESA designations in Scotland are summarised in the Appendices II(iii) and II(iv).

# 2.4. ESAS: A COMMENT.

ESAs have been variously praised and criticised (for example, Bishop and Phillips [1993]; Wathern [1992]; Brotherton [1990 & 1991]). Some authors feel that they are a compromise measure, in that they do not address issues of: continued agricultural support for often contradictory measures such as drainage or reclamation; or - in Scotland particularly - the continued payment of HLCAs

<sup>(22)</sup> In fact, Breadalbane and Loch Lomond were designated in the first round of ESAs. Wathern (1992) has commented on this, "the sensitivity with the second priority area, the Machair Lands of the Uists and Benbecula, coupled with potential conflict with another EC grant-aided development programme, the Integrated Development Plan (IDP), have been suggested as possible reasons for non-designation at this time" (p.204).

within LFAs with no environmental obligations attached (23); the lack of environmental measures in intensively farmed areas; and the evasion of planning controls on farmland. Others see ESAs as positive, if they represent a consistent and sincere step in the direction of co-operation between agricultural and environmental objectives on farmland. It is necessary to highlight the fact that the research presented here is not an evaluation of ESAs *per se*, but rather a Critical Appraisal of its socio-economic Evaluation. For further discussion of ESA merits, efficacy, and failures, the reader is therefore referred to: Wathern (1992); Lobley (1989); Sinclair (1986); Evans (1992); Bishop and Phillips (1993); RSPB (1990); Austin (forthcoming); Colman (1994a); Whitby (ed) (1994); and Garrod *et al* (1994).

# 2.5. ESAS AND THEIR IMPLICATIONS FOR POLICY RECIPIENTS.

"The ESA programme, with its direct and tangible commitment to conservationist farming, makes a significant departure for agricultural policy in the UK. For the first time farmers are being paid by MAFF to 'produce' countryside, and they seem to be responding to this challenge as keenly as they once did to past encouragements to produce more milk or barley" (Whitby and Lowe [1994], p.18).

It is important to recognise the enormity of the shift, for policy recipients, in agricultural policy emphasis from the period of the 1940s to the mid-1980s (and specifically between the Agriculture Acts of 1947 and 1986) which culminated in the implementation of ESAs. Although it is outwith the remit of the thesis to discuss the following issues in detail, it *is* necessary to note their existence, since they comprise the policy context within which farmers and landowners seek to understand their land-use options, and thus make their decisions.

The greatest shift concerns definitions of 'good' and 'poor' farming practice. From 1947 until the early/mid 1970s, agricultural support stood firm, with structural and financial encouragements towards higher production levels and efficiency (see above, and see Appendix II(i)). At this time, the fact that government grants were being given for drainage, and for hedge and tree removal, was seen as an endorsement and condoning of these as 'good' farming practice. As

29

<sup>(23)</sup> The HLCA system is felt by some to be a direct incentive to increase sheep numbers to the upper limit (see Mowle [1990]).

Carter (1984) notes: "...grant availability may well create a climate where certain operations are seen to be the right thing to do..." (p.42). Further, during this period, Duckham (1958) had described a 'good' farmer as "... a good husbandman who uses his knowledge, observation and material resources in a way which gets the most out of the 'forces of nature' with the minimum of biological risk from disease, drought etc.." (p.15). The ESA, however, represents a significant change in "the norm of farmer responsibility for the environment" (Colman and Lee [1988] p.135), with the 'norm' of explicit environmentally beneficial farming now being coincident with 'good' farming practice (24).

Connected very closely with this is the second major shift which the ESA represents: towards a concept of 'traditional farming'. The information supplied by the government to both farmers and non-farmers alike promotes the ESA as supporting 'traditional' farming practice, with 'traditional' farming being viewed as good, and environmentally beneficial. This is significant for a number of reasons.

The government's ESA-related notion of 'traditional farming' *implies* a bygone age. Although MAFF, through ESAs, "explicitly recognise the man-made nature of the British countryside ..." (Lobley [1989] p.27), this 'recognition' appears to take two forms. The immediate agricultural past (to which the ESAs are purportedly responding; see above) is dealt with either by relegating the farmer as merely responding to the march of technological change, or by grouping the current farmer with previous generations who have worked the land for hundreds of years, and have produced the countryside which society now wishes to conserve (25). Within the government-produced information on ESAs, these carefully-worded allusions to the recent farming legacy may well comprise a key facet of the ESA's implementation and acceptance (26). The following quotes are illustrative:

<sup>(24)</sup> See also Rodgers' (1992) discussion of "Good Husbandry versus conservation management - a conflict of policy?".

<sup>(25) &</sup>quot;The Government has responded to growing public concern about the rural environment and the impact on it of modern farming practices ... The Government will continue to encourage the reconciliation of agricultural and environmental objectives through an appropriate combination of advice, clear regulation and financial incentive" (MAFF [1991], p.22).

<sup>(26)</sup> Acceptance by both farmers and landowners; *and* by the non-farming, increasingly 'aware', tax-paying public. The policy's 'legitimacy' may well have been influenced by its 'traditional' stance.

"Although the practices have changed radically over the years ... nevertheless, the pace of change in agricultural technology, and the economic pressures to adopt it, have quickened in recent decades. Some of these technologies are hostile to the valued environmental features of the countryside" (MAFF [1989], p.3).

"The countryside in which so many people have an interest ... is largely the creation of generations of farmers earning their living from the land ... it is man's activity, primarily through agriculture, which make the countryside so attractive..." (MAFF [1989], p.3).

This raises the point also observed by Docherty (1993): "A tradition is always older than the immediate past; hence the endorsement of tradition always implies a rejection of that immediate past in the interests of something *purer*" (p.217; emphasis added). This is observable in the case of the ESAs, and is something to which farmers are having to adjust. Firstly, the ESA-related literature which farmers and landowners receive is no longer supportive of the 'immediate past' - this, in fact, being the 'tradition' which many farmers will have experienced (27). Secondly, the ESA information also implies a return to traditional farming systems and concerns which would previously have been viewed as anachronistic. This paradox comprises the current context within which policy recipients now farm and manage estates; although exemplified by the ESA, it is not exclusive to this policy, but is also represented by the concurrent policy measures resulting from the EU Agri-Environment Directive, such as support for organic farming, hedgerow building and so on.

It is argued that the ESA's publicised foundations of *good*, *traditional* farming practice - details which reach both farmer and non-farmer - builds on what has been variously termed: "the politics of nostalgia" (Marquand [1979]); and "the invention of tradition" (Goffman [1978]). A similar example of agricultural nostalgia is illustrated in the Hovis Advertisement (see Photograph 2.1.); further, Walston (1988), in his letter concerning how to open his farm to the public, states "Never underestimate the power of nostalgia" (p.193) (28).

<sup>(27)</sup> As Bishop and Phillips (1993) observed, farmers' responses to policy initiatives will be influenced by their "tradition ... promoted by government policies about the need to increase food production" (p.317).

<sup>(28)</sup> Bouquet (1986) has also observed "a kind of nostalgia which has arguably been transposed on the family farm ... it is a cultural symbol: it condenses the notion of independence and self-determination..." (p.23).

The most recent MAFF publication (1994) in this vein - "Balance in the Countryside" - was advertised in the *Radio Times* (17/9/94; see Photograph 2.2.); the booklet begins:

"Britain has a wide variety of landscapes, from fertile plains to rugged hills. Nine tenths of the land is either farmland or woodland, much of it shaped over the years by farmers and foresters" (p.1.)

Further, in the context of ESAs, the booklet continues:

"Although it is a pleasure to visit, our countryside is first and foremost a working landscape. We have an agricultural tradition that goes back thousands of years. Farming ... has to meet changing demands. Sometimes this can threaten the conservation of features such as hedgerows, meadows and copses. Conscious of these threats, MAFF ... has introduced a number of schemes and measures to help conserve particular parts of the countryside" (p.2; emphasis added).

Such trends comprise a cultural context which is different from that prevailing from 1947 to the mid-1970s. The culture of production for the nation at all costs is being replaced with an ethos focussing on wider environmental aims and objectives. Thus, ESAs cannot be viewed solely in their legislative context. What they *represent* to policy recipients, and therefore how they are interpreted, must also be taken into account.



It's the poppies . "romander, from those harves's before the unr.

Red poppies in the corn .

We'd to weed them out, every one Hard work it was, youd get sits of wheet in your have down your neck, stuck to you all over.

What a bleased relief when it came time for dinner. Frede, the farmer's daughter'd bring tea ramd in a pail.

She'd just dip in a mug and pass at to us and we'd give her bunches of poppies in return .

Dinner was cheese and maybe a pickled onion, with doorsteps of, fresh farmhouse bread. St always love the taste of cousty wholemcals.

Speaking of which, have you tried Hoir's Wholemeal with kibbled malled wheat ?

There's no mistaking that plorious taste of harvest mashed town with Freda's thick, hot, sweet tea.

Freda's ten? Well yes. You see, I married her .

> HOVIS MHOLEMEAL As good today as it's always been.

NOSTLAGIA

PHOTOGRAPH 2.2. MAFF ADVERTISEMENT: "BALANCE IN THE COUNTRYSIDE".

# HOW WE HELP KEEP ENGLAND BEAUTIFUL.



Many characteristic features of our beautiful English countryside, such as hay meadows, heather moorland, stone walls and barns, have been created by farming over hundreds of years.

Some areas are of national importance for their landscape, wildlife habitats and historic features. MAFF has designated 22 such areas as 'Environmentally Sensitive Areas' (ESAs). Farmers in this scheme manage their land in ways which are sensitive to the environment. Thousands of farmers are now working with MAFF in ESAs to conserve and enhance our countryside.

The Ministry of Agriculture, Fisheries and Food has many environmental responsibilities. To find out more call 0645 556000 for a free brochure called 'Balance in the Countryside' – reference PB0574 RAD TIM. Or write to

MAFF Environment matters, FREEPOST, Blackhorse Road, London SE8 5BP.

MATE ENVIRONMENT

VISIT OUR EXHIBITION AT THE NATURAL HISTORY MUSEUM UNTIL SEPTEMBER 25 1994.

17

SOURCE: Radio Times 17/9/93.

#### 2.6. CONCLUSIONS.

This Chapter has examined UK agricultural legislative developments from the 1940s to the 1990s, within the specific context of the increasing environmental obligation experienced by the agricultural industry. The ESAs, implemented first in 1986/87, represent "the flagship policy of the Ministry's new found commitment to conservation" (Whitby and Lowe [1994], p.11). Further, ESAs exemplify the "agricultural fundamentalism" shift from towards increasing agricultural accountability over the past five decades. As a direct result of this process, individuals and institutions within the agricultural industry are having to adjust to current notions of 'good' farming practice, and to the retention of traditional farming systems thought to be environmentally benign (see Whitby and Lowe [1994]).

Although such trends are not consistently represented throughout the policies of MAFF (and those of other Agricultural Departments), their implications at farm level, in terms of environmental expectations and norms, are potentially farreaching. The objectives of the ESAs "have been woven together around the idea that it is *legitimate* and *desirable* to maintain the 'particular character' of farming..." (Potter *et al* [1991], p.33; emphasis added). Such issues must therefore continue to be discussed and evaluated (29). To omit this analytical context would result in firstly, an extremely limited understanding of future acceptable levels of environmental responsibility within agriculture; and secondly, a naive evaluation of the impact and adoption of the ESA. Chapter Six develops these issues further.

<sup>(29)</sup> In their evaluation of the Broads Grazing Marshes Conservation Scheme, Colman and Lee (1988) observed that the legislative and cultural context into which a scheme, such as the ESA, is introduced, is a crucial facet of an accurate understanding and evaluation of the success of that given policy.

#### **CHAPTER THREE**

# GOVERNMENT GUIDELINES FOR POLICY EVALUATION AND

#### THE MAFF EVALUATION OF BREADALBANE ESA.

#### 3.1. INTRODUCTION.

The aim of this Chapter is to review government guidelines for conventional policy evaluation, particularly with respect to priorities and criteria determining data selection, collection and analyses. The discussion of these facets is crucial in the overall Critical Appraisal of the government-funded Breadalbane ESA MAFF Evaluation, since, in spite of the lack of specific, consistent methodological and conceptual recommendations from the government for agri-environmental policy evaluation (1), their *overall* evaluation guidelines, 'norms' and methods - discussed below - proved to be extremely influential (see Chapter Six) (2).

The first part of the chapter examines the three texts, published by the government, which outline their policy evaluation guidelines: *Policy Appraisal and the Environment* (DoE [1991]); *Policy Evaluation: A Guide for Managers* (Her Majesty's Treasury [1988]); *Economic Appraisal in Central Government. A Technical Guide for Government Departments* (HMT [1991]). The second part of the chapter comprises the MAFF-funded Socio-economic Evaluation of Breadalbane ESA. The aim here is solely to present an example of conventional evaluation; its appraisal is the subject of Chapter Six.

<sup>(1)</sup> It is necessary to highlight the fact that specific government guidelines for *agri-environmental* policy evaluation have not been published. Further, Whitby and Lowe (1994) have observed that: "No single guideline exists for the evaluation of policies, which may account for the variation in methodological styles adopted for the ESA evaluation studies" (p.22).

<sup>(2)</sup> It is argued that the case-study, although unique, is not the only example of its kind. Rather, it illustrates the underlying set of presumptions and assumptions informing those agri-environmental policy evaluations increasingly contracted-out by government departments and ministries.

#### 3.2. POLICY EVALUATION: OFFICIAL GOVERNMENT GUIDELINES.

"... A few have even described the present situation as a climate of anti-analysis ... there is so little (government) analysis of analysis. It suggests that, in central government at least, the forces of bureaucratic policies are stronger than the organisational need to learn" (Williams [1983]: 80).

Policy evaluation is *defined* as being "post-implementation of a .. policy, to assess the degree to which objectives have been achieved and how efficiently and economically, and what lessons can be learnt for the future" (DoE [1991] p.39); it "examines the outturn of a policy, both as a management discipline and to provide feedback into future decisions" (DoE [1991] p.15).

Further, HMT describes it as "... the process of examining a policy while it is in operation or after it has come to an end. It follows naturally from a policy appraisal ... (analysis done before a policy is launched) (3)... Evaluation enables the decisions taken as a result of the appraisal to be reviewed afterwards with the same rigour in the light of what has actually happened ..." ([1988], p.1). Further, evaluation "is to be distinguished from monitoring (routine checking of progress against plan)" ([1988], p.1), since its focus is upon reviewing how a policy has performed overall "in relation to estimated costs and benefits" and "the extent to which (it) met the objective(s) set ..." (HMT [1991], p.15).

The process of evaluation comprises the following stages:

- establish the objectives of the (policy) decision made;

- establish the scope of the evaluation;

- consider what alternative states of the world and/or decisions should be considered for comparison with the outturn;

- compare the outturn with the chosen alternatives;
- present the results;
- disseminate the results or recommendations. (HMT [1991] p.15).

In addition, guidance is given on: choosing the questions, measures and indicators, data collection, costings and analyses (HMT [1988], pp. 3-19). Suggested methodological and analytical tools to be applied within the evaluations

<sup>(3)</sup> DoE (1991) further defines appraisal as: "the process of identifying, quantifying, weighing up, and reporting on the costs and benefits of the measures which are proposed to implement a policy" (p.1).

are also outlined in the appendices of the government publications (see, for example, HMT [1988], Appendices B, C, and D).

The government documents therefore set out the approved objectives and approaches which the Government currently encourages for the evaluation of its policies and programmes (4). They state the procedures to be followed, and the criteria and objectives which should be considered - both prior to, and during, evaluations. On a superficial level, much of what is outlined for the subsequent implementation by evaluators appears relatively straightforward. However, on closer examination, it is possible to observe a number of recurring themes and features which detract from this image of coherence and procedural ease. These are now discussed, since these emphases and their effects were observed during the MAFF Evaluation of Breadalbane ESA (see Chapter Six).

#### 3.2.1. Facets of government guidelines on evaluation.

Firstly, the evaluation has to justify its cost by leading to expenditure savings; if this does not seem possible, then proceeding with the evaluation needs to be questioned, the argument being that "evaluation costs money. Even if it is done as part of the normal work, there is an opportunity cost of other work which might have been done instead... The prime consideration in all cases must (therefore) be the likely usefulness of the (evaluation) exercise" (HMT [1988] p.17). Further, questions must be asked: "... Is it likely that .. the evaluation will be able to increase effectiveness or efficiency by more than enough to cover its costs? ... Can the department give a satisfactory account of the effectiveness etc.. of its individual programmes without evaluation? Can the main benefits (of an evaluation) be obtained by small-scale or partial studies?" (HMT [1988], p.18). Also DoE (1991) comments: "Research may help to reduce uncertainty but will rarely eliminate it. You should consider whether the expected benefits from further research are likely to justify the cost" (p.12). Further, HMT (1991) states that: "the extent of the evaluation should depend upon the potential value of the lessons to be learnt..." (p.43). In connection with this emphasis, Williams (1983) also observed:

<sup>(4)</sup> The DoE (1991) makes a distinction between "POLICY, the ways in which the government seeks to achieve the objectives which it sets itself in a particular area, and PROGRAMMES or PLANS, sets of related activities which give effect to policy. Programmes may in turn be composed of PROJECTS, discrete activities usually at specific locations" (p.3). According to these definitions, POLICY is under discussion here.

"Once, (British) policy analysis and evaluation was characterized by comprehensive, systematic schemas of review with a strategic focus; today, it is characterized by *ad hoc* reviews of operational efficiency with the primary focus on costs" (p. 79).

In addition, it is worth noting that these criteria appear to contradict the HMT statement that: "Ministers have instructed that policy evaluation should be built into *all* new policy initiatives and all proposals arising from policy reviews" (HMT [1988], p.3, emphasis added). The implications of such inconsistent recommendations for evaluators is not addressed within the texts.

Secondly, the implication of the above stance is reflected in the need for financial justification of collection of further data, that is, additional to the normal "desk-top collection" (information which is already available or needed for other purposes), which is "information compiled specially for the evaluation" (p.15). "The (evaluation) manager will ... need to consider the costs or other burdens which calling for extra information may create" (HMT [1988], p.15).

This apparent prejudice against the collection of what is already seen as further/additional data, unless its cost can be justified, is evident in other sections of the publications. Under the heading of 'Collecting the Information', HMT (1988) outlines two options:

"Logically, you ought to decide what information you need and then ensure that it is provided. In reality of course, you have to judge what is sensible and practicable to ask for. But avoid letting the availability of information dictate the questions rather than the other way round ..." (p.15).

In addition to there being a distinct lack of criteria for such 'judgements', there is no further information concerning how this balance is to be achieved. The implications for evaluations which place primary importance upon financial, 'sensible', and available criteria, when assessing the actual and potential importance of data, are evident within the case study of the MAFF Evaluation.

Thirdly, when a policy has passed through its appraisal stage and reaches the evaluation stage, the emphasis is upon the extent to which the policy is meeting its objectives, rather than this being linked with a continuing evaluation of the objectives themselves; although HMT does state in one sentence that: "Evaluation requires a critical and detached look at both the objectives and at how they are

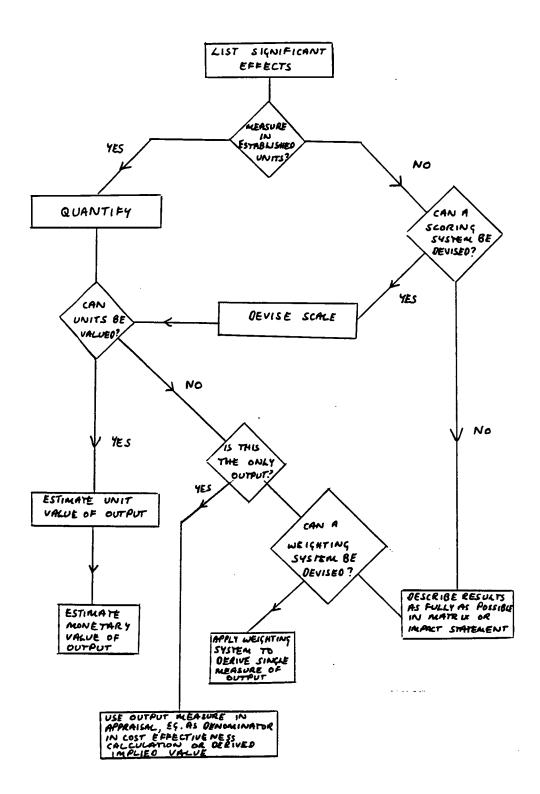
being met" ([1988], p.1). However, the remainder of the publication focuses solely on the evaluation of whether objectives are achieved. Again, there are no further guidelines.

Further, HMT (1988) recognises that "objectives often pull in different directions" and that these "competing objectives should be recognized as such ... and an effort made to quantify the desired balance between them" (p.7). However, the text gives no further guidance concerning those criteria involved in recognising and quantifying such competing objectives; also, there is no information on how a hierarchy of acceptable objectives can be established.

Fourthly, the publications emphasise the need to engage in quantifying and valuing the information, rather than combining this with an attempt to incorporate qualitative aspects; the former are seen as more accurate data. The publication from the DoE (1991) states that "any form of quantification (within a policy appraisal) is likely to provide a better basis for decisions. Almost all appraisals will be built around estimates of quantities" (p.10). The phrase "identify and quantify" appears on a number of occasions. HMT (1991), in one of their appendices, has a diagram relating to one aspect of policy evaluation and appraisal; a section from it gives an insight into the inbuilt bias towards quantification (Figure 3.1.).

It is worth noting, in reference to this figure, that in the text, the evaluator is informed: "having quantified each output ... it is possible to compile an impact statement or matrix of options against outputs" (HMT [1991]; emphasis added). The guidelines thus provide an increased opportunity for the persistence of quantification being viewed as the fundamental prerequisite to analyses within evaluation. Thus, although the HMT recognises that "it is unlikely that all the questions can be answered in precisely measurable form, (and that) for some there may be no suitable substitute for a qualitative judgement" ([1988], pp.11 & 12), they still insist that "however, whenever possible, an evaluation should look for exact measures and, if they are not obtainable, for indicators which throw light on those aspects which are not easily measurable ([1988], p.12). It is these indicators which would then be used, with a possible associated loss of the 'original' qualitative data and observations, as well as the possible subjective input as indices are constructed; these indices, however, are argued as being inherently more 'objective' than qualitative data.

FIGURE 3.1. DIAGRAM OUTLINING THE APPROACH FOR THE APPRAISAL OF NON-MARKETED OUTPUTS.



SOURCE: After HMT (1991), Annex B, p.47.

A further example from HMT (1991) states: "All material effects of a proposed investment or policy should be quantified where possible. Often it is assumed that if an effect cannot be valued it is 'unquantifiable'. In practice, most effects can be quantified in established units" (p.52). There is no discussion, however, of the strengths and weaknesses of established valuation techniques within the text. The issue of *appropriateness* of methods is therefore not addressed, but rather assumed (see Chapter Six). Gray and Jenkins (1985) have observed: "An underlying question is, should we be cautious in assuming that the transfer of analytical methods from one context to another will provide feasible and effective solutions? ... Surprisingly little effort has been made in Government to find answers to this question" (p.16). Once again, the MAFF Evaluation highlights the implications of such a stance for the accuracy of Evaluation information (see Chapter Six).

Fifthly, mention is made of "social" criteria: "All the implications of (policy) options must be analysed, including financial, social and environmental effects" (DoE [1991] p.1); and further, "Evaluation usually needs multi-disciplinary skills" (HMT [1991] p.43). However, there is no further articulation or outlining of these aspects, and there is a distinct absence of methodological provisions and guidelines for those who would wish to develop this field further. This has implications for the likelihood of such data ever being used in this specific context. Chapter Six demonstrates, however, the effects of omitting these data from a socio-economic evaluation.

Sixthly, although the stated government aims are to evaluate the extent to which a particular policy meets its objectives (see above), those very objectives often remain vague for political reasons: "Sometimes, Ministers decide to define their objectives in general terms without stating specific targets at the outset ... a political decision to keep objectives open..." (HMT, [1988] p.7). This has implications for the accuracy of such subsequent evaluations (5), although the Guide simply states that "the evaluation plans should take account of the fact" - there are no guidelines as to how, over what time-scale, or within which parameters; rather, the guidelines which *do* exist take clear policy objectives as given. The DoE (1991) comments that "Policies tend to grow out of earlier decisions, so that clear starting and finishing points for an appraisal cannot always be identified" (p.2). This occurrence of evolutionary policy and lack of clarity of

<sup>(5)</sup> See Chapter Six.

objectives is accepted and even drawn attention to; however, the evaluation must nevertheless follow the ideal guidelines and procedures. Anand (1988) states:

"... it should be said that effectiveness judgements often require quite specific objectives to be available to administrators. Politicians, however, often see advantage in doing precisely the opposite, that is, in making policy vague in order to attract as large a number of votes as possible, to leave 'details', about which they are not specialists, to administrators, and to maximize the amount of flexibility in case a particular policy is seen not to be working" (p.269).

The effects of this 'political' dichotomy were evident in the MAFF Evaluation (see Chapter Six).

Finally, it is necessary to examine the issue of assumptions as highlighted in these texts, since they, in turn, directly inform the evaluations. Examples include: assuming clear policy objectives; assuming the quantifiability of all significant data, and so on. As HMT states (1988): "In any appraisal or evaluation, a great deal has to be taken for granted. It would be impracticable and impossibly expensive to look at every single link in the chain and test whether it is secure" (p.9); and that "Evaluation is not a scientific exercise aimed at producing definitive answers to all questions, and judgement lies at the heart of it" ([1988], p.7; This is a core issue for two major reasons: emphasis added). firstly, such assumptions are rarely explicitly defined; secondly, that although focussed evaluation - which does not aim to answer all the questions - is clearly possible and necessary, this prime emphasis on focus can be used to obviate the requirement for rigorous, contextual analyses. This is not a call for 'research' in place of 'evaluation' (for definitions and discussion see Chapter Six). However, there is a need for criteria, by which the evaluation boundaries are set, to be made explicit, since existing procedures ensure that the necessary "judgements" remain excluded from debate and analysis. Further, this is more than an academic, theoretical point; the Critical Appraisal of the MAFF Evaluation amply illustrates the impact of assuming, rather than explaining, the questions which do and do not receive attention within an evaluation (see Chapter Six).

In this context, the government guidelines suggest that: "a good evaluation ... will consider what the underlying assumptions are, and decide which ones need to be regularly looked at" (HMT [1988] p.9). However, there is no subsequent procedural, methodological or conceptual outline for examining assumptions

associated with an evaluation, no comments on assessing their degrees of influence, and level of importance for evaluation results. One assumption is cited, however:

"with economic incentives, there may be assumptions about the changes in behaviour of companies or individuals who agree to participate. The validity of such assumed links may be difficult to establish, but they are often vital to the success of the policy" ([1988], p.10).

This issue is particularly crucial when considering the development of agrienvironmental policies whose main feature is that of being voluntary and therefore requiring individual response to the scheme's economic incentives. The omission of recommended procedures and methods to address both this singular issue and its associated assumptions is therefore even more serious for *future* policy development, since they may well be based on the evaluation results (6).

# 3.2.2. Conclusions concerning government-published evaluation literature.

This section has examined those government-published texts which give guidelines for policy evaluation. Although there is a dearth of both overall and specific information within the field of agri-environmental policy evaluation, the emphases and recommendations within these three texts provide a valuable insight into the rationale which consistently underpinned the MAFF Evaluation of Breadalbane ESA (see Chapter Six) (7).

The features from the government publications comprised: the emphasis upon cost reduction, including justification of specific types of information gathering; the lack of emphasis upon evaluation of policy objectives *per se*, the focus being the *achievement* of objectives; the requirement for quantified data and indices, with apparent unquestioned belief in their objectivity; the apparent satisfaction with an awareness of social criteria, rather than a methodological approach to incorporate such data; an abstract assent to the reality of unclear policy objectives; and finally,

<sup>(6)</sup> Thurow (1983) has commented: "Economics cannot do without simplifying assumptions, but the trick is to use the right assumptions at the right time. And the judgement has to come from empirical analysis (including those employed by historians, psychologists, sociologists and political scientists) of how the world is, not of how economics text books tell us it ought to be" (p.237).

<sup>(7)</sup> As outlined at the beginning of Chapter Six, the Breadalbane ESA evaluation was one of a number of similar ESA socio-economic evaluations, many of which experienced the facets characteristic of the above government recommendations (pers. comm. Whitby 1994).

a lack of consistent methodological approaches for addressing assumptions within the evaluation, in spite of the recognised requirement of examining them.

The conventional approaches, reflected in these texts, ensures that evaluations continue to be less than satisfactory in terms of representing the complexity of situations - this reductionist stance being justified with respect to data 'usefulness', and costs. As a direct consequence, the analytical and evaluative processes continue without themselves being assessed and evaluated. Further, these heuristics are responsible for:

"controlling the analytical process, screening unfamiliar data, anchoring the new situation within the narrow parameters of ... past experiences, and making available ... primarily those definitions and approaches ... used most often in the past (Patton [1981] p.271).

Procedures and methods thus continue to be followed, at the expense of increased understanding concerning *why* and *how* questions should be asked, *how* issues should be addressed, and *how* data can be presented and interpreted. This is particularly serious as policy evaluation continues to feed into policy approaches and mechanisms which are shifting, and are addressing a broader range of issues (as outlined in Chapter Two). The accuracy of such evaluations is therefore increasingly at risk; their usefulness in continuing to inform future agrienvironmental policy developments is severely limited.

# 3.3. THE MAFF EVALUATION OF BREADALBANE ESA.

#### 3.3.1. Introduction.

Concurrent with the introduction of the Environmentally Sensitive Area (ESA) Policy (see Chapter Two) was the legislative order for its monitoring:

"Where (ESA) agreements have been made ... with persons having an interest in land in a designated area the Minster shall arrange for the effect on the area as a whole of the performance of the agreements to be kept under review and shall from time to time publish such information as he considers appropriate about those effects".

(Agricultural Act 1986, Section 18(8)).

The monitoring has been described as the internal programme of MAFF, "designed to identify any significant changes to wildlife, landscape or historic features which occur after designation" (Hooper [1992], p.22). In addition to the above monitoring programme, MAFF commissioned a series of socio-economic evaluations, funded through its Chief Scientist's Group, of which the Evaluation of Breadalbane ESA is one such study.

The Socio-economic Evaluation of the Breadalbane ESA (referred to as the MAFF Evaluation) was carried out by a research team (8) at the Scottish Agricultural College (SAC), from 1987 to 1990. This section outlines the characteristics of the area which resulted in its designation in 1987, and the features of the ESA Scheme which are particular to Scottish ESAs. The information refers to the 1987-1992 designated area (see Appendix III(i)), and does not include the post 1992 extension (see Appendix III(ii)), since this was instigated subsequent to the MAFF Evaluation.

The aims, objectives and methodology of the evaluation are presented, followed by results concerning: the impact of the Scheme on the local farm economy, and on farmers' attitudes to conservation; and evaluation of the uptake of the Scheme, focussing in particular on farmers' attitudes towards the ESA.

#### 3.3.2. Breadalbane ESA.

#### 3.3.2.1. Description of the Area.

Breadalbane ESA lies within the Southern Highlands, and is located mainly in Tayside Region (Perth and Kinross District). It is the largest ESA in Scotland, covering an area of approximately 120,000 hectares, excluding the major lochs of Rannoch and Tay. It stretches from Glen Lochay in the west, to Strathardle in the east. The majority of the ESA is designated as a Less Favoured Area (LFA).

The nearest large town outwith the ESA is Perth, with a population of 41,654. Within Breadalbane, the towns and villages primarily service the agricultural industry, although some have a distinct tourist role, such as Pitlochry, at the northern fringe of the ESA, and Aberfeldy, the largest settlement located wholly within the ESA - with a resident population of 1,469. The main transport links comprise the A9 road (Perth to Inverness), and the mainline railway (Perth to Inverness).

<sup>(8)</sup> N.B. Lilwall, S.J. Skerratt and T.J. Perkins.

Approximately 85-90,000 hectares of Breadalbane ESA are farmed, the remainder comprising either large-scale forestry or shooting estates. There are approximately 160 farm businesses within Breadalbane ESA, each comprising one or more farm *holdings*. In addition to these, there are 72 "insignificant" holdings, which employ less than 1100 man hours per annum; many are holiday or second homes, or retiral homes where the land is let as summer grazings.

The tenureship of the ESA's land area divides almost equally between owner/occupied (50.1%) and tenanted (49.9%). Within the ESA, there is a small number of estates covering an extensive area, particularly in the western section of the ESA. These estates are either farmed "in hand" or with one or more tenant farmers.

Breadalbane is dominated by extensive hill sheep farming, (Scottish Blackface), combined - on lower altitudes - with the rearing of store cattle. In addition, there are a small number of arable farms on the alluvial flood plain of the River Tay near Aberfeldy and Fortingall.

The topography of the ESA is diverse, and ranges from mountainous peaks, through to gorges and lochs. The National Trust for Scotland Reserve of Ben Lawers (3984 ft), and also Schiehallion (3554 ft), are areas internationally recognised for their rare arctic and alpine vegetation. In addition, there are the scenic lochs of Tay and Rannoch, with their surrounding agricultural land interspersed with wooded slopes of a species-rich mixture - including a remnant of the ancient Caledonian Pine Forest, the Black Wood of Rannoch. The ESA also contains the beautiful, thickly wooded gorge of Glen Lyon - which, at over 20 miles in length, is reputed to be the longest glen in Scotland. The Forest of Clunie (1500-2000 ft), a plateau of rough grazing and heather moor, is one of the ESA's most significant environmental features - particularly as a habitat for the upland breeding wader population; it lies adjacent to a Scotlish Wildlife Trust reserve, the Loch of the Lowes, renowned for its ospreys.







Two National Scenic Areas (NSAs) lie wholly or partly within the ESA boundaries: Loch Rannoch and Glen Lyon; and River Tay (Dunkeld). A third NSA, Loch Tummel, lies adjacent to the ESA's northern boundary (9). In addition, there are twenty nine SSSIs (20,957 hectares) which cover approximately 17.5% of the ESA's land area. Milton Wood and Ben Lawers comprise the two National Nature Reserves. There are also a number of Scottish Wildlife Trust reserves, and local authority landscape designations.

The ESA is rich in archaeological remains, particularly stone circles, neolithic and bronze age burial mounds, round house settlements, and crannogs in Loch Tay.

Of particular significance within Breadalbane ESA is the inbye land of the glens and the unimproved herb-rich pastures, which are able to support up to 350 plant species on one site. In the glens, such land also supports scrub birch, hawthorn, blackthorn and rowan, thus providing valuable habitats for small birds. A second feature of this ESA are the areas of semi-natural birch woodland, with juniper, Scots pine, alder, ash, hazel and oak.

3.3.2.2. Breadalbane ESA: Designation and Policy Mechanism.

Breadalbane ESA was shortlisted as an ESA both because of its inherent conservation and landscape attributes (see above), and perceived threats to the status quo (see Table 3.1.). The overall aim of the ESA Scheme is: "to encourage positive conservation measures and traditional farming practice, while protecting sensitive habitats from agricultural intensification " (SOAFD [1989]). The ESA therefore encourages conservation-friendly farming within specific geographical areas deemed to be of high conservation value. Within such areas, financial incentives are given to farmers and landowners to encourage them to protect and enhance environmental features on their land. In addition, they are discouraged from agricultural intensification and from farming practices which may cause environmental damage; traditional farming operations are promoted.

<sup>(9)</sup> included in the ESA, post April 1992.



# INHERENT CONSERVATION AND LANDSCAPE ATTRIBUTES.

- \* High scenic quality and outstanding beauty
- \* Unimproved, inbye pastures of the valleys and glens
- \* Arctic/Alpine vegetation
- \* Wetlands and areas of open water, including major lochs
- \* Semi-natural woodlands of broadleaves and Scots Pine
- \* Archaeological sites: stone circles, burial mounds, homesteads and crannogs.

# PERCEIVED THREATS TO THE EXISTING AREA

\* Possible intensification of hill sheep farming, leading to detrimental effects within sensitive habitats

- Low farm profitability resulting in increasing tendency towards:
- selling land for afforestation
- reducing expenditure on traditional farming

operations and conservation features.

TABLE 3.1. ATTRIBUTES OF, AND THREATS TO, THE BREADALBANEAREA. (Skerratt et al, [1992]).

The objectives of the Breadalbane ESA are as follows:

(a) "to protect the open hill rough grazing from land reclamations, overgrazing and the inappropriate use of herbicides and pesticides;

(b) to provide similar protection for the unimproved, enclosed land in the valleys;

(c) to rectify the neglect of traditional farm dykes and hedges;

(d) to encourage natural regeneration of farm woodland;

(e) to ensure that new developments such as vehicular tracks and farm buildings do not damage the landscape." SOAFD (1989).

The Breadalbane ESA Scheme is entirely voluntary. However, each farmer wishing to join the scheme for a period of 5-10 years is required to produce a simple, and balanced, Farm Conservation Plan based on, and incorporating, the 16 Management Guidelines (see Table 3.2).

\* Avoidance of over-grazing or poaching

\* No new land reclamation work on the open rough grazings and agreement to follow good muirburn practice

\* Limits on the application of herbicides and pesticides on rough grazings

\* Limits on the application of lime and fertiliser and herbicides to unimproved, enclosed pastures

\* Agreement to obtain written approval before constructing vehicular tracks, removing hedges or dykes, or carrying out planting outside of the forestry grant schemes

\* Agreement to obtain written advice on the construction of farm buildings and to discuss capital grants schemes before undertaking any work

\* No pollution on the farm and compliance with tree felling control procedures

\* Maintenance of stockproof dykes and hedges and agreement not to damage features of archaeological interest

\* Preparation and agreement of a farm conservation plan

TABLE 3.2.SUMMARY OF BREADALBANE ESA MANAGEMENTGUIDELINES.(Skerratt et al, [1992]).

The payments outlined below represent those in operation at the time of the ESA evaluation (for changes since April 1992, see Appendix III (iii)). The ESA Scheme provides payments to the farmer for undertaking conservation work agreed in the Farm Conservation Plan and maintenance according to the 16 Management Guidelines. The farmer can claim up to £4500 per annum for five years. This payment is made up of two parts: firstly, the flat-rate payment (up to £1500 per annum) and the item payments (up to £3000 per annum).

The *flat-rate* payments are based on the amount and type of land within the farm unit. A total of £1500 per annum may be claimed. Farmers can claim £15 per annum for each hectare of enclosed land and £2.50 per annum for each hectare of rough grazings. The ESA Scheme defines enclosed land as "land enclosed by fences, hedges, walls or dykes for the controlled grazing of livestock, cropping or the maintenance of farm woodland. This will normally mean land below the hill dyke or fence" (SOAFD [1989]).

The *item* payments comprise payments for the specific conservation work of the Farm Conservation Plan (see Table 3.3). These are calculated on the basis of

standard costings for particular items of work at the rate of £X per linear or square metre for dyking and fencing, or £Y per hectare for other features, and so on. The amount paid per year is calculated on the basis of the amount of relevant work completed. A maximum figure of £3000 per annum per farm business can be claimed for these item payments, or £100 per annum per hectare, whichever is the lower figure. A flat-rate payment of £240 per annum is paid where the farm business covers an area of less than 16 "adjusted" hectares (10).

- \* Repair and maintenance of existing dykes (walls)
- \* Hedge restoration
- \* Tree planting underplanting of existing areas
- \* Fencing of woodland, wetland and permanent pasture
- \* Eradication of bracken
- \* Heather regeneration
- \* Archaeological site protection

TABLE 3.3. CONSERVATION WORK FUNDED UNDER THE ESA. (Skerratt et al, [1992]).

The farmer receives the first annual flat-rate payment soon after the agreement is signed, and then at yearly intervals for the remaining period. The item payments can be claimed at any time provided the work has been completed. However, for any work completed during a calendar year, all claims must be submitted by the end of January of the following year.

It is possible for the farmer to join other schemes whilst the ESA scheme is running on the farm. It is not possible however to apply for other forms of grants or aid from Government funds for the work agreed in the conservation plan; it is therefore not possible to obtain double funding.

<sup>(10)</sup> An adjusted hectare refers here to the total number of hectares of enclosed land plus one-sixth of the total hectares of other agricultural land.

# 3.3.3. The Socio-economic MAFF Evaluation of Breadalbane ESA.

The MAFF Evaluation of Breadalbane ESA had three specific objectives; these were:

\* To record the current farming and socio-economic conditions in the designated ESA of Breadalbane, and the "control" area (not designated as an ESA) of Glenshee and Glenisla.

\* To evaluate the likely uptake of the ESA in the Breadalbane area, to assess its impact on farmers, the rural economy and the rural landscape.

\* To evaluate the likely impact on farming systems, the rural economy and the rural landscape, of selected policy options.

For the first objective of the MAFF Evaluation, base data were collected on farming and socio-economic conditions within Breadalbane ESA and the control area. The subsequent data base contained information concerning, for example, land-use, stocking densities, labour units on farms, scheme involvement, pre-ESA conservation activity, and attitudes to on-farm conservation. This information comprised the basis for the second objective, *this* becoming the overall focus of the MAFF Evaluation. The third objective became subsidiary to the second, during the execution of the MAFF Evaluation; although referred to in a brief Section of the MAFF Evaluation Report, it did not receive the same analytical attention as the uptake and impact assessment. This facet of the MAFF Evaluation is not reported in this thesis, since it lay increasingly outwith the remit of the Evaluation team (11).

# 3.3.3.1. Methodology.

Data were collected via two surveys (as specified by MAFF) in both the ESA and control area. The control area lies immediately to the east of the ESA, the eastern boundary of the ESA and the western boundary of the control area being coincident (see Map, Appendix III (iv)). The area was selected at the outset of the MAFF Evaluation, the criteria involved being those features in common with the ESA; these comprised farming type, topographical variety, accessibility, natural beauty, and level of tourist initiatives (and their potential impact). The soft fruit growing area around Blairgowrie was excluded from the control area, due to its uniqueness

<sup>(11)</sup> It is reported, however, in Skerratt et al (1993).

within the region and therefore its obvious dissimilarity compared with the farming types within Breadalbane ESA.

The surveys within the two areas (ESA and control) focused on the following data sets: firstly, for impact assessment, data were required on the farm business, the local economy, the environment, and attitudes and behaviour. The ESA uptake evaluation aimed to represent more clearly the decision-making behaviour of the farmers within the designated area, with respect to: participation in the ESA scheme; and how conservation objectives could relate to the everyday farming and management of the farm business. The types of data required were subdivided into three categories: (i) the individual farmer, (ii) the farm characteristics, and (iii) the policy initiative, that is, the ESA and its implementation.

The first survey was carried out from July to December 1988; it involved face-toface interviews with farmers, using a structured questionnaire. The survey sample comprised a one hundred per cent census survey within the ESA, and a random sample of thirty three percent of the control area farmers, which was stratified on the basis of farm size and tenure type, in order that the ESA and control samples were approximately equivalent in these two respects, the criteria of size and tenure being predetermined by the availability of control area data at this stage of the research. A randomiser programme was used for sample selection. The overall response to this survey was seventy eight percent of farmers in the ESA area, and seventy three per cent of the control area sample.

The issues covered in this questionnaire can be subdivided under three headings, physical, attitudinal and response to the ESA Scheme. Physical comprised data on: farm size, land-use, farm buildings, labour, farm woodlands, on-farm non-agricultural activities, inputs to the farming system. Attitudinal questions addressed: farm conservation, farm objectives. Responses to the ESA Scheme included: attitude towards the Scheme, factors considered when deciding whether or not to join; perceived advantages, disadvantages and suggested improvements; expected impact of the scheme on the farm business; and details of the farm conservation plan.

The second survey was carried out towards the end of the three-year study, from January to March 1990, using a telephone questionnaire (assistance from the Research Unit in Health and Behavioural Change, Edinburgh University). As far

as possible, the issues raised were broadly similar to those of the first survey to allow for comparison of data; in addition, the survey sample (census in the ESA, thirty three per cent sample in the control area) was identical. The overall response to this survey was virtually the same, although some farmers preferred to answer questions face-to-face rather than over the telephone - and vice-versa; the farmers did not necessarily take part in both surveys.

Within the questionnaire, similar issues were covered as in the first set of interviews. The more complex financial questions were omitted, however, due to the telephone medium reducing the possibility of discussing farm accounts (both in terms of the time taken, and the inconvenience for the farmer of reading out accounts over the telephone).

### 3.3.3.2. Results.

Data from the first and second surveys led to results concerning: evaluation of the uptake of the Scheme, focussing in particular on farmers' attitudes towards the ESA; and the impact of the Scheme on the local farm economy, and on farmers' attitudes to conservation.

#### BREADALBANE ESA: UPTAKE.

#### Uptake pattern.

Table 3.4. shows the actual and projected uptake of Breadalbane ESA to 1992. It demonstrates the initially rapid uptake, with the number of applications levelling off as time progresses. The uptake for Breadalbane ESA was particularly high compared with other ESAs in Scotland.

	Арр	Applications		orovals		
to 31 May	No.	На	No.	На		
1988	76	34,690	41	14,927		
1989	84	36,961	75	31,257		
1990	97	51,270	82	38,158		
1991**	106	55,968	97	51,216		
1992**	118	62,304	112	59,136		

Source: SOAFD (1990)

\* Projections based on 75% uptake from eligible units.

\*\* Projected

TABLE 3.4. ACTUAL AND PROJECTED\* UPTAKE TO 1992. (Skerratt *et al*, [1993]).

#### Total Uptake.

Figure 3.2. illustrates the uptake pattern as it occurred within Breadalbane ESA, during the period 1987-1990. More recent data (see Skerratt *et al* [unpublished]) comprise the following uptake information: as of February 1992, there have been 104 participants, representing 69% of eligible farmers; the hectarage covered by these agreements is 62,962, and this represents 70% of eligible land.

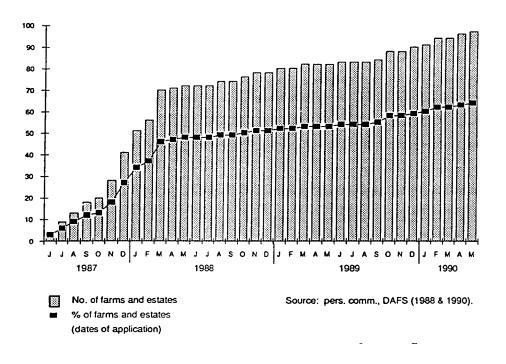


FIGURE 3.2. APPLICATION CURVE: NUMBERS AND PERCENTAGE OF ALL ELIGIBLE ESA FARMERS, 1987-1990. (Skerratt *et al* [1992]).

### Factors affecting Uptake.

Those factors which appear to have affected Breadalbane farmers' ESA adoption/non-adoption decisions are now discussed. These can be subdivided into three sections: the individual farmer, farm characteristics, and the policy initiative - the ESA and its implementation. The major results are outlined below.

### Individual Farmers.

At the individual farmer level, the age of the decision-maker seemed to be important. As can be seen from Table 3.5., as the age of the farmer increased, the willingness of the farmer to participate in the ESA Scheme appeared to decrease, with sixty-seven percent of farmers in the 25-40 category taking part in the scheme, as opposed to twenty-seven percent of farmers aged over 65 years. The research highlighted the fact that the younger farmers were more willing to 'give the scheme a try', whereas the older farmers preferred to continue farming the land in the way they had always done.

Another issue, which is a further comment on age, is that of retirement status; those nearer to their planned retirement were less likely to join, with an associated reluctance to see their day-to-day management of the farm altered in any way, and a concern over the five-year commitment required by the ESA.

Age (years)	% Farms		
16-24 25-40	NA 67 50		
41-64 65+	50 27		

TABLE 3.5. SCHEME PARTICIPANTS: DISTRIBUTION WITHIN AGE CATEGORY. (Skerratt *et al*, [1993]).

# Farm Characteristics.

The main factor which appeared to influence ESA adoption was farm size. The lowest uptake of the Scheme occurred in both the '0 to 50 hectare' range, and with the farms and Estates at the top end of the size range. The highest ESA-adoption was on farms of 50-100 hectares. The reasons associated with this were that on the smaller farms, the flat-rate payment (calculated on a per hectare basis) was significantly less than the maximum of £1,500 per annum; in addition, the potential for positive conservation measures on these smaller farms was felt to be more limited, with an associated concern over the probable difficulty therefore in producing a "balanced" farm conservation plan (12). The incentives at this end of the farm-size scale were therefore felt to be lower. In contrast, the larger farms found difficulty, and therefore disincentive, with the upper limit of £1,500 for

<sup>(12)</sup> this was a very definite requirement stipulated by SOAFD in their ESA Explanatory Leaflets.

observation of the management guidelines on a sizeable hectarage of farm land. In addition, the response on these larger properties was that there was the potential for carrying out more positive conservation measures than were provided for under the maximum funding of  $\pounds$ 3,000 per annum for each of the five years of the conservation plan. This was significant in the Breadalbane area, since there are a number of large estates covering many thousands of hectares. The "ideal" farm size for taking full advantage of the ESA funding thus appeared to be that of 50-100 hectares.

Farm status - that is, whether the farm is tenanted, owner-occupied or mixed - was anticipated by the researchers as being significant to the ESA adoption/nonadoption decision. However, adoption of the Scheme was found to be almost identical within these categories, with fifty seven percent of tenants, fifty five percent of owner-occupiers, and fifty two percent of those of mixed tenureship, being involved in the Scheme. A significant factor here, however, is that it appeared that a number of the tenants who farmed within the larger estates were strongly encouraged to join the ESA Scheme by their landlords and/or factors, some estates topping up any shortfalls in the ESA funding which the tenant farmer would have otherwise incurred. In addition, two tenants within the area were not allowed to join the ESA Scheme, due to landlord preference.

### Policy Initiative.

This category comprises firstly, data on farmer response to the information and advice associated with the ESA's introduction and implementation; and secondly the specific advantages, disadvantages and suggestions for improvement which were cited by farmers when interviewed. It must be stressed that these comprise the comments and feedback from farmers themselves.

Extension - Information and Advice: Table 3.6. illustrates the primary - that is, the first and main - source of ESA-type information used by farmers within Breadalbane. The combined SAC input reached 43 percent of farmers, with SOAFD input accounting for 36 percent. Farmers were then asked to comment on the adequacy of the information they received at three specific stages of the ESA's implementation: when considering whether or not to join the Scheme, when drawing up the farm conservation plan, and when actually carrying out the ESA-funded conservation work.

Primary Sources of Information	% of Respondents		
SAC (Perth) SAC Advisers (Perth) SAC (Edinburgh)	17 24 2		
SOAFD (Perth) SOAFD Advisers (Perth) SOAFD Booklets	27 2 7		
NFU	2		
Neighbours	2		

TABLE 3.6. PRIMARY SOURCES OF INFORMATION CONCERNING THE BREADALBANE ESA SCHEME. (Skerratt *et al*, [1992]).

Further, as can be seen from Table 3.7. (below), over eighty percent of farmers saw the ESA-related information and advice as adequate or completely adequate for the first two stages, and seventy percent for the third stage. Inadequacy of the extension input was greatest when farmers were carrying out the work; however, this was stated in only 12 percent of cases.

The results indicate that the level of, and satisfaction with, the information and advice received by farmers was an important positive factor in their ESA adoption/non-adoption decisions, and for many farmers certainly encouraged their adoption of the ESA Scheme.

	Completely Adequate		(%)	Completely
		Adequate	Inadequate	Completely Inadequate
When considering whether or not to join the Scheme	40	44	7	2
When drawing up the farm conservation plan	46	39	2	2
When carrying out the work	29	44	10	2

TABLE 3.7. Adequacy of Information and Advice Concerning Breadalbane ESA (Skerratt et al [1992]).

Farmers' comments concerning the ESA Scheme: The major advantages and disadvantages of the Breadalbane ESA and suggestions for its improvement, as stated by the farmers, are outlined below. Within the questionnaire, these particular questions were designed to be open-ended; thus after giving their responses, farmers were then asked to state the *main* advantage, disadvantage, and suggestion. However, as can be seen from Tables 3.8., 3.9. and 3.10., a number of interviewees were unable/unwilling to isolate a *main* comment from their overall feedback concerning the ESA Scheme. In addition, many of those interviewed did not make suggestions for the Scheme's improvement (see Table 3.10.).

Advantages (see Table 3.8.): Primarily, these concern the opportunity for repair and/or maintenance of dykes, and the associated jobs that the ESA Scheme required. Secondly, the Scheme allowed for environmental activities to be carried out on the farm, activities which were seen as "unaffordable" without ESA funding.

Main stated advantage	% of Respondents	
Dykes and work for dykers	20	
Environmental activities that could not have been done otherwise	16	
Farm and countryside more attractive	14	
Stock control features	13	
Financial input to the farm	13	
Unable/unwilling to state main advantage	24	

TABLE 3.8. ADVANTAGES OF THE ESA SCHEME. (Skerratt et al, [1992]).

Disadvantages (see Table 3.9.): Twenty eight percent of respondents felt that the main disadvantage of the ESA Scheme was the interference with their farm system; as has been mentioned, this was primarily associated with pre-ESA grazing location, and particularly with the exclusion of stock from certain areas of the farm for long periods. One-quarter of farmers felt that the range of ESA-funded conservation items was too narrow (as the main disadvantage), particularly as the establishment of new features was not allowed under the Scheme; these may

include planting of trees where there are currently no trees, and the creation of ponds. It was felt that there was scope for a more comprehensive farm conservation scheme.

Main stated disadvantage	% of Respondents
Interference with farm system/ management	28
Range of conservation items too narrow	22
Bureaucratic input	9
Uncertainty over the five years and future	9
Itemised payments not high enough	8
Unable/unwilling to state main disadvantage	24

TABLE 3.9. DISADVANTAGES OF THE ESA SCHEME. (Skerratt *et al*, [1992]).

Suggestions for Improvement (see Table 3.10.): Firstly, as mentioned above, a major suggestion was to broaden the Scheme remit in order to include new features. In addition, farmers suggested the possibility of non-agricultural land within the area - such as that owned by hotels - becoming eligible for ESA funding, thus increasing the scope for environmental improvements within the ESA as a whole.

Suggestions	% Response
Broaden Scheme remit	12
Increased funding or index-linked payments	6
Scheme should be for more than 5 years	4
Opportunities to modify plan	3
Unable/unwilling to state <i>main</i> suggestion, OR unable to make suggestion	75

 TABLE 3.10.
 SUGGESTIONS FOR IMPROVEMENT IN THE ESA SCHEME.

 (Skerratt et al [1992]).

Secondly, a point which was raised as the main issue by only six percent of respondents, but by a much larger percentage of respondents as part of their overall suggestions, is that of keeping the itemised payments for the conservation work in line with inflation. Concern had arisen that agreements were signed, say, in 1988, for a five-year period, but at 1988 prices. The costs of dyking, particularly, increase during the lifetime of a Farm Conservation Plan. It was therefore felt that index-linking of the itemised payments should be seriously considered if future ESAs were to be designated in Scotland.

#### BREADALBANE ESA: IMPACT.

The main results fall within four categories: Farm Business, Local Economy, Landscape and Attitudes.

### Farm Business: Land-use and Stocking.

More than half the farmers interviewed indicated that they had made some adjustment to their cropping patterns and stocking level over the previous two years (that is, 1986-1988). The most common shift appeared to be away from arable (particularly barley) towards increased cattle and sheep numbers. No adjustments, however, were brought about as a direct result of the ESA scheme.

It is worth noting at this point that, although the SOAFD publications, such as *A First Report* (1989), stated that: "the scheme is designed to resist pressures towards damaging intensification ....", and "protect open hill rough grazing from

land reclamation, overgrazing ...." the recommended maximum stocking density of 0.5 Livestock Units (L.U.) (13) per hectare (on open rough grazings) was higher than most Breadalbane farmers' stocking density. Thus, in the view of the researchers, the opportunity for confronting the issue of overstocking was not fully addressed.

### Farm Business: Labour.

Although there was no specific employment objective in the Scheme, the effect of the ESA has been slight, since the majority of ESA-funded conservation work has been undertaken by contractors (see below) rather than by existing on-farm labour. In two percent of cases, however, the farm workforce has directly been affected by the opportunity which the ESA represented for the employment of younger people under the (then) Youth Training Scheme. More detail concerning this issue of employment is given below.

#### Farm Business: Destination of ESA monies.

A farmer participating in the ESA Scheme is able to claim up to £4,500 per annum for each of the five years, up to £1,500 of this being the flat-rate payment, and up to £3,000 being the "itemised" payments (see Appendix III (i)).

Firstly, flat-rate payments: more than eighty percent of the participating farmers stated that such monies were being - and would continue to be - used for on-farm expenditure; that is, the money was being ploughed back into the farm business. This payment, however, was increasingly being used to top-up itemised payments which were falling short of the full cost. Eighty three percent said that there was no chance of any off-farm investment of these monies; and more than a quarter of the respondents were using this flat-rate payment to help reduce debt.

Secondly, itemised payments: these were for specific conservation activities, such as dyking, fencing and tree planting. A small number of farmers carried out the work themselves, and were thus able to keep the monies in lieu of their time.

<sup>(13)</sup> STOCKING RATE CALCULATION TABLE:

1 dairy cow	= 1.0.L.U.
1 bull or other bovine cattle over 2 yrs.	= 0.8.L.U.
1 bovine animal from 1 to 2 yrs inclusive	= 0.6.L.U.
1 bovine animal of less than 1 yr.	= 0.4.L.U.
1 ewe including lambs	= 0.15.L.U.

However, in the majority of cases, much of the conservation work was carried out by contractors. The itemised payments were therefore used directly for the purpose of maintaining or improving the existing farm conservation features.

### Farm Business: Farming System.

Very few respondents reported any change in the running of the farm business and their farm management, as a direct result of the ESA Scheme. The Management Guidelines appeared to be "well-tailored" to the Breadalbane farming systems. The one area of infringement and difficulty, at least initially, was linked with the fencing of woodland areas for regeneration (or where specific underplanting occurred) and of a small number of wetland areas. These required a resultant change in grazing location from areas which had previously been used for shelter. In addition, in the earlier stages of the Scheme's implementation, there was confusion over the precise time-periods for which areas should have been fenced off, although it seems that this issue has since largely been resolved, due to SOAFD consultation with Scottish Natural Heritage (SNH).

### Local Economy: Labour Supply and Demand.

In addition to the above comments, it is necessary to look at the percentage of farmer involvement in each of the ESA-funded activities (see Table 3.11.).

Activity	%ESA Participant Farmers involved each activity
Dyking	100
Fencing off woodland	89
Tree planting	86
Fencing off wetland	58
Fencing off unimproved pasture	44
Bracken control	42
Archaeological site protection	35
Hedge restoration	16
Heather regeneration	7

TABLE 3.11. FARMER INVOLVEMENT IN EACH OF THE ESA-FUNDED CONSERVATION ACTIVITIES. (Skerratt *et al*, [1992]).

It can be seen that one hundred percent of participating farmers, for example, carried out some dyking as part of their conservation plan; eighty nine percent of

these participating farmers fenced off woodland, and so on. In order to carry out these activities, farmers seemed to follow one of two options: use of available farm labour, with additional training as required; or use of contract labour. This choice depended on the nature of the activity (whether dyking or tree planting for example), the availability of on-farm and/or contract labour, associated costs, time input for the work, training requirements, and the perceived required standards for the completed work.

It was found that contract labour was used, to varying degrees, for five out of six of the conservation activities, the highest contribution being for dyking and fencing (see Table 3.12.). Since dyking was carried out on one hundred percent of participating farms, and was also the activity that perhaps required the highest degree of training, 33 full-time jobs were required in the area as a direct result of the ESA agreements. A number of the dykers came from outwith the area, some of whom were previously established. In 1989, these dykers stated that they were booked up for at least the next five years on ESA-funded work. Table 3.13. illustrates the degree of government expenditure according to the type of ESA work, and the significance of the contract labour share is evident.

Activity	Own Labour(%)	Contract Labour(%)	Both (%)
Dyking	9	85	6
Hedge restoration	75	29	0
Tree planting	73	20	7
Fencing	26	55	19
Bracken control	77	23	0
Heather regeneration	100	0	0

Labour Inputs

TABLE 3.12. LABOUR INPUTS FOR EACH ESA-FUNDED ACTIVITY. (Skerratt *et al*, [1992]).

Type of Work	Total Expend. £k	Farm Labour £k	Contract Labour £k	Materials £k
Dyking	603	73	530	0
item payments extra cost	106	0	106	0
Fencing	444	78	144	222
Hedge replanting	21	5	2	14
Tree planting	21	5	2	14
Bracken eradication	25	10	3	12
Total	1220	171	787	262

\* At 1990 prices.

TABLE 3.13. PROJECTED EXPENDITURE\* ON LABOUR AND MATERIALS TO 1996. (Skerratt *et al*, [1993]).

The ESA has thus, in this instance, had an impact on the local economy in terms of employment. It should be noted, however, that more than sixty percent of the dykers lived outwith the ESA and came into the area specifically for the work on a day-to-day basis; there was thus a leakage of ESA funds from the ESA itself (this issue is addressed below).

### Landscape.

The SAC evaluation concentrated on the level and extent of conservation work being carried out with ESA funding, using the control area for comparison. This focus was determined by the concurrent research being carried out by the Macaulay Land Use Research Institute and the Countryside Commission for Scotland (the latter is now part of Scottish Natural Heritage) into the ecological, conservation and landscape impacts of the Scheme in Breadalbane.

As can be seen in Table 3.14., the ESA has facilitated significant conservation work which - with reference to the control area - would not have been carried out to the same extent without such funding. Within the ESA, advice was available,

others in the area were carrying out the work, and, of course, financial assistance was present; all of which are strong incentives for carrying out the work. The control group therefore demonstrates relatively clearly the opportunity and incentive afforded by the ESA Scheme.

Type of conservation work	ESA%	Control Area %
Dyking	61	6
Hedge restoration	10	0
Tree planting	79	46
<u>Fencing</u> - woodland - wetland - permanent pasture	35 34 27	0 4 0
Bracken eradication	25	0
Heather regeneration	5	4
Archaeological site protection	20	0

TABLE 3.14. ESA AND CONTROL AREA CONSERVATION ACTIVITY - ESA TYPE WORK. (Skerratt *et al*, [1992]).

Where "%" represents the percentage of those within the ESA as a whole, and within the control area sample, who are undertaking these particular conservation activities.

### Attitudes.

The evaluation focussed on the impact of the ESA on attitudes to conservation, and on-farm conservation. The observations must be qualified, since the responses occurred just two or three years after the introduction of the Scheme (1987), and in many cases, almost immediately after the farmer had joined the scheme. There is a necessity for a greater time-period to have elapsed in order to facilitate a more accurate assessment of the attitudinal impact of the ESA.

However, within the two surveys, three aspects of this issue were examined: firstly, whether the ESA had led to a change in farmers' *interest* in conservation; secondly, whether their *understanding* of conservation had changed; and finally, whether the ESA had changed their *awareness* of conservation practices on the farm.

ESA-induced change	Increase		Response ( Don't Know	(%) Other
Interest in conservation	40	45	4	11
Understanding of conservation	45	42	2	11
Awareness of conservation practices on farm	47	36	2	15

TABLE 3.15. ESA-INDUCED ATTITUDINAL CHANGE. (Skerratt et al,[1992]).

As is evident from Table 3.15., the ESA-induced changes are relatively low, with almost half the farmers reporting no change in interest in conservation as a result of the ESA Scheme. The majority of those giving this response stated that they were good stewards of the land prior to the introduction of the ESA, and the Scheme had thus not altered their attitude. The greatest percentage of respondents reporting an increase was for "awareness of conservation practices on the farm" - that is, a greater awareness of both the functional and aesthetic aspects of farm conservation.

# 3.3.4. Overall Assessment of Breadalbane ESA.

# 3.3.4.1. Uptake.

The adoption of Breadalbane ESA is the highest of all the Scottish ESAs. The factors affecting uptake appeared to be the farmer's age, education and nearness to retirement. The factor of tenureship, at this stage of the research, does not seem to play a significant part in the adoption process, except in the context of the influence of landlords on the large tenanted estates within the area. However, the amount of potential ESA-funded work and the significance of the financial incentives (the flat-rate element of which is calculated on a per hectare basis) is related to farm size. Uptake could have been increased with a recognition of the restrictions that small and large farm size can bring (see Results), and the opportunity for flexibility in order to encourage the participation of such farm units.

In addition, the ESA-funded conservation works had benefits for livestock farmers, for example the dykes provide good stock control and shelter, and areas where trees have been underplanted will also provide shelter within the next few years. The small number of lowland arable farmers in the area did feel that the Scheme had little to offer them in this way; for example, they would have preferred the opportunity for planting trees in *new* areas which could have subsequently provided shelter. Within the Scheme, therefore, there needs to be the opportunity for catering to this diversity of farm type, size and tenureship arrangements.

Certain details of the Scheme itself increased its uptake; these included: the relatively easy application procedure; the easy form-filling and crucial assistance (from SAC) with the Farm Conservation Plan; and the timely payment of the Flat Rate Grant. In addition, the flat-rate payment was felt by many farmers to be a sufficient incentive for involvement in the Scheme. However, uptake could well have been increased had an in-built price review system been incorporated into the ESA, since farmers are committing themselves, up to five years forward, on the basis of cash payments at today's price levels.

### 3.3.4.2. Socio-economic Impact.

The overall socio-economic impact of the ESA has been limited. The farm businesses within the area appear to have been little affected in terms of changes in land-use patterns and livestock, except for some shifts in grazing and sheltering locations where areas have been fenced off. The ESA-funded conservation activities have largely been carried out by contract labour, and thus farm-level labour situations have remained unchanged. The ESA monies, however, have been invested in the fabric of the farm, and this may have implications both in terms of their financial value and aid to farming activities such as stock control. However, the proportions of ESA grants invested in the participating farms could have been increased with less use of contract labour and more encouragement of the training and associated use of on-farm labour. The local economy has seen little change due to the ESA; the major effect was connected with the labour required to carry out the ESA-funded conservation work; however, as mentioned elsewhere in this section, this impact was significantly reduced due to labour coming from outwith the designated area, often on a daily basis.

The majority of ESA participants felt that the Scheme led to a positive landscape impact, primarily in terms of the repair and maintenance of dykes, particularly

since farmers had been increasingly replacing dykes with fences due to the former's prohibitive cost and required time input. In addition, the encouragement of woodland regeneration in certain areas of farms which were formerly grazed was felt to have a positive long-term impact (for a detailed botanical assessment, see Nolan and Still [1992]).

The issue of the extent to which farmers' attitudes to the environment were changed by the ESA was difficult to assess because many farmers felt that they had already been farming in a way that was beneficial to the environment, thus creating and maintaining the sorts of features for which the ESA had been designated. This was particularly felt to be the case in this predominantly LFA, extensive hill farming area. For some farmers the ESA was merely facilitating a continuation of these practices which had recently become impossible to carry out due to the financial 'squeeze' on farming. However, what can be pinpointed is the way in which the ESA appeared to increase farmers' awareness of the scope for integrating conservation activities, as represented by the ESA, with everyday farming Also of importance here was the opportunity for planning and practices. negotiation between farmer and adviser (during the ESA adoption procedure) which led to a realization for a number of farmers that there was room for discussion over often differing land-use objectives. The ESA appeared to be a positive experience for the majority of farmers who joined, in that the Scheme was voluntary, and was publicized as "experimental" (thus suggesting possibilities for its improvement). In addition, the application procedure and form-filling were not particularly onerous (as compared with other schemes), and the payments were received fairly speedily and covered a significant percentage of the costs involved. However, farmers did comment on the necessity for index-linking the itemised payments due to the five (and now up to ten) year duration of an agreement.

# 3.3.4.3. Negative Aspects of Breadalbane ESA.

Firstly, Breadalbane ESA has not sufficiently confronted the overgrazing issue, which was cited as important in the early stages of the ESA's designation and implementation. Specific areas, such as herb-rich meadows and wetlands, *have* been catered for under the ESA provisions, due to funding which has allowed them to be fenced off. However, the open hill rough grazings had been specifically identified as requiring protection from overgrazing; but the stocking density level set within the Management Guidelines has not led to any changes in the average annual stocking density of farmers within the designated area.

Secondly, feedback from farmers indicated that payments became "insufficient" after the first two to three years of the Scheme's operation; the greatest increase in costs was for the dyking work, due to both inflation and the increasing prices charged by dykers. As a result, farmers were increasingly having to use a proportion of their flat-rate payment to meet the rising costs.

Thirdly, the exclusion of non-agricultural land is seen as a disadvantage, since such land is significant to the ESA as a whole, in both hectarage and landscape terms, and its exclusion results in a piecemeal approach. This is therefore seen as a missed opportunity, although it is recognised that the ESA is an agricultural measure, and changes of this sort would require an amendment to the Statutes.

Finally, the majority of the dyking and fencing work was carried out by contract labour. Although it is recognised that new jobs have been created as a result, a "leakage" of resources has been identified, in that ESA monies leak firstly from the farm business to the contractor; and secondly, from the Breadalbane area, since more than sixty percent of the contractors are from outwith the designated area.

3.3.4.4. Positive Aspects of Breadalbane ESA.

Firstly, the ESA is positive in terms of its overall uptake - that is, almost seventy percent of eligible farmers have joined (March 1992).

Secondly, the Scheme has brought about a considerable amount of enhancement work: stone dykes have been renovated and rebuilt; semi-natural woodlands have been fenced off to allow for regeneration; areas of herb-rich pasture, and some wetland, have been fenced off so that grazing may be controlled and poaching reduced.

Thirdly, most of the income from the flat-rate payment has been ploughed back into the farm business, with over fifty percent of the farmers receiving the maximum payment of  $\pounds1,500$  per annum.

Fourthly, the Breadalbane ESA Scheme has shown the potential for integrating conservation with day-to-day farming. The aesthetic and functional aspects of conservation are being demonstrated, such as the maintenance and repair of dykes - which are both a landscape and stock control feature.

Fifthly, the ESA has had a positive visual impact - at least in the short-term, primarily with respect to dyking and tree planting.

And finally, the knock-on requirement of the ESA for thirty-three full time jobs, fifteen of which have been filled by those resident within the ESA, is an obvious advantage and has contributed towards the maintenance of the traditional craft of drystone dyking.

## 3.3.4.5. Recommendations for Breadalbane ESA.

The two essential elements in the Breadalbane Scheme should be retained; the combination of a substantial flat-rate payment and a balanced Farm Conservation Plan ensures both high uptake for the Scheme, and a broad coverage of conservation features.

Schemes such as Breadalbane ESA should allow for the funding of new features, such as ponds and new woodland, as these would add to the attractiveness of the Scheme from the farmers' point of view. Although these features can and do attract funding from other sources, there is considerable appeal in developing a single, comprehensive conservation plan and working through it over a five to ten year period.

As farmers gain in conservation experience, it is quite likely that they will see scope for improvement in their Farm Conservation Plans. Consideration should therefore be given to allowing modifications to the original Plans, for example in the second or third years (a fee could be charged to cover the cost of this second approval). Such a system would allow for more feedback from the farmer on some of the details of the Scheme, and may subsequently have the effect of increasing uptake, and giving farmers a more positive attitude to farm conservation.

Although it is recognised that the creation of jobs was not one of the objectives of the ESA, the financial resources of the Scheme could well have been contained within Breadalbane to a greater extent if, for example, there had been increased awareness of training opportunities in the area and associated liaison with bodies such as the Agricultural Training Board, at earlier stages of the ESA's implementation. There needs to be a working awareness - within the design of the ESA - of the (adoption) implications of certain features within this ESA. Firstly, the complexities of tenureship arrangements must be recognised in order that the appropriate individuals can be approached, and account taken of the constraints and opportunities of tenants and landlords, factors and managers. Although the Local Area Advisory staff are aware of the various estates and their farming arrangements, there are no details within the ESA mechanism which cater for them.

Secondly, as mentioned, the Scheme needs to address the diversity of farm size and type. For example, a finer tuning of the flat-rate incentive payment for the farms of less than 50 hectares, no charge for their Farm Conservation Plan, and the possibility of signing up for a shorter time-period (in recognition of the comparatively limited amount of work available for ESA funding), may encourage farms of this size to join the Scheme. A higher ceiling for itemized payments, even for say three out of the first five years, may encourage more of the larger farms to join.

It was stated that, overall, the socio-economic impact of the ESA has been limited. The above comments and recommendations, if met, would encourage higher adoption levels for the Scheme, and allow for a greater positive financial input to the farms and the area. In addition, farmers' awareness of their increased role in determining aspects of the Breadalbane ESA policy may well encourage greater participation in ESA-type Schemes, and have longer term positive implications for involvement in farm conservation activities *per se*.

### 3.4. CONCLUSIONS.

This Chapter has examined the government-published literature outlining policy evaluation guidelines. Observations have been made, highlighting the key facets of these guidelines, and pointers have been given concerning their implications for accuracy and usefulness of conventional evaluations of agri-environmental policy. The Chapter also presented the case-study of a conventional, government-funded policy Evaluation: the MAFF Evaluation of Breadalbane ESA. The methods, results and Evaluation conclusions have been outlined.

The Thesis now continues with a discussion, over the next few Chapters, of the reasons why such a conventional policy Evaluation (the MAFF Evaluation) is inadequate. Firstly, the farming-related literature presented in Chapter Four illustrates the potential complexity of the policy recipients' context, behaviour, motivations and decision-making. The Chapter concludes with a recognition of the necessity for a broader range of data to be included within the Evaluation. Chapter Five outlines farm-level interviewing carried out subsequent to the government-funded MAFF Evaluation (this is referred to as the 1993/4 Fieldwork). This comprises the data source for Chapter Six. Chapter Six - the Critical Appraisal - then focuses the discussion on a comparative assessment of the results and information obtained from the conventional MAFF Evaluation with that of the 1993/4 Fieldwork, and briefly examines the findings in their wider evaluation context.

The Thesis concludes with an assessment of the implications of the conventional policy evaluation approach, as exemplified by the MAFF Evaluation, and states the resultant methodological and conceptual imperatives.

#### **CHAPTER FOUR**

### THE COMPLEXITY OF THE FARM-LEVEL CONTEXT.

#### 4.1 INTRODUCTION.

The aim of this Chapter is to examine the literature which exists concerning the farm-level context, and associated behaviour and decision making. The objective is to illustrate the accepted *complexity* of farm-level decisions and activities, in order to provide a basis for assessing (in Chapter Six) the extent to which the conventional socio-economic Evaluation of Breadalbane ESA (the MAFF Evaluation) represented an accurate analysis. The basis of the discussion therefore, is not whether the literature shows conventional socio-economic Evaluation to be poor *social science* research. Rather, it is to examine whether the approaches used in the MAFF Evaluation comprised a poor *agricultural and socio-economic analysis*. Chapters Four and Six are therefore intended as two complementary facets - literature and data - in the Critical Appraisal of the MAFF Evaluation; Chapter Four sets the wider context for the data which are presented and discussed in detail in Chapter Six.

The Chapter therefore examines farming-related research literature, and focuses on two specific aspects: farming and the farmer; and the farmer and others. These two aspects have been selected since they comprise issues which the ESA itself, and therefore its Evaluation, of necessity involves. Further, literature specifically concerning the adoption of UK agri-environmental schemes by farmers is briefly examined. The purpose is not to develop the theme of 'adoption' *per se*. Rather, the examples illustrate the complexities inherent in this specific adoption process, and their implications for levels and methods of evaluation.

The Chapter then concludes with an assessment of the extent to which existing literature indicates a necessity for broadening the conventional data set (exemplified within the MAFF Evaluation) within the socio-economic evaluation of voluntary, agri-environmental policy.

#### 4.2. FARMING AND THE FARMER.

"As farming forms part of so many systems, a single discipline will run the grave risk of ignoring relevant factors when attempting to explain, interpret, predict and ultimately influence the present pattern of agriculture and changes in it". (Hill and Ray [1984], p.410)

"... when ... denying to others the complexity which we impute to ourselves". (Cohen [1992], p. 225)

Firstly, extensive research has been carried out concerning the motivations of farmers, their objectives, the aspects of farming which they value, and the type (for example, intensity) of farming that they wish to pursue (these are discussed below). These studies illustrate the variety and dynamism of such aspects; they comprise evidence of the fact that farming, to many farmers, is more than "just a job" and a means of earning money; indeed, as Gasson (1974) has commented: "most people regard work as more than just a means of earning a living" (p.125). For some individuals and their families, financial and economic criteria *may* be key and overriding factors (although Gasson has argued that even economic motivations are themselves complex (1)). However, for many others, their view of farming is closer to being "a way of life" rather than "farming as a business" (see Newby *et al* [1978], p.16; and Seabrook and Higgins [1988]).

The apparent insistence within conventional policy evaluations and analyses (such as the MAFF Evaluation) on the 'aggregate' or average farmer being primarily economically motivated and driven therefore needs to be questioned. As the opening quote suggests, there is a willingness to accept complexity in ourselves; however, when analysing others, such complexity may well be considered superfluous and additional to the prime matters under consideration. As Gasson (1973) has observed: "people tend to recognize a great variety of meanings in work for themselves but attribute only instrumental values to others. Some (studies) have shown that while (farm) workers seek a wide range of goals in their occupations, their employers believe that higher wages will be sufficient to motivate them, not realising that workers too might strive for responsibility, achievement, or control over the job" (p.538). Newby (1982) has also made a

<sup>(1) &</sup>quot;Economic motivations themselves are complex, embracing elements as diverse as the desire for security, professional pride and demand for leisure and these are interwoven with aspirations for a happy family life, desire for esteem, self-fulfillment and so on" (Gasson [1971], p.32).

similar observation: "too often 'labour' is reduced to a dehumanised factor of production, which may be 'pushed' or 'pulled' hither and thither by exogenous influences, but whose needs and aspirations are rarely given serious attention" (p.150). Such observations highlight the necessity of viewing 'the farmer' as more than "a mechanical allocator of resources of a bio-economic enterprise" (Buggie [1977], p.1.).

Research suggests, moreover, that farmers themselves do not view farming in purely one-dimensional, economic terms. As Newby et al (1978) have noted, "... by no means all farmers believe that they must pursue the maximum possible profitability without taking account of their own preferences in respect of their lifestyles and other non-economic rewards... many farmers remain resistant to using a narrowly defined notion of economic rationality as their only guide to entrepreneurial activity" (p.41; emphasis added). Williams (1960) states that: "the incentives to farm are not always economic ones" and that "for the farmer, and often his family, the farm is a means of integration of many interests" (p. 203). Another example is Gasson's (1988b) research into the economics of parttime farming; she observes: "Farming is a business subject to market forces like any other. The farmer as an entrepreneur needs to be aware of the margin between costs and returns, the rate of return on capital, the opportunity costs of his labour and the managerial input and of the capital invested in the farm business. It does not follow that economic considerations like these must necessarily dominate the farmer's thinking to the exclusion of all else" (p.139; emphasis added). This comment is echoed in Capillon's (1986) study of farm classification, where he states that: "It soon became evident that the technical choices made by farmers were governed by things other than the natural environment or production processes. The professional pride of the farmer and the family's desire for a better life also intervened" (p.1).

Rees (1961) has observed what he terms the non-economic aspects of farming which farmers *do* consider: "To understand fully why these farmers have clung to their traditional occupation even in adversity, other factors in community life must be considered. The solidarity of the family, the bonds of kinship, the connection with a chapel or a church, the individual's status among his neighbours, all the him to his locality and make his life incomplete elsewhere" (p.31).

This complex milieu within which farmers live was specifically highlighted by Gasson (1973) in her paper entitled "Goals and Values of Farmers". She defines farmers' 'goals' as: "ends or states in which the individual desires to be or things he wishes to accomplish" (p.524); and their 'values' as: "a more permanent property of the individual, less liable to change with time and circumstances. A value is a conception of the desirable referring to any aspect of a situation, object or event that has a preferential implication of being good or bad, right or wrong" (p.524). She argues that together they comprise one facet of a farmers' *motivation*, that is, "what farmers *really want* from their occupation" (p.521). In her discussion, Gasson cites Ashby's (1926) classification of the motivations of farmers:

- desire of economic advantage or fear of economic need;
- hope of reward or fear of punishment;
- feeling of honour, striving for recognition, or fear of shame;
- need of occupation and pleasure of activity.

She states that "(i)n empirical investigations of occupational values the themes of material gain, recognition and pleasurable activity constantly recur" (p.526).

From earlier empirical research (Gasson [1969] & [1971]) the author is able to highlight "the dominant values likely to be associated with the farming occupation" ([1973], p.527). These she classifies as *Instrumental* (farming is viewed as a means of obtaining income and security with pleasant working conditions); *Social* (farming for the sake of interpersonal relationships in work); *Expressive* (farming is valued as an activity in its own right) (Gasson [1973], p.527). The facets of these four values are listed in Table 4.1. (see below). The results and analyses of Gasson's survey work show the value orientations of farmers to be related to a number of aspects of farming: "many characteristics might prove to be associated with value orientations ... age, education, socioeconomic status, length of farming experience, association with a particular farm, commitment to farming as a career, family size, stage in family cycle, size and type of farm, income level, indebtedness, degree of urbanisation and so on" ([1973], pp. 531 & 532).

### **INSTRUMENTAL:**

- \* Maximizing income.
- \* Making a satisfactory income.
- \* Securing income for the future.
- \* Avoiding losses.
- \* Increasing net worth.
- \* Controlling a larger business.
- \* Providing pleasant working conditions.

## **INTRINSIC:**

- \* Enjoying the work itself.
- \* Pursuing a healthy, outdoor life.
- \* Purposeful activity, value in hard work.
- \* Independence free from supervision, free to organise time.

# SOCIAL:

- \* Belonging to the farming community.
- \* Gaining recognition, prestige as a good farmer.
- \* Creating and maintaining good relations with workers.
- \* Continuing the family tradition.
- \* Spending more time with the family.

### **PERSONAL:**

- \* Exercising special abilities and aptitudes.
- \* Chance to be creative and original.
- \* Gaining self-respect for doing a worthwhile job.
- \* Meeting a challenge, achieving an objective.
- \* Self-fulfilment and personal growth.

TABLE 4.1. OBJECTIVES OF THE FARMING OCCUPATION.[Source: Gasson (1973), cited in Gasson and Errington (1993), p.99].

Other research in this area indicates the existence, and significant influence, for farmers, of these noneconomic values and their interplay with economic values. Examples include: Schroeder et al's (1985) discussion of 'agrarian values'; Patrick et al (1983) and their research into the goals of farmers; and Newby et al (1978) who cite "... the tensions between ... what could be called their (farmers') expressive feeling for their land as a business - was frequently expressed" (p.213). Hermann et al (unpublished) have also discussed what they term 'farmers' disposition to act', in the context that "agriculture is no longer a homogeneous sphere and the reasons for maintaining farming might differ considerable between farmers. To comprehend their motives, we need to gain an insight into their world and their world view" (p.2; emphasis in original).

Secondly, in addition to the complexity of farmers' motivations and therefore their priorities in farm decision making and behaviour, Seabrook & Higgins (1988) have

found that: "the images the farmer holds about himself/herself significantly affect behaviour and the decisions made about the farm business" (p.99). Further, "in an agricultural context, the individual farmer's concept of himself or herself as a decision-maker defines the components of appropriate farming practice" (p.100; emphasis added). The authors discuss this in terms of the balance between the three components of the Self-concept: the Cognised Self ('this is me'); the Other Self ('this is how I think others see me'); and the Ideal Self ('this is how I want to The Self-concept may be changing, or it may be relatively settled be seen'). (p.100) during different stages of the individual farmer's lifetime. The authors argue that the behaviour of farmers may well make sense to them in terms of their image of themselves as farmers; "if, for example, the (introduced) idea is viewed by the farmer as for the PROGRESSIVE, but he has a view of himself as TRADITIONAL, he will not want to adopt it" (p.104). They state that this is because "all individuals have views of themselves, and a person will try to interpret all information available to them in the light of this Self-concept; to do anything else involves changing the way of understanding the world, and that can be unsettling ... (and) this unwillingness to change (2) arises because of conflicts with the images of self" (pp. 104 & 105); (3).

The methodological approach comprised examples of these images being presented to the farmer through a series of continua on which farmers place a cross with respect to their 'Cognised Self' (see Table 4.2.) (4). Their work points to a significant aspect of farmers' behaviour and motivations; however, it remains bypassed in current policy evaluations.

<sup>(2)</sup> And perhaps also the willingness to stay the same.

<sup>(3)</sup> This research finding is particularly poignant to the discussion raised in Chapter Two concerning the promotion of the ESA as "traditional" farming. The necessity for addressing this issue is self-evident.

<sup>(4)</sup> Criteria concerning notions of 'Traditional' and 'Progressive' are also discussed by Newby *et al* (1978) in part in terms of "degree of market orientation".

EXPERIENCED	INEXPERIENCED
EXTENSIVE	 INTENSIVE
TRADITIONAL	 PROGRESSIVE
 INEFFICIENT	 EFFICIENT
MACHINERY-	 LIVESTOCK ORIENTED
ORIENTED	

TABLE 4.2. AN EXAMPLE OF THE SCALES OF FARMER'S SELF CONCEPT. (Source: after Seabrook and Higgins (1988), p.101).

Research by Gasson (1971) also points to the importance of this facet of behaviour: "It may be that the adoption or non-adoption of modern practices (5) follows indirectly from a much more basic decision to compete or not compete at a certain level in contemporary agriculture. Having decided to compete at a fairly high level, the individual may rather passively go along with what is defined as part of the business of farming. The larger scale commercial farmer may not really weigh and balance alternatives in a painstaking fashion before reaching every decision, *but may simply conform to his role*" (pp. 36 & 37; emphasis added) (6). Gladwin and Murtaugh (1980) have defined this as a 'attentive-preattentive' distinction in decision-making; that is, the way in which an individual may subconsciously filter out options which do not comply with their preconceptions and ideas concerning what they need and want. Further, Coughenour (1976) has also highlighted farmers' "conformity to the personal conception of self" (p. 80), particularly in relation to attainment of personal goals and standards.

83

<sup>(5)</sup> and perhaps (in the view of the author), even those seen as 'traditional'.

<sup>(6)</sup> See also Buggie's (1977) paper concerning the 'Managerial Ability' of farmers, whereby a farmer builds the business up to the level of complexity that he desires, and thus may see adoption as increasing that complexity and therefore as undesirable. Also, see Shucksmith ([1993], p.468) concerning the 'habitus' of the individual farmer as the context in which decisions are made.

## 4.3. THE FARMER AND OTHERS.

"The very diversity in the social relations of agricultural production renders all but the most trivial generalisations extremely difficult" (Newby [1982], p. 149).

So far in this discussion, the farmer has been referred to as an individual, and implicitly as a discrete entity. However, just as "the farmer" cannot be considered without understanding his/her motivations, values and self-concepts, so too "the farmer" cannot be considered in abstraction, in a social vacuum. The tendency to represent farmers as individuals is generated by the conventional bias towards information and farmer response data which can be aggregated from an individual level. However, Thurow (1983) has observed: "Societies are not merely statistical aggregations of individuals ... but something much more subtle and complicated. A group or community cannot be understood if the unit of analysis is the individual taken by himself" (pp.222-223).

The following examples from the literature demonstrate the necessity, therefore, for recognising the farmers' inter-relationships as 'context', a context which affects their behaviour which is subsequently monitored and evaluated at policy level. The types of social context of the farmer include: the farmer's immediate family, those with whom he/she lives and/or works (on a regular, perhaps daily, basis); extended family or kin with whom there is occasional, possibly irregular contact; neighbouring farmers, in close proximity, who may or may not be friends; farming colleagues; farming friends. These comprise the 'settings' within which scenarios of influence can occur between individuals. They may be complex, dynamic, multi-directional and non-systematic.

The discussion follows two themes: firstly, the farmer and his/her family; and secondly, the extent to which the farmer is susceptible to the potential inputs from others as a result of the very public nature of the farming activity itself.

"Family farms are arguably still the most important units of decision making in the countryside. Over 90% of agricultural land in the UK is under their ownership or management control..." (Potter and Lobley [1992b], p.54).

"Farming as is practised in the UK ... is predominantly a family business ... the nature of the farm business cannot be properly understood without reference to the family that operates it." (Gasson and Errington [1993], p.1).

"Family farms remain the principal unit of agricultural production in advanced capitalist societies ... However the world of farming ... has traditionally been depicted as a "mans' world" .... Attention has focused on the 'farmer' as business principal, labourer and decision maker ... As a consequence, the composite social character of the family farm has all too readily slipped from view". (Whatmore [1991], p.4).

A number of researchers have argued for a structured recognition of the "farm family" as the unit of analysis (for example, Errington [1988]; Gasson and Errington [1993]; Whatmore [1991]; Gasson et al [1988]). Newby (1982) highlights rural sociological studies, where "a particular theme ... was to chart how far the socially-derived goals of farming families departed from assumptions concerning economic rationality and profit maximization frequently made by policy makers" (p.144). Further, "... the entire household is defined as the economic and decision-making unit. In other words, the household, rather than the individual, is used in deciding the allocation of productive factors, the use of income and consumption" (Eboli and Turri [1988] in Hermann and Uttitz [1990], pp. 63 & 64). Although the precise definition and meaning of 'family' is debated, (see, for example, Bouquet [1986] and Hill [1986]), it is recognised as a filter for farm-level decisions. For example: "Studies ... have largely depended upon the individual as the unit of analysis ... (excluding) social structural and interpersonal variables. Yet it seems clear that the decision to adopt agriculturally-related technology is more of a family than a purely individual matter" (Abd-Ella et al [1981], p. 42).

Indeed, Abd-Ella *et al* (1981) state that: "family farm behaviour in general, and adoption in particular, is expected to be influenced by family and farm characteristics" (p.43). Further, "the family plays an important role in determining what occurs on the farm. It provides the human factor in farming through labour and management inputs. The family also has certain demands ... (which) may motivate the adoption of recommended practices ... to meet these demands ... (or) may also compete with the farm enterprise for the scarce capital needed for

adoption of certain practices" (p.43). This point is emphasised by Gasson and Errington (1993) who observe that "farmers themselves are well attuned to the family dimensions of their occupation" (p.5).

Newby (1982) comments that "... a considerable proportion of UK farmers are *family* farmers ..." (p.144) and that "such farms are not merely operated *by* families, but *for* families. Sociological questions relating to family structure, relationships, values etc.. thus become highly relevant" (p.144). Newby *et al* (1978) have also commented that "the small farms tend to be much more an extension of family identity" (p.151). Therefore, farmers will be considering family factors as well as farm-production related factors, within their approach to farming. The authors pursue this further when they comment: "... the major concern of such (family) farmers is to maintain an equitable degree of profitability (and, by extension, standard of living), rather than go for profit maximization and the attendant extra work, increased risk, extended borrowing and greater capitalisation that this would involve. 'Keeping the name on the land' (Arensberg and Kimball [1968]) is therefore as much a goal as obtaining a maximum rate of return on capital invested" ([1978], pp. 182 & 183).

A further example is cited by Gasson *et al* (1988) in their review of the farm as a family business. Firstly, they define family businesses (see also Errington and Gasson [1994]) as those in which:

(i) the principals are related by kinship or marriage;

(ii) business ownership is usually combined with managerial control; and,

(iii) control is passed from one generation to another within the same family. (pp.1-2).

In the context of decision making on such family farms, the authors state:

The implication of this scenario for an analysis of farm-level decision making is that "the objective function of a family business may be composed of a number of

<sup>&</sup>quot;... decisions may involve several people ... members of the family, who may not share the same objectives. Each may have responsibility for a separate enterprise or clearly defined function ... Or each member may have a different ordering of priorities for the business as a whole; for example, the son may argue for development of the business, while the father favours consolidation, and the mother is more concerned with maintaining family harmony" (pp.6-7).

objectives and ... profit maximisation need not predominate among them" (Gasson et al [1988], pp.15-16).

In this context, research therefore points very clearly to the fact that the farmer (predominantly male) is not the sole decision maker in all matters. Rather, there are 'domains' of decision making (and types of decisions) with their associated family involvement on the farm (see Berlan Darque [1988]; Gasson [1986]; Bouquet [1986]; Whatmore [1991]; and Gasson *et al* [1988], pp.26-28) (7). Thus, the continuance of addressing only the male head of the household and/or head of the family as the sole decision maker is erroneous, since others' opinions within the immediate and extended family may also be represented in the final range of decisions. Farmers cannot necessarily be *assumed* to be the "opinion leaders within household and family" (as compared with Hermann and Uttitz [1990] p. 67).

The above research examples serve to demonstrate the existence of an 'alternative rationality' in the context of family farm decision making (8). This concept is elucidated by Gasson and Errington (1993) in the following quote:

"... The argument here is not that family farms do not behave in a business oriented way, but that their logic is far more complex. Rational decisions are made within a framework which embraces intrinsic values in farm work, the values of autonomy and family continuity as well as maximising profitability. Performance needs to be monitored and success judged in terms of the real objectives of the farm family business rather than imposed norms" (p.112).

Further, Carlson and Dillman (1983) argue that it is necessary to look beyond the immediate farm family because "it is easy to form the impression that the border of a nuclear family is also an impermeable boundary of the farm unit" (p.183); however, "the fact that many farmers may have extensive support relationships with other farms, ranging from informal sharing of labour and joint ownership of machinery to formal partnerships and corporate arrangements, often gets

<sup>(7)</sup> Phelan (pers. comm. October 1993) has described the phenomenon of husband-wife decision making, for example, as "the power of the pillow-whisper".

<sup>(8)</sup> See also Shucksmith's (1993) discussion of farm household behaviour, which he describes as being "... the outcome of interplay between it members' own 'disposition to act' ... their material resources ... and the external context" (p.467).

overlooked" (p.183). Their research indicates correlations between kinship arrangements and levels of innovativeness, and that this is particularly significant where the considerations of future generations have to be taken into account. They argue that "... 'farming with a relative' has a significant positive effect on the innovativeness in the area of soil erosion. A possible cause is that farming with another individual provides opportunities to interact with someone else regarding decisions about new ideas ... (and that) farmer operations involving different generations give a longer planning horizon for making decisions" (p.198).

# 4.3.2. Farmers within a 'network'.

Another facet of influence concerns that which takes place between farmers during their interactions as both colleagues and friends. It is the case that exchange of ideas occurs, as does competition, and the desire to impress (see Seabrook and Higgins [1988]). The influence of others on an individual's decision has been well documented in adoption studies (see below) with the recognition, for example, that there are some who need to see what others have done and talk with them about it while considering the possibility of also adopting (see Barban *et al* [1970]).

A key aspect in these patterns of influence comprises that of the public nature of farming. Newby *et al* (1978) have commented:

"Farming ... is a highly visible activity - visible, that is, to other local inhabitants and ... to anyone who passes through the countryside. Farming activity in all its complexity is particularly visible to other farmers. The tightly-knit nature of most farmers' friendship network would suggest a high degree of consensus over prestige allocation as well as facilitating normative control over what constitutes 'good' farming practice" (p.211).

Seabrook and Higgins (1988) have also noted that:

"Farming is a notably visible occupation pursued by individuals within a highly judgemental peer group. Land is intersected by roads and lanes and meets other land farmed by other members of a farmer's peer group" (p.103).

This 'public' characteristic of farming as an occupation is believed to have potentially far-reaching implications, since it means that how farmers behave - both visibly, and as shown in their 'results' such as stock quality, harvest tonnage and so on - is available for judgement, criticism, praise, envy, pride, and so on. Similarly, a policy which advocates, for example, a reduction in inputs, a less intensive type of farming, or an emphasis on traditional or on conservation objectives (such as the ESA) may involve the farmer undertaking a risk of others' judgement upon him/her in terms of the implicit standards of farming 'imposed' in a given area. The following quote (Hill [1988]) illustrates this point:

"... most advances in farming over the past forty years have had the effect of increasing output while holding the level of cost or of cutting costs without reducing output. It has been suggested that farmers are happier with the first than the second, largely for psychological reasons. Cutting costs (for example, dispensing with hired labour, sharing machinery, or constantly avoiding overcapacity, using chemicals more sparingly) gives the impression of business contraction and reduces the margin of security, which in may situations is valued above profit. To move from an output-increasing ... to an output-reducing regime will be likely to reduce the safety margin further and so carry a psychological penalty. This may be compounded to the extent that farmers judge the performance of others and themselves by such criteria as the physical appearance of the farm, crop yields and amounts produced. As Bell (1987) highlights, "to many farmers geared to maximising yields and taking a pride in so doing, the idea of allowing land to lie fallow or diverting it to non-agricultural use, would be an anathema" "(p.20).

Thus, how farmers see farming, and how that view is reinforced and perpetuated, or altered, within the local farming community, may well preclude certain types of behaviour while 'allowing for' others. This 'cultural sanction' (Phelan; pers. comm. October 1993) within which farmers live and operate therefore has a greater and more consistent role to play than is currently recognised within evaluations of policies focusing on the impact and uptake of a policy. Indeed, Newby (1982) has commented that: "the importance of the community in enforcing standards of acceptable behaviour should not be discounted" (p. 144).

Research has shown that farmers may behave in a particular way as a result of what has been termed "significant others' influence ... those with whom a farmer compares himself" (Gasson [1971], p.35). In their study of farm diversification decisions, Hermann and Uttitz (1990) discuss the phenomenon of 'relative deprivation' as a motivational factor in behaviour; they argue that, amongst farming families, "it is not the absolute level of the economic situation which is used as the criterion for satisfaction with conditions, but rather the satisfaction depending on the subjective perception of the situation and the social groups chosen for reference" (p.71). This ties in with Seabrook and Higgins' (1988) research which points to the Other Self and the Ideal Self as aspects of a person's Self-

concept which need to be satisfied. Coughenour (1976) also discusses the need for individuals to receive 'approval' for their farming practices and the way that they follow them through. Coughenour (1976) talks of the social costs and benefits of farming and the 'psychic income' which can be derived. Gasson (1971) in her discussion of work orientation, talks of the need for work, for responsibility, for approval and so on. The dimensions discussed by Littlejohn (1963), Newby (1977) and Strathearn (1981) concerning class systems, occupational hierarchies, and the shifting criteria for status and respect, all take on highlighted salience when the susceptibility of the farmer to farming-related criteria of approval and disapproval are taken into account. This vital element of the farmer's, and often the farm household's, psychological 'context', is often bypassed in conventional evaluation (9).

This discussion does not intend to imply a consistent susceptibility to the influence of others; all farmers and farming families are not equally receptive - some farmers demonstrate a fierce independence from one another, by 'visibly' doing things 'their own way' (that is, the importance placed on the notion of the 'Ideal Self' as defined by Seabrook and Higgins [1988]).

Further, research by Barban *et al* (1970) reviews the work of Reismann and his theory of Social Character which, he believed, was made up of 'tradition-directed', 'inner-directed' and 'other-directed' people. Barban *et al's* (1970) findings describe the links between inner-other directedness and 'innovation proneness and adoption leadership' (p.232) amongst a sample of Illinois commercial farmers (10). They stress that: "in designing communication to farmers about the acceptance of new farm practices, one might find a knowledge of Social Character to be of unique value" (p.241).

An additional variation concerns how influence can change over time - according to age, exogenous influences, changing aspirations and reference groups, length of

<sup>(9)</sup> An example being the power of approval/disapproval concerning, say, decisionmaking and farm management power within a farm household, such as the handing over of the reins to one's successor, and the associated roles which the father and son are to hold (see Coughenour and Kowalski [1977]).

<sup>(10)</sup> The authors also touch on individual's perceptions of the riskiness of either talking issues through, or making decisions without consultation with others (see Barban *et al* [1970], pp. 235 & 236).

time in farming, and so on. Abd-Ella *et al* (1981) argue that increased duration of family farms lead to them finding that "certain practices work better for them; therefore they become more reluctant to change them ... they become more selective" (p.55). Thus susceptibility to others' comments and ideas may lessen as confidence increases. Seabrook and Higgins (1988) state that a farmer's Self-concept may change over time, and along with this, a susceptibility to others.

In this discussion, it must be remembered, however, that such influences upon farmers are not confined only to the *farming* community but are open both to the wider public domain, and to the immediate geographical community in which a farmer is located (11). The following extended quote illustrates very eloquently the types of potential influences connected with certain images of the farmer and farming:

"Among the 97 per cent of the British population who do not work on the land, the farmer is stereotyped in varied and often contradictory ways. He is viewed as solid and dependable, a source of down-to-earth wisdom and a haven of continuity and stability in an ever-changing modern world. He is also regarded as a ruddycomplexioned John Bull, bluff and forthright in the expression of his opinions. Less flatteringly, the farmer is sometimes looked upon as the archetypal moaner, feather-bedded by tax-payers' money, but forever pleading poverty while riding around in a large new car. In times of war or a world food crisis the urban population is reassured by his presence and the security which an indigenous agriculture allows; but otherwise the farmer is apt to be ignored or taken for granted, and even, as when he demands further cash support, resented. More recently with the rise of a trendy environmentalism the farmer has been branded as the destroyer of the nation's heritage, promoting the rape of the rural landscape and poisoning its flora and fauna in the pursuit of Mammon. To all this the farmer has had one stock response: no one understands the farmer except farmers Any sociological inquiry which attempts to delve behind the themselves. stereotypes is therefore fraught with difficulties.

These difficulties are not eased by the fact that even among themselves farmers are not entirely consistent with how they view agriculture. On the one hand farming is a business - and very big business at that ... But farming is also, to repeat a wellworn cliche, a way of life, much more, as any farmer will affirm, than a mere job, but a highly distinctive and unique life's experience. It is this belief in the unique qualities of the rural way of life which allows the farmer to set himself at a distance, socially as well as geographically, from the urban mass, and it is this social distance which produces the stereotyping. The farmer believes that these stereotypes reflect the misunderstanding and incomprehension of agriculture which so characterize prevailing urban attitudes. Thus farming to the farmer is also a

<sup>(11)</sup> Two qualifiers need to be cited here; (i) that the general public are increasingly 'remote' from the production of food through farming (pers. comm. Scottish Consumer Council, Nov. 1994) (ii) within rural areas, there are less people connected with farming. These factors, as outlined in the quote, however, may only serve to heighten the stereotypes.

constant battle against the meddling of an ignorant, but intimidatingly large, urban majority of the population..." (Newby *et al* [1978], pp.15-16; emphasis added).

The 'environment' which this comprises, and the extent to which it has changed and farmers have responded, has been discussed in Chapter Two (see also Gasson [1988a], p.33; and also Carr's [unpublished] discussion of social pressures on farming).

# 4.4. <u>UK RESEARCH INTO FARM-LEVEL ADOPTION OF AGRI-</u> ENVIRONMENTAL POLICIES.

The reasons for focussing on this are that firstly, agri-environment schemes are moving increasingly towards being voluntary in nature (see Chapter Two), and secondly, towards the financial encouragement of what is termed 'environmentally beneficial farming', which for some farmers will be a continuation of how they already farm, while for others it will be a significant departure from the focus on production. As a result of these two shifts, the criteria of how and why farmers make certain decisions, currently run their farm in a particular manner (12), opt for certain policy options and not for others, are receiving increased attention (for example, Gasson and Hill [1984]; Potter and Lobley [1992 a & b]; Carr [unpublished]; and Brotherton [1989, 1990 & 1991]).

The aim of this section therefore, is to give a brief outline of the UK research into farm-level adoption of agri-environmental policy initiatives (13). The examples cited below are focused around this very specific field, and thereby exclude the following parallel research areas: U.S. research into the adoption of conservation policy; and research into the adoption of technology or improved technology packages. The reason for this stance concerns extrapolation from one decision setting to another; this is now outlined.

Firstly, the discussion of conservation in U.S. literature refers primarily to soil conservation, with the aim of managing the land in a sustainable and productive

<sup>(12)</sup> Newby et al (1978) comment that, although farmers are squeezed, there is sufficient slack in the system for them to choose.

<sup>(13) &</sup>quot;agri-environmental" is used as an 'umbrella' term to incorporate 'land diversion' (the diversion of farm land for conservation purposes), 'set-aside', and other extensification measures. Where ESAs are referred to in the literature, this is made explicit.

manner. Examples of research include: Bultena and Hoiberg (1988); Napier *et al* (1988); McNairn and Mitchell [1992]; and Pampel and van Es (1977). This policy (and therefore analytical) emphasis contrasts with the overall aim of UK agrienvironmental measures such as ESAs, with their focus upon conserving the rural environment and specific features on the farm *per se*, with the emphasis (in some cases) upon *reducing* production (see also Carlson and Dillman [1983]).

Secondly, the following quote raises specific issues which have also delimited the nature of the research examples discussed in this section:

"The later 1980s have witnessed an expansion in the range of financial incentives on offer, almost all of which are voluntary on the part of the farmer. Most significant among these are set-aside agreements, land management agreements for conservation purposes, diversification aids, grants for the establishment of woodlands on farms, and early retirement incentives ... One notable difference between these newer forms and the long established investment aids is that they generally do not reinforce the 'natural' propensity of farmers to produce more and to be technically up to date. Though the pattern of diffusion of new technology has been well studied, it is unlikely that a similar spread will be seen with changes which might be seen as counter to the inclinations of many farmers" (Hill [1988], p.iii).

Further, these grants have been referred to as "the unorthodox idea (for farmers) of land diversion" (Potter and Gasson [1988], p.366). In addition, Taylor and Miller (1978) have argued from their research that: "... farmers who adopt environmental innovations have a different orientation towards farming than do farmers who adopt commercial innovations" (p.634).

Thus, since reasons for the adoption of *conservation* schemes may well be different from those associated with adopting *commercial* policy initiatives, the two cannot necessarily be viewed, and therefore discussed, as synonymous. Secondly, the use of the term 'innovation' for policies which may be 'counter to the inclinations of many farmers', and which are promoted by the government as being an encouragement towards 'traditional' farming (see Chapter Two), appears to gloss over an issue of potential importance in farmer adoption of such policy initiatives (see Seabrook and Higgin's [1988] comments concerning farmers' self-concept). Thus, "whether the adoption of land diversion by farmers can ... be regarded as an innovation is a debatable point" (Potter *et al* [1991], p.99). It is necessary therefore, to express caution when examining research pertaining to adoption of agricultural innovations (for example, Voh [1982]; Dewees and Hawkes [1988];

and Polson and Spencer [1991]) and attempting to draw parallels with agrienvironmental adoption (14).

For these reasons, the literature examined below focuses on research concerned with the specific context of UK agri-environment policy adoption, of which ESAs are one example (15).

In 1988, Gasson published a review of literature entitled: "Farmers' Response to Incentives for Land Use Change" (1988a). The author highlighted key facets of the debate, including: economic and non-economic motivational factors; importance of farmer's persuasion and interest towards a policy initiative (including the 'selectivity effect'); farm size and degree of technological change; the development of a farm typology relating to financial constraints and a 'conservation score'; and the examination of farm-level attitudes towards conservation and the environment, farmers' "social conscience" and stewardship.

The first of these examples has been highlighted in the more general literature concerning farmer motivations (see above); it is therefore also interesting to note its continuity within this specific context of agri-environmental scheme adoption. In her discussion, Gasson (1988a) cites examples from researchers who view economic factors as having differing degrees of importance for the farmer. Firstly, "the idea that farmers neglect economic factors when making decisions about conservation (is) echoed by Westmacott and Worthington ([1974], p.66):

<sup>(14)</sup> Although Potter *et al* (1991) cite Gasson as stating: "that any form of behaviour or type of activity is an innovation, regardless of content, provided it is novel to the farmer" (p.99). The *mechanism* of ESAs may be novel, but whether the 'traditional' objectives they espouse represent the same degree of 'novelty' to farmers and landowners, is currently a moot point. Also, it is necessary to consider Potter's (1990) comment with respect to the production of CARE (Conservation, Amenity and Rural Environment) goods (McInerney [1986]), and particularly in connection with ESAs: "laggards in the agricultural modernisation process ... already probably make up a good proportion of participants in ESA schemes ... This contrasts with the traditional focus of conservation grants and advice on *progressive* farmers, those who are most willing and able to carry out a conservation project on their farm" (p.6).

<sup>(15)</sup> The discussion here also excludes the edited volume (Whitby [ed] [1994]) concerning ESAs. The reason for this is that the focus of this thesis comprises the Critical Appraisal of a MAFF Evaluation, which includes an extensive discussion of data sets. It would not be consistent therefore - in this very specific context - to use data which have come from other MAFF-funded Evaluation studies from the same programme.

"We believe that any attempt to justify in economic terms the retention ... of landscape features overlooks one essential fact. Farmers do not make these decisions solely on the basis of finely balanced economic reasoning - they often act simply because they feel the decision to be appropriate to their overall needs, both material and spiritual ... if he (a farmer) cannot justify his decision on economic grounds, the he will simply ignore the economic argument and justify it on other grounds" " ([1988] p.26).

Whereas, states Gasson (1988a), "(a)nother body of literature inclines to the view that conservation behaviour is largely determined by economic considerations" (p.28). Here, Gasson cites the following quote from Newby (1979):

"In the final analysis a farmer must make a profit and all the economic pressures on farmers will eventually lead them to place agriculture before environmental conservation".

Gasson (1988a) concludes "(a)lthough it is hard to gainsay the importance of profitability as a factor in conservation decisions, few would argue that this is the only influence" (p.29). The author cites further research by Westmacott and Worthington (1984) in which they argue that "a balance has to be struck between the need for profit and other values placed on the landscape" (p.29), and that this balance depends on the individual. Gasson ([1988a], p.29) then highlights Westmacott and Worthington's (1984) conclusions:

"Few farmers in this country manage their land with the single-minded aim of maximising profit. They usually live on the land and some have as much interest in its history, beauty and wildlife as anyone else. But the depth of this interest varies greatly. The extent to which a farmer will compromise his farming to satisfy this interest is a personal decision, which will depend not only on the depth of his interest but also the cost. For conservation always costs something, whether it is the cost of maintenance or the loss of profit. But this cost is one which some farmers are prepared to pay without question, but many are not" ([1984], p.75)

This recognition of the interplay of a combination of factors, that is, where economic criteria form *part* of the whole decision making scenario, is reflected in research by: Skerratt and Dent (1994); Potter and Gasson (1988); Potter and Lobley (1992 a & b) (16); and Brotherton (1989, 1990 and 1991). The following two examples are illustrative.

<sup>(16)</sup> This research examines the research finding that "the ageing of a business principal brings with it changes in actions, motivations, and outlook which could affect the management of potentially large areas of the farmed countryside" (Potter and Lobley [1992a] p.141). The changes are pinpointed as gradual extensification of production, and reductions in productive capacity of the farm; and these may well be encouraged through the adoption of land use schemes. The authors

Firstly, research by Brotherton (1989) highlights those factors considered by farmers when facing the option of a land diversion scheme. "Economic factors" are described in terms of the scheme particulars, since "these determine the extent to which the particular scheme makes economic sense in terms of the current and likely future organisation and management of the eligible holdings" ([1989], p.300) (17). Brotherton (1989) distinguishes these from the other key facet - that of 'farmer factors' which he defines as 'essentially attitudes': "Farmers' attitudes to MAFF, to bureaucracy, to interference, to risk taking, to privacy, to conservation, to trees and so on, may affect the extent to which farmers are favourably disposed, by inclination or circumstance, to the idea of the scheme" (p.300) (18).

These findings are developed through Brotherton's further research (1990 & 1991). He states:

"Attitudes and economics are the ultimate factors determining participation in a voluntary land diversion scheme (19). But crucial to the entry decision are the *relative weights* that farmers attach to attitudes and to economics, and, on that, different farmers may take different views" ([1990], p.47; emphasis added).

These differing emphases which farmers place on 'economics' or 'attitudes' comprise Brotherton's criteria for identifying four different types of farmer: 'profit-motivated', 'profit-influenced', 'scheme-influenced' and 'peer-influenced'. This typology is then used to predict farmer-type participation in voluntary land diversion schemes using data gathered by Potter and Gasson (1988). In relation to ESAs, Brotherton (1990) pointed to "the attractiveness of the specific (ESA) schemes (20) as a key factor affecting participation whilst considering also the effect of farmers' attitudes." (p.61).

(18) These may tie in with Gladwin and Murtaugh's (1980) 'pre-attentive' criteria.

(19) Brotherton's (1990) paper specifically examines participation in UK Set-aside and ESAs.

observe a key influence in this process: "Whether or how far this proceeds is strongly influenced by the presence or absence of a successor" (p.141; emphasis added).

<sup>(17)</sup> Brotherton (1989) describes these particulars as "entry requirements, scheme's duration, constraints imposed and payments offered" (p.300). It is argued, however, that even seeing these as 'essentially economic factors' (p.304) may be an overly-focused interpretation, particularly with respect to the implications and concerns for farmers over 'constraints imposed' (see Chapter Six of thesis).

Brotherton (1991) then pursues the issue further: "Two major variables are expected to determine entry to an ESA Scheme. The first concerns the farmer's general attitudes to the idea of the scheme; the second, the extent to which the scheme offers financial advantage" (p.245). The paper concludes, however, that "... in general, the effect of attitudes is probably subservient to the power of financial attractiveness" ([1991], pp.249) (21).

The second example of research examining the interplay of economic and noneconomic factors, comprises Potter *et al's* (1991) typology of farmers which built on the earlier research concerning criteria affecting the adoption of land diversion schemes. These criteria comprised: firstly, "the level of financial constraint or liquidity as reflected in farm size and profitability, the level of fixed charges, indebtedness and the existence of other sources of household income". Secondly, "farmer's 'conservation score' based on evidence of past investment in conservation works on the farm, expressed (conservation) attitude, use of professional advice, and (farm conservation) plans for the future" ([1991], p.109). The typology "helped to explain farmers' responses to the hypothetical schemes" ([1991], p.109) (22).

In the context of the first criterion, Potter and Gasson (1988) had previously differentiated between "constrained" and "enabled" businesses (p.371) (23), and had found that "participation ... is inversely related to the level of constraint ... enabled farmers are *more willing* to participate than constrained individuals" (p.372; emphasis in original). The authors explain that this is because "constrained

(22) Indeed, Gasson has stated that "the interaction of financial status and interest hold the key to conservation activity on farms" (Gasson [1988a], p.32).

<sup>(20)</sup> Each ESA being slightly different in detail (see [1990], pp. 55-61). In concluding his paper, Brotherton (1990) cites the following example: "participation in some ESA schemes ... may be depressed by the relatively small total returns that entry would bring to many of the farmers; whilst participation in other areas ... may be limited because payment levels fail to compensate for scheme constraints..." (p.61).

<sup>(21)</sup> However, in the concluding paragraphs, the author comments that "the explanation of initial participation in the ESA schemes ... have been framed in terms of financial attractiveness, with no account given to farmer attitudes. In a sense, this is unreasonable, and some trade-off between attitudes and economics may be expected..." ([1991], pp.248-249).

<sup>(23) &</sup>quot;Constrained" being described as "most vulnerable to policy change and ... in the worst position to make the necessary adjustments"; and "enabled" as "offering the least resistance to necessary and desirable adjustments" ([1988], p.371).

farmers fear the lower returns, reduced flexibility, and increased bureaucracy that would most probably accompany any diversion of land out of productive use" (p.372); (24).

Further, facets of the conservation score (25) have been researched by Potter and Gasson (1988) and Potter *et al* (1991):

"It was discovered that the most eager participants were those who envisaged using payments received under the various schemes to further a conservation or forestry project which had already been planned" ([1988], p.372).

The authors (1988) describe this as the 'selectivity effect' (26), whereby "some ... individuals were attracted to the scheme because they offered the prospect of being paid to do what they would have done anyway" (Potter *et al* ([1991], p.109). This led the authors to pose the question:

"Do farmers who are contemplating reducing their cereal acreage, increasing the area of grassland and shifting to a more extensive grazing regime see land diversion as a useful way of subsidising these changes?" ([1991], p.110).

Further, the authors note that:

"voluntary schemes may not be very successful in instigating land-use changes on farms without a past history of conservation, though they may improve and extend the conservation efforts on farms already committed to good conservation practice" ([1991] p.112).

In their conclusion to their 1988 paper, Potter and Gasson's comment with respect to the same data is that:

<sup>(24)</sup> Financial status as a facet in the adoption of farm-level conservation initiatives has also been highlighted by Newby *et al* (1977), in the context of farm size and technological innovation (see Gasson [1988a], pp. 30-31).

<sup>(25)</sup> For further detail, see Potter and Gasson (1988) "Appendix: Scoring farm and farmer characteristics" (p.375).

<sup>(26)</sup> Skerratt and Dent (1994) also identified what they termed the "congruence" of the ESA scheme's on-farm conservation work with the pre-ESA intentions of the farmer or landlord, as an important factor encouraging scheme adoption, and one which appeared to allow other factors to be 'over-ridden'. See also Potter and Lobley (1992b): "The principle reason for wanting to enter land into a conservation scheme - that it would allow them (elderly farmers) to continue with existing practices and methods ..." (p.141).

"It may be difficult to escape from the charge that the schemes are merely subsidising land-use changes that would have happened anyway" (p.374) (27).

Farmer interest in conservation and the environment *prior* to a scheme's introduction has also been examined by Taylor and Miller (1978) who highlight farmer's persuasion towards the project/scheme as one of the three 'best predictors of conservation activities' (IN Gasson [1988a], p.27). Further, "British research has emphasised the importance of the farmer's *interest* as a determinant of conservation behaviour ... Westmacott and Worthington (1974) too reported that most farmers in their study areas who had maintained "good" landscape had been influenced by an interest in game or in wildlife, aesthetic considerations or a social conscience" (Gasson [1988a], p.28).

In addition to the above research concerning economics and attitudes, and levels of pre-scheme conservation interest, the adoption literature also examines the influence of farmers' environmental attitudes, and their notions of stewardship and ethics, on adoption of agri-environmental schemes. These are now briefly discussed.

Gasson (1988a) has cited farmers' attitudes towards conservation and the environment as a key facet in scheme adoption: "farmers have responded in different ways to the growing criticism of the impact which modern agriculture is having on the countryside" (p.33); and that "attitudes of the farming community can change as a general growth of concern for environmental issues among the population at large is mirrored in the views of farmers ..." (p.24); (see also Chapter Two; and Skerratt and Dent [forthcoming]). Although disputing the precise extent and motivations of this change (28), Westmacott and Worthington (1984) do identify "the development of (farmers') 'social conscience'" (p.73) concerning the environmental implications of farming.

<sup>(27)</sup> See also Colman (1994b) for his discussion of the extent to which "it is important to avoid policies which incur the moral hazard of paying farmers for things they need no payment to perform" (p.310).

<sup>(28)</sup> See also Potter (1986) who makes the observation that conservation appears to be linked to those very processes which bring about environment damage and loss.

The notion of 'stewardship' of the land is touched upon by Newby *et al* (1977) who, in their Typology of East Anglian farmers (29), cite "'gentleman farmers' as those who most often chose to retain traditional features of the rural environment ... their motives might spring from sporting interest, *a sense of stewardship*, or an interest in nature conservation *per se*" (Gasson [1988a], p.31, emphasis added; see also Newby [1979], p.103).

Colman (1994b), in his discussion of Ethics and Agricultural Stewardship, examines the "aspects of the behaviour of economic agents ..." (p.299) who, "although strongly motivated by self-interest, are (also) conditioned by regard for self in the eyes of society at large and of an impartial 'spectator'" (p.301). Colman discusses the views that economic agents have multiple objectives, one element of which is ethical motivation (30). Specifically in connection with Agricultural Stewardship, Colman states:

"Without wishing to make exaggerated claims for the extent to which the farming community are the guardians of the soil and act as protectors of the countryside, it is reasonable to argue that agricultural stewardship can be seen as a form of ethically motivated behaviour intended to produce positive externalities or at least to limit the negative ones" (p.305).

Further,

"A key attribute of agricultural stewardship is that it involves some sacrifice of financial profit, which results from refusing to undertake acts which reduce social benefit from land-use or from investing in the generation of such benefits ... There is little doubt that where agricultural stewardship entails some loss of profit, farmers and landowners obtain non-monetary satisfaction" (pp.305-306).

Colman concludes his paper with the observation that:

"Agricultural stewardship may be practiced for a whole range of motives, including those which may be broadly classed as ethical ... On this definition, it may be considered that all farmers practice stewardship to some degree, but some to a much greater extent than others" (p.309).

<sup>(29)</sup> The typology is based upon the dual criteria of 'level of market orientation' and 'personal involvement in manual work'.

<sup>(30)</sup> Colman defines this as being "for reasons other than pure self-interest or egoism" ([1994b], p.309).

## 4.5. CONCLUSIONS.

The aim of this Chapter has been to illustrate the complexity and dynamism of the farm-level context, and thus the extent to which its examination is a prerequisite for accurate evaluations of agri-environmental policy.

The foci for discussion comprised: farming and the farmer, the farmer and others, and farm level adoption of UK agri-environmental policies. These areas highlight, firstly, the motivations of farmers and their self-concepts, as being integral to their farming strategies and decisions (which will include ESA-related decisions and behaviour). In this context, Gasson (1971) has noted: "since neither the extreme of economic rationality nor its opposite pole, unstable irrational behaviour seems realistic, a wider theoretical schema is needed to take account for non-economic conditions and provide a more accurate and convincing explanation of human behaviour" (p.33). Such a wider 'schema' is the subject of Chapters Five and Six, where the implications of a continued adherence to a narrower schema, the "dominant tradition" (Finch [1986]), are reviewed in detail.

Secondly, the Chapter examined the networks within which farmers live, work and make decisions. The literature points to the importance of the farm family as a 'filter' for farm-related decisions, and as being specifically cogent to studies of adoption behaviour. Gasson and Errington ([1993], p.158)) cite Buchanan *et al* (1982), in their discussion of farm family businesses decisions:

"... the person who ignores the fact that many farm business decisions are in fact family decisions, as much influenced by family developments as business developments, is taking large strides away from reality" (p.8).

The influence of kin, and of farming neighbours, in the public activity of farming, was also highlighted as being a significant facet of farm-level behaviour (31). This has been pointed out as a crucial factor in decisions relating to extensive land-use options and non-farming options on farm land. Once again, the relevance of these observations to the ESA-type schemes is paramount, and thus requires consistent analysis within evaluations of agri-environmental policy.

<sup>(31)</sup> This is discussed in detail in Chapter Six.

Thirdly, the Chapter discussed the processes of farm-level decision making, of particular significance in this period of *voluntary* policy options necessitating adoption/non-adoption decisions. Having highlighted earlier both the criteria involved in decisions, and outlined those involved in making the decisions, the discussion moved on to examine the specific literature concerning the adoption of UK agri-environmental schemes. The literature highlights the "complex nature of the decision to enter into voluntary ... schemes" (Potter [1990], p.5). Integral to the discussion is the importance of economic and attitudinal criteria, and the relative emphases placed upon them by farmers. More specifically, the nature of a scheme, and its implied financial benefits, appear to be key facets of the adoption In addition, farmers' previous experience of conservation, and the scenario. 'congruence' of a scheme with previously-intended conservation activities, both appear paramount. Finally, attitudes towards the environment, and notions of "stewardship" are indicative of a further dimension of the decision making complex.

The above examples from a wealth of farm-level research literature clearly emphasise the necessity for rejecting the reductionist representations of policy recipients which appear consistently within government evaluation guidelines (see Chapter Three) and through government input to their funded evaluations (as exemplified by the Critical Appraisal of the MAFF Evaluation in Chapter Six).

Further, a set of methodological and conceptual reforms are required within the socio-economic evaluation of agri-environmental policy, which clarify those assumptions, inaccuracies and misrepresentations which otherwise characterise policy recipients as possessing an "apparent intractable propensity ... to act in ways contrary to those which economic modes of behaviour prescribe for them" (Newby *et al* [1978], p.127). In order to achieve this, it is necessary to examine in detail the implications, for an evaluation, of continued approaches which provide only partial data and understanding. The next chapter outlines a period of interviewing (referred to as the 1993/4 Fieldwork), subsequent to the MAFF Evaluation, which aimed to gather data in order to address those lacunae identified within this Chapter. These implications are outlined in Chapter Six; the imperative 'reforms' are then presented in Chapter Seven.

### **CHAPTER FIVE**

#### 1993-1994 FIELDWORK IN BREADALBANE ESA.

#### 5.1. INTRODUCTION.

The previous Chapter outlined evidence from the literature which points to the complexity of the on-farm situation, and particularly of farm-level decision making associated with agri-environmental scheme adoption. Further, the arguments in Chapter Two highlighted the image that a scheme portrays to the policy recipient, and the importance of the policy context now in existence. These issues have been placed alongside the government guidelines for policy evaluation (see Chapter Three) with their characteristic emphases upon cost, objectives, quantification and assumptions. This appraisal of the government literature pointed to the continued applications of these heuristics, and then moved on to present the MAFF Evaluation of Breadalbane ESA.

The conclusions reached from these chapters have an underlying theme: *that conventional socio-economic policy evaluations, of which Breadalbane ESA is an example, address agri-environment related issues only partially, and inaccurately.* This stance was further emphasised as a result of the author's participation, as a Research Assistant, in the MAFF-funded Evaluation of Breadalbane ESA. This involvement facilitated insights into the Evaluation process, heuristics and methodologies, and conceptual emphases; these subsequently proved invaluable to the Evaluation appraisal (see Chapter Six).

This theme is examined further, through the Evaluation appraisal of Chapter Six. A basis for the appraisal comprises data gathered in Breadalbane ESA, subsequent to the Evaluation. This Chapter therefore, outlines these data, and the approaches and methods used in its collection. A summary of results is presented, with methodological comments concerning the data selection methods applied in the appraisal (Chapter Six).

## 5.2. FIELDWORK IN BREADALBANE ESA: 1993-1994.

The aims of the 1993/4 Fieldwork were two-fold: firstly, to gain information specific to Breadalbane ESA, in order to facilitate a comparative appraisal of Evaluation and post-Evaluation data sets concerning key issues. Secondly, to examine those issues omitted from the Evaluation due to the effects of methodological and conceptual preference (see Chapter Six). The following specific areas of interest were discussed with farmers, farmers' wives, landowners, factors, and farm advisers, through semi-structured interviews over a four-month period:

\* The possibility of stages, or decision points, comprising an ESA adoption/non-adoption process.

\* The specific, and repeated, range of factors which influenced the adoption/non-adoption of Breadalbane ESA.

\* The interplay of 'financial' factors with 'other' factors affecting adoption decision making.

## 5.3. <u>METHODOLOGY</u>

5.3.1. Sample selection.

5.3.1.1. Farmers, factors and landlords.

The MAFF-funded Evaluation had facilitated the development of a data base of existing farm businesses within the initial (pre 1992) Breadalbane ESA. Information concerning farm businesses within the extended (post 1992) ESA designation was gained from the Scottish Agricultural College (SAC). A random sample was selected from the total population of 200 farm businesses. The previously used categories of "adopter/non-adopter" could not be used to stratify this sample, since the timing of the fieldwork (1) meant that a variety of scenarios existed: those who had *not* joined the first ESA, but were considering the second

<sup>(1)</sup> which coincided with farmers in the extended ESA being presented with the option of joining for the first time; and those in the existing ESA being given the option either to join for the first time, or renew their farm plans.

ESA (2); those who had joined first ESA but were not interested in the second ESA; those who had joined first ESA and were also interested in joining the second; and finally, those who had not joined the first ESA and were not interested in joining the second. These variations were recognised within the samples, and were noted within the interviews; however, they did not provide the criteria for sample stratification. This was for two main reasons: (i) the cells would have contained too few farm businesses for subsequent sampling; (ii) those in the extended ESA, with no previous option of joining, had to be incorporated also. The sample was therefore stratified according to interest/non-interest in the ESA. The criterion for "interest" comprised: "registering with SAC for help in the preparation of an ESA farm conservation plan". Although it is recognised that not all those requesting a farm plan would follow through and adopt the scheme, it was viewed as an appropriate proxy measure (see Skerratt and Dent [1994], p.154).

Following the selection of the sample of 45 farm businesses and estates, potential interviewees were contacted by letter (see Appendix V (i)) and were subsequently phoned. The interviews were then carried out with the farmer and in a number of cases, with the farmer's wife (3).

### 5.3.1.2. Farmers' Wives.

The selection of farmers' wives for interview was carried out following the interviews with farmers. This procedure was chosen in order to allow for the identification of those farmers' wives who viewed themselves as actively involved in farm-level, and specifically ESA-related, decision making.

#### 5.3.1.3. Local area advisers.

Individuals from SAC, SOAFD and FWAG were chosen due to their specific involvement with the Breadalbane ESA implementation, and their associated roles as farm advisers. They were not intended as a representative sample; rather, they were chosen due to their working knowledge of the ESA scheme, the policy recipients and the geographical area.

<sup>(2) &</sup>quot;first ESA" meaning the first period of the ESA's implementation: 1987-1992; "second" meaning the second period of its implementation: 1992 onwards.

<sup>(3)</sup> The extent to which the farmer's wife contributed to the discussion varied between farms. On estates, the landlord's or factor's wife was never present.

# 5.3.2. Interviewing.

The semi-structured interviewing approach was used for data collection. Reasons for its selection comprised firstly, a recognition of the complexity of the issues involved in decision making in relation to the ESA policy option. The sole reliance upon structured, and quantitative, methods in the ESA MAFF Evaluation had precluded the possibility of addressing such complex themes (see Chapter Six for a detailed discussion), and had yielded insufficient and, at times, inaccurate, data.

Secondly, a key element of the fieldwork comprised an assessment of the reasons *behind* the importance of the factors highlighted by the interviewees. This was crucial to an *understanding* of the interplay of issues, process, priorities and so on. Further, it enabled the *development* of an issue during an interview, such that its facets could be 'disentangled' and explored. The following quote from Gasson (1973) is one example of the type of scenario which existed in this decision setting (see also Patton [1990], p.314;); (4):

"The outer skin might represent values upheld by society and publicly expressed for social approval, the next layer values held by members of the sub-group - fellow workers, the village, the farming community ... Beneath this might be values shared only with members of the family and deeper still those which the individual admits only to himself" (p.526).

The interviews themselves took from one and a half to three hours. During each interview, verbatim notes were taken and, where appropriate, sections were read back to the interviewee to ensure accurate representation of meaning (5).

All interviewees were assigned a code in order to maintain anonymity; these codes related to (where appropriate): whether they were located in the original (pre 1992) or extended (post 1992) ESA; and whether they had requested/not requested

<sup>(4)</sup> See also Cloke *et al* (1994) who comment that "... pilot interpretation of qualitative information contained within the questionnaire documents ... confirmed that rural people view their problems in a rather different way, using different descriptions than the discourses now bound within the traditional wisdom of policy-makers and researchers" (p.22; emphasis added).

<sup>(5)</sup> A tape recorder had been used in initial interviews. However, the issues discussed included comments and (sometimes strong) feelings specific to landlords, advisers, income and so on. Interviewees therefore became uneasy that such comments were being taped, and spoke more freely when only notes were taken. This latter approach was therefore adopted early on in the interviewing programme.

help with an ESA farm conservation plan. Specific codes were also assigned to: farmers' wives, and local advisers.

## 5.3.3. Issues discussed.

The interviews were semi-structured around the following issues:

## 1. The decisionmaking PROCESS.

- a. How do you go about deciding whether or not to join the ESA?
- b. What do you look for in the ESA?c. What would rule out you joining the ESA?
- d. What issues do you have to consider when thinking through whether or not to join? (IMPORTANCE).

## 2. The farm household decisionmaking.

a. On your farm, who would you say is involved in the thinking, discussions and decisions about the ESA? b. Is this specific to ESA-related decisions?

(In what ways?)

## 3. The farmer and neighbours.

If you'd heard that certain other farmers had decided not to join the ESA, how would that affect your decision? Why is that?

## 4. The ESA Scheme, the farmer and farming.

- a. What do you see as good farming?/poor farming?
- b. What do you see as traditional farming/progressive farming?
- c. How does the ESA fit in with how you see these aspects of farming?

## 5. The ESA and farm conservation.

a. Do you think that the ESA is "conservation"?

Why/why not?

b. What do you see as farm conservation?

TABLE 5.1. CORE ISSUES DISCUSSED WITHIN THE INTERVIEWS.

These provided a core set of data from each interview, whilst also allowing for conversation and discussion unique to each interview which comprised issues of particular importance to the interviewee, some of which had not been anticipated by the researcher.

The above issues around which the interviews were structured were selected on the basis of the initial appraisal of the conventional, socio-economic MAFF Evaluation of the Breadalbane ESA (see Chapter Three), and on the basis of the literature which had highlighted issues relating to the complexity of adoption (Chapter Four). They also focussed on those issues which the researcher identified as having been omitted from the conventional approach, including farmer networks (6).

In addition to interviews with farmers, landowners and farm advisers, a small number (7) of farmers' wives were interviewed. The terminology used here - that of 'wives' rather than 'spouses' - reflects the situation within the interview sample: there were three cases of women farmers (who have therefore been included in the 'farmer' category); they did not have partners. The remaining farmers within the interview sample were male. Interviews with farmers' wives were important in establishing the extent of their input to the ESA decision making process, and whether this differed from other farm-related decisions. The issues discussed with them were as follows (Table 5.2.):

<sup>(6)</sup> having worked with the conventional data and been aware of its ambiguities and omissions; see Chapter Six.

<sup>(7)</sup> The number of interviews with farmers' wives was less than had been anticipated, for two reasons. Firstly, the number of farmers' wives actually involved with the farm business was less than had been anticipated, with a large proportion of them involved primarily with off-farm work. Although this is an important issue needing further investigation, it was outwith the scope of the fieldwork. Secondly, the severe winter weather conditions made travel and meeting extremely difficult at times, and led to the cancellation of some interviews.

# 1. How much "say" do YOU/farmers' wives have in the farm-related decisions that are made?

- a. To what extent.
- b. In what ways.
- c. Reasons why this is.

# 2. Are there certain farm DECISIONS in which you are involved more than others?

- a. Which are these.
- b. Reasons for this.

# **3.** Are there different TYPES of decisions and different SCALES of decisions (relating to the farm)?

- a. Which are these.
- b. Reasons for these differences.

# 4. How about the ESA? How much were you involved in deciding whether or not to join the scheme?

a. In what ways.

# TABLE 5.2. CORE ISSUES DISCUSSED WITHIN THE INTERVIEWS WITHFARMERS' WIVES.

These issues were selected in order to focus upon farm household decision making, and how the ESA was reported within this. Also informing their selection was the literature (see Chapter Four) concerning farm household decision making. The data from these interviews were collated as outlined below, with codes relating to the data collected.

5.3.4. Data management, analysis and interpretation.

Immediately following the interviews, the extensive notes which had been taken were then typed into ASCII files. These were subsequently downloaded onto *The Ethnograph* (8). Data within each interview were then numbered line by line; these lines were assigned codes relating to the following categories (Table 5.3.):

<sup>(8)</sup> A data base management system for qualitative, verbatim data; see Appendix V (ii).

- \* The ESA decision making process.
- \* Farm household decision making.
- \* The farmer and neighbours.
- \* The ESA, the farmer and farming.
- \* The ESA and farm conservation.
- \* Previous experience of the ESA.
- \* Other farm-related or grant-related experiences.
- \* General comments concerning farmers and farming.
- \* Comments on agricultural and conservation policy.

# TABLE 5.3. CATEGORIES OF DATA.

The first five headings comprise the issues discussed within the semi-structured interviews; the remaining four comprise those issues which were raised by the interviewees themselves (9). The stage of assigning codes was key to subsequent accuracy of data extraction and analysis; the appropriateness and consistency of the codes was therefore rigorously checked by re-examining the data in its original context to ensure distortions had not occurred, and by re-examining the same data within its category(ies) to check its congruence with the category heading.

It should be noted that *The Ethnograph* allows for the overlapping or "nesting" of categories, such that data do not have to be artificially assigned to only one category in those instances where an overlap between categories clearly exists. In addition, this facility allows specific comments relating to a particular issue to be viewed either as *discrete* comments, or within a wider, related context.

Following the assignment of codes, the data were then extracted under the subject headings for analysis and collation. This stage allowed for recurring themes within categories of data to be identified and recorded.

<sup>(9)</sup> Patton ([1990], pp.390-398) distinguishes between those initial analytical categories created by the evaluator ("sensitizing concepts"), and those developed and articulated by the interviewees ("indigenous concepts"). The above categories therefore comprise both types.

The results are summarised in the following section (10). A full account is not given, however, for the following reason. The aim of the 1993/4 Fieldwork was to provide data for the Critical Appraisal presented in Chapter Six; the data are intended to be viewed *alongside* the data ensuing from the MAFF Evaluation. Thus, to outline the results themselves in such detail at this point in the thesis would, of necessity, lead to extensive repetition of findings. The methodological implications of this approach are outlined below.

# 5.4. SUMMARY OF RESULTS FROM 1993/4 FIELDWORK.

## 5.4.1. Introduction.

The summary of results is structured around those themes which were examined during the semi-structured interviews. These "primary patterns in the data" (Patton [1990], p.381;(11)) comprise the responses to those issues introduced into the interview (see Tables 5.1. and 5.2.), and those highlighted by the interviewee. The data on which the summary is based are presented in full either in Chapter Six (the Critical Appraisal), in Section 5.5. of this Chapter, or in Appendix V(iii)). Where the results are given in Chapters Five or Six, their location in the Chapter will be indicated in parentheses (12).

The first part of this section comprises a summary of responses from interviews with farmers, estate factors and landlords, and with farmers' wives (13). The

<sup>(10)</sup> More detailed results are presented in Chapter Six, and in Skerratt and Dent ([1994] and [forthcoming]).

<sup>(11)</sup> See also Strauss and Corbin's (1990) methodological recommendations for writing up the qualitative data, in which they discuss the concept of "analytical story lines" or themes from the data (pp.229-232).

<sup>(12)</sup> The data from interviews with local area advisers, however, are presented in Appendix 5 (iii), since they are not discussed specifically within the Critical Appraisal of the MAFF Evaluation (Chapter Six). The reasons for this is that the responses cited in Chapter Six are all from: farmers, farmers' wives, estate factors and landlords, and are thus from the perspective of the land-user, the policy recipient. The local area advisers, however, cannot be described in the same way; the 'origin' of their perspectives will therefore be different. However, their comments do elucidate further the themes outlined in Chapters Five and Six, and are therefore an extremely important component of the data.

<sup>(13)</sup> The reason for including the interviews from farmers' wives within the first section (rather than presenting them as a separate section) is that the data contributed primarily to the discussion

second section provides a summary of those data from the interviews with local area advisers from FWAG, SAC and SOAFD.

# 5.4.2. Interviews with farmers, estate factors and landlords, and farmers' wives.

## 5.4.2.1. ESA decision making.

This section examines the ESA decision process, the uniqueness of the ESA decision, and the factors affecting adoption of the ESA.

## (i) The ESA decision process.

Firstly, to adopt or not to adopt the ESA did not appear to be based upon a single "yes"/"no" decision. Rather, the data show how the policy recipients could take six to 12 months to decide whether to join the scheme or not, and that this could be represented as a *process* involving constituent, related decisions [see Section 6.3.1.]. These include, for example, the decision to contact SAC or FWAG to request a farm conservation plan; requesting the input of the local SAC Adviser; and finally, contacting the Agriculture Department (SOAFD) for approval and implementation of the five or ten year agreement. For some individuals, these decisions may seem to merge into indistinct phases, while for others, they were reported as separate decisions, particularly with respect to decisions resulting from the receipt and subsequent negotiation of the farm conservation plan.

The complexity associated with the decision making process being typically over a six to 12 month period, comprised the potential dynamism of the decision makers' context. A direct implication of this was that the ESA became one of a number of issues being considered within this time frame [see Section 6.3.2.1.]. Thus, interviewees stressed that ESA-related decisions were not as all-absorbing for them as for the researcher or evaluator studying their decision making (14).

concerning "Farm household decision making". This facet of the data is presented in the first section, and therefore its inclusion here is more appropriate.

<sup>(14)</sup> This has implications for the focus of analysis in adoption decision making of agrienvironmental schemes (see Chapter Seven).

## (ii) The uniqueness of the ESA decision.

ESA-related decision making appeared to represent a distinct decision setting [see Section 6.3.2.]; for example, ESA *adoption* could not be simply interpreted as indicative of *risk taking* behaviour *per se*, since the ESA could represent either an increase or a reduction in risk [see Section 6.3.2.2.]. For some farmers, the ESA comprised a *reduction* in risk, due to the guaranteed grants for a period of five or ten years, and because the ESA was viewed as part of a trend in agricultural policy development, thus making it *less* risky to be involved in environmentally-beneficial farming schemes *now* rather than to risk being penalised at a later date. For others, however, to join the ESA was a risky option, since the adopter would be making a commitment to certain land use patterns, stocking densities, and conservation activities for 5 to 10 years into the future. For some, this would be a long time to 'give over' land for environmental concerns, particularly in a context of policy uncertainty.

(*iii*) The factors affecting adoption of the ESA. [See Section 6.3.3.] The extent to which financial factors were important to ESA decision making was addressed. A key point was outlined by farmers: that although financial issues were of great importance, they were rarely evaluated in isolation; rather they were 'traded' against the other characteristics, options and constraints of the scheme [see Section 6.3.3.1. and Section 5.5.1.].

Thus, perceived financial gains from the ESA were set against potential ESAinduced restrictions on current land use and farming activities (such as stocking density and grazing location), and independence in decision making with respect to the farming business. There were varying degrees to which such examples of 'interference' by the ESA were viewed as a possibility, and concerns were expressed by some with respect to the scope of influence (specifically from conservationists) which the ESA represented. An examination of these implications of ESA adoption was considered essential by most decision makers, and was carried out both through the sifting of rumours from neighbouring farmers [see Table 6.22. and Section 5.5.2.], and through the negotiation of specific details of the ESA farm conservation plan [see Tables 6.6. and 6.7.].

A variation in the nature of these trade-offs existed when there was a degree of 'congruence' between the conservation works funded by the ESA, and the farmers' or estates' pre-ESA intentions. In these instances, the individuals stated that they

were less concerned over detailed financial aspects of the scheme, since the ESA was providing the opportunity to carry out previously planned activities [see Table 6.14.].

Further, the inter-relatedness of 'financial' and 'other' criteria in this decision making context was evidenced at the time of the interviewing, since the second round of ESA farm conservation plans were being established. Many farmers were aware that the ESA payment levels had been increased (following the reviews in 1991/92); however, they were also aware that the 'conservation' element of the scheme had increased [see Table 5.6. and Table 6.16.], since FWAG was receiving a higher ESA profile within the designated area (15). This specific facet of the scheme was key to 'trading' the potential benefits from ESA grants against possible ESA restrictions.

In addition to the financial criteria and the facets of the scheme, other factors affecting adoption appeared to include [see Section 6.3.3.]: the length of ESA agreement (and the associated feeling of commitment); the degree of negotiation over the farm plan [see Tables 6.6. and 6.7.]; perceptions of the ESA scheme [see Tables 6.18. and 6.20.]; neighbours' influence (see below); previous experiences of policy (both ESA and non-ESA; [see Table 6.15.]); the extent to which the scheme would benefit the farm or estate; the wider, shifting policy objectives [see Table 6.21.]; and landlord influence [see Table 6.19]. The influence of age, farm size and tenureship on ESA adoption, were also discussed [for these results, see Section 6.3.5.].

5.4.4.2. Farm Household decision making [see Section 6.3.4.2.].

Two aspects of farm household decision making are summarised below: those involved in the decisions, and the types of farm-related decisions being made. The data supporting these observations comprise interview material from both farmers and farmers' wives.

<sup>(15)</sup> FWAG had not been involved in the preparation of ESA farm conservation plans in the first round of Breadalbane ESA (1987-1992). However, post 1992, the local FWAG officers were involved in preparing farm habitat surveys and recommending priorities for conservation activity on the farm, from which the ESA Farm Conservation Plans were drawn up by SAC.

#### (i) Those involved in the decision making.

The following farming arrangements (16) existed within the interview sample, and were highlighted as the contexts within which farm-related decisions were being made [see Table 6.24.]:

- siblings and parents in partnership together, with parent(s) in a non-managerial role;

- siblings in sole partnership with each other as farmers and decision makers;

- siblings currently farming and making decisions together, with an arrangement to hand the management on to sons of siblings;

- father and son in formal, joint decision making, partnership.

- husband and wife involved in joint decision making partnership;

Data concerning two generational farm households and ESA decision making [see Table 6.25.] pointed to the changes which the senior of the two generations anticipated upon their retiral from the business. Those farmers already farming in a partnership with their offspring (sons) pointed to the fact that some of the priorities of their son(s) were different from their own (including the type of farming system/stock they wanted to run), and that this could affect future farm-level interest or participation such as the ESA (17).

Interviews with farmers' wives allowed aspects of husband and wife decision making to be elucidated; these are now summarised. Firstly, the interviewees emphasised the importance of the decision of the farmer's wife to either become involved in the farm business, or to pursue an occupation unrelated to the farm business [see Table 6.25.]. They stated that joint decision making could not be assumed simply due to both spouses living on the same farm. Rather, some farmers' wives chose to take no part in the farm business; indeed it was highlighted that farmers' wives may well choose to work off the farm, not because they *have* to, but because they *want* to, and that these individuals would have no wish to be involved in decisions associated with the farm. However, those who made the

<sup>(16)</sup> The arrangements were either as formal business partnerships, reflected in management decisions; existing working partnerships in the process of being formalised (such as the gradual taking over of the management by offspring), and partnerships operating without such formal agreements.

<sup>(17)</sup> It cannot be assumed that it is the younger generation who will be the ones not wishing to adopt the ESA. Although this did appear to be the scenario in a number of cases, the opposite was also observed.

conscious decision to be actively involved in the farm business would then contribute significantly to farm-related decisions.

For those farmers' wives who had decided to become involved with the business. the interviewees highlighted variations in the degree of involvement. These are now summarised [see Table 6.27.]. Firstly, who 'does the books' (accounts) appeared to be a major factor in decision making, since this affected how much was known about the farm business, and therefore how informed the decision maker's contribution could be. Further, if the farmer's wife is from a farming background in the first place, she is more likely to be involved with the farm business. Who was in the farm when the couple were married is important; the family in the farm first was stated as having more control over decisions, particularly in two-generational farming households. Also, if there is a young family, this can lead to the farmer's wife taking on 'traditional' roles of looking after the home and family, and the husband looking after the farm business. Finally, whether the farmer's wife has any other commitments, such as on-farm accommodation for tourists, can affect here level of involvement in decisions concerning the farm, due primarily to time constraints.

## (ii) Types of farm-related decisions.

Within the interviews, the distinction between types of decisions associated with the farm business was clarified [see Table 6.28.]: there were 'major' and 'day-today' decisions. 'Major' included decisions such as buying a new vehicle (tractor or car), and the spending of significant sums of money. 'Day-to-day' decisions comprised those relating to the routine running of the business; examples included the changing of feed for the sheep, and decisions which had to be made on the spot.

ESA-related decisions [see Table 6.29.] were seen as 'major', largely because they could involve finances and labour; firstly, there could be potentially large sums of expenditure (for example, for paying a dyker weekly) before retrospective reimbursement occurred; and secondly, discussions were necessary concerning the possible use of either farm, or contract, labour to carry out the ESA conservation work. Another aspect which appeared to require joint decision making concerned the ESA farm conservation plan. The recommendations in the plan had to be discussed and jointly agreed as they could have implications for stocking density and location, particularly at lambing time.

## 5.4.2.3. The neighbourhood 'networks' of farmers [see Section 6.3.4.1.].

Interviewees pointed to the trends they had observed over recent decades: that of fewer rural people actually being connected with farming, and of the amalgamation of farms, such that "neighbouring farmers" could, in fact, live a few miles apart. This was further emphasised by the point that a 'good neighbour' was not necessarily the farmer next door, but was one with whom one had a good working relationship.

In addition to these observations, farmers also stated that, although there were variations in an individual's susceptibility to the influence of farming neighbours on behaviour [Tables 5.11a. and 5.11b.], the way in which farmers could view and criticise one another's farm management and results was an important facet in decisions concerning the farm.

A distinction was made, however, between this very specific influence on farming *per se*, as compared with neighbour influence on ESA adoption [see Section 5.5.5.]; this is now pursued. Farming activities tend to be cyclical, and often common to neighbouring farmers. Thus, the timing and competence of these activities - such as crop spraying, harvesting and ploughing - were compared by farmers. Further, the 'tidiness' of farms was an issue of which farmers were acutely aware as being open to the judgement of others. However, ESA adoption was not viewed in the same way. Thus, whether a farmer joined, or did not join, the ESA, was viewed as a decision appropriate to that individual farm. Each farm was recognised as being different, in terms of, say, ratio of inbye to rough grazings; layout of fields, buildings and woodlands; stocking density and so on. These specificities appeared to over-ride the possibility for comparison between individual farms, and thus the influence of one farmer's ESA adoption decision upon a neighbouring farmer, was diminished [see Tables 6.22. and 6.23.].

Although the individual nature of each farm was recognised at the final stages of ESA adoption/non-adoption decision making, farmers pointed to a facet of neighbour influence which *could* occur with respect to ESA decisions. The opportunity for such influence was at a more general level of discussion between farmers concerning, for example: what the ESA was about; what benefits could be derived; how those who had been in the first ESA had found the scheme in terms of restrictions, changes and payment levels; what specific restrictions existed in the second round scheme; and other details of the scheme [see Table 6.22.].

However, when the individual farm or estate became the focus of discussion, neighbour influence appeared to decline, again due to the individual features, and concerns, associated with each farm business, and the uniqueness of the proposed ESA farm conservation plan [see Table 6.23.].

### 5.4.2.4. The ESA Scheme, the farmer and farming.

Firstly, the data pointed to variations in response concerning whether the ESA represented 'good' or 'poor' farming. For the majority of farmers, the ESA appeared to encourage less emphasis upon agricultural production and more upon conservation objectives; this was viewed by many as a move away from 'good' farming [see Table 6.20. and Section 5.5.3.]. A related theme is that estate owners and factors made the distinction between what they viewed as ESA-type 'estate work', and 'farming activities', and although they felt that the two could be integrated within their *estate* strategies, they were also aware that *farmers* could view ESA conservation work as being outwith their remit [see Table 6.18.].

Further, the changes in agricultural policy experienced by farmers over the past 30 years or so were highlighted as comprising a shift in what was being expected of farmers; farming habits *now* being asked for, funded, and therefore implicitly 'rewarded', were felt to be substantially different from earlier agricultural incentive structures [see Chapter Six, p.163].

Interviewees' responses to the ESA and associated notions of 'traditional' and 'progressive' farming included the following issues [see Tables 5.12. and 5.13.]: firstly, that farmers outlined their individual 'tradition' in farming, depending on their own farming experience. Secondly therefore, very few farmers saw the ESA as clearly 'traditional' farming, since although 'traditional' *could* mean the more nostalgic interpretation of the horse and plough, and the associated restoration of dykes and woodlands, it could *also* mean the production-focused agriculture experienced over the past few decades. Indeed, some interviewees stated that the ESA was a 'progressive' policy, as it was indicative of the *future* trends in agricultural policy development. Thirdly, individual notions of whether current farming is 'traditional' depended on the geographical location and the associated farming system.

#### 5.4.2.5. The ESA and Farm Conservation.

Interviewees indicated that the first round ESA (1987-1990) could be viewed, to some measure, as conservation, primarily in terms of preserving existing landscape features, such as the dry stone dykes. However, when interviewees compared the first ESA with the second ESA scheme (post 1992), the latter was felt to be *more* conservation oriented, primarily in terms of fencing off areas for regeneration [see Table 6.16.]. These distinctions also reflected the extent to which some farmers felt that the first scheme was of benefit to their farm management, as compared with the second ESA which they interpreted as being beneficial primarily for the conservationists [see Table 6.16.].

Many farmers disagreed with the specific aspects of conservation which the ESA aimed to implement [see Tables 6.4. and 6.5.]. These related to, firstly, the fencing of areas (some of which had been previously used for sheltering stock), and secondly, the issue of avoiding overgrazing. Comments concerning the fencing of herb rich, and birch woodland, areas, highlighted the perceived impractical nature of the suggested measures. Further, the fencing of such areas was felt to be 'misguided', and its implementation raised a fundamental question for farmers which was cited in most interviews: the features of apparently high conservation value, for which the ESA had been designated, had existed prior to the introduction of the ESA; these features were also viewed as the result of recent and current stock management regimes, and thus there could be no reason to recommend fencing and exclusion of stock. This specific concern led to the view, held by many, that conservation - as promoted by the ESA - was being defined in a text-book, office bound, theoretical manner, as compared with a working knowledge of the habitats which *already* existed on the farm.

### 5.4.2.6. Previous experiences of the ESA [see Tables 6.15. and 6.16.].

As mentioned in the methodology (see above), the timing of the post-Evaluation interviewing coincided with the period in which many farmers within the original (1987-1992) ESA were coming to the end of their first ESA agreement; they therefore had the option of renewing their ESA application [see Section 6.3.3.2.].

The data gathered at this time, point to the previous ESA being an influence concerning whether the policy recipient joins for a second time. The facets of the scheme which the individual appeared to consider at this point were: firstly, payment levels, specifically the sufficiency of itemised payments with respect to dyking, and the degree to which the flat-rate payments had been used to top up specific grants; secondly, the level of interference with farming and the amount of changes which had been required; and thirdly, factors of the ESA scheme which had put them off the first time, for example, the possibility of too many restrictions on current farming, the perceived amount of paperwork, or the insufficiency of grants.

Further, previous experience of the ESA appeared to allow for *comparisons* to be made between the two ESA schemes (1987-1992; and post 1992), these then informing subsequent ESA-related decisions [see Table 6.16.]. For example, the second ESA scheme was perceived by many as having more restrictions, more of a conservation emphasis, less opportunity for dyking, higher grant levels, more requirement for fencing of areas, and less conservation activities of *direct* benefit to the farmer. These very specific comparative experiences provided information which was not available to the individuals within the extended ESA (who may receive this information second-hand); such experiences appeared to directly inform decisions concerning future participation in the ESA.

Finally, reasons for joining the *first* ESA (1987-1992) may no longer be relevant to the second (post 1992) ESA; for example, necessary dykes may have been rebuilt, such as those around a particular field (say, near to the farm buildings), or those repaired after a flood. The appropriateness of the second ESA scheme may be decided therefore, using different criteria, since the factor of 'congruence' would no longer be key.

## 5.4.2.7. Previous experiences: non-ESA [see Section 6.3.3.2.].

The key non-ESA experience cited by interviewees concerned Sites of Special Scientific Interest (SSSIs); [see Table 6.17.]. Those mentioning this did so primarily in negative terms; further, neighbours of farmers who had an SSSI designated on their farm also stated that they did not want to go through a similar experience. Although differences between SSSIs and ESAs were recognised, the two schemes were both interpreted as having conservation objectives; concerns over the potential control by conservationists through the ESA over the use of farmland, became a significant factor therefore, in dissuading ESA adoption.

Other previous experiences related to involvement in schemes such as the Agricultural Improvement Scheme (AIS), and the associated specific commitment to planned expenditure over a period of years. The form filling associated with such schemes, and particularly with the IACS (18) regulations, both comprised important disincentives to those considering the ESA, and for some, *they* became the basis upon which ESA decisions were made [see Table 6.17.].

## 5.4.3. Interviews with Advisers.

The data pointed to the significance of the roles of advisers in encouraging or discouraging ESA adoption [see Table 6.6.]. The role of the FWAG advisers was observed by farmers through the way in which the farm habitat survey was carried out [see Table 6.4.], and also through the content of the resulting farm conservation plan [see Table 6.5.]. Secondly, the SAC adviser played an important role in negotiating an acceptable ESA farm conservation plan which also aimed to incorporate the conservation objectives of FWAG [see Table 6.7.]. Finally, the flexibility of the SOAFD advisers in allowing discussion of the final farm conservation plan, and negotiation of specific grants for ESA conservation work once the plan was in progress, were cited as important facets of adoption decision making. The individual advisers were therefore interviewed in order to discuss their views concerning the ESA and reasons for farm and estate adoption/non-adoption of the ESA scheme. These results are now summarised [the full data are presented in Appendix V(iii)].

The factors affecting ESA adoption were considered, by advisers, to include the following: tenurial status; farm size; neighbour influence; whether the ESA was perceived as 'farm' or 'estate' work; the input of SAC; the conservation element of the scheme; the wider policy context; and the fact that the scheme was being implemented by an *agricultural* adviser. The reasons for adoption were highlighted as being both financial and conservation-oriented.

<sup>(18)</sup> IACS: Integrated Administration and Control System. The first call (by SOAFD) for forms and detailed maps of farm fields coincided with the period during which farmers could decide concerning the second round ESA scheme.

Other issues which were raised in connection with the ESA, included the importance (to the farmer) of being able to negotiate the farm conservation plan; and the different ESA priorities that were emphasised by FWAG as a conservation organisation, as compared with SAC and SOAFD.

Finally, the differences between the old (1987-1992) ESA scheme and the new (post 1992) ESA scheme were briefly discussed, together with an indication of the type of farmer who appeared to be the most eager to join the second round of the ESA scheme.

# 5.5. METHODOLOGICAL COMMENT.

The above outline of Results is intended as an overview of the themes arising from the 1993/4 Fieldwork data, these being: ESA decision making; farm household decision making; the neighbourhood networks of farmers; the ESA scheme, the farmer and farming; the ESA and farm conservation; previous experiences of the ESA; previous non-ESA experiences; and issues raised by advisers.

These data comprise the source of information for the Critical Appraisal in Chapter Six. Since these data are a crucial component of the appraisal of conventional evaluation (exemplified by the MAFF Evaluation), it is necessary at this point to outline the basis upon which the data - in the form of specific quotes (19) - have been selected for discussion.

In Chapter Six, *themes* are addressed, which link back to those both included and omitted from the MAFF Evaluation. The purpose of data selection in this context is to highlight such themes, without also implying a homogeneity of interviewee response within those themes. That is, the selected quotes are not intended as *representative* of the sample as a whole, or as indicative of a uniform 'voice'. It is recognised that such an impression could be gained by the reader, and thus it is necessary also to emphasise the differences present in the interviewees' responses within the categories or themes. With this aim, the following six examples serve to demonstrate the diversity inherent within the data.

<sup>(19)</sup> During the semi-structured interviews, extensive notes were taken, rather than recording the discussions on tape (for reasons outlined in Footnote 5). The data type which ensues comprises *sentences* which are then cited as "quotes". This contrasts with the data type resulting from taped (and subsequently transcribed) interviews, which are cited as "text" - that is, more substantial extracts from interview conversations.

5.5.1. The financial aspects of the ESA and their place in the adoption/nonadoption 'trade-off'.

The 1993/4 Fieldwork data demonstrated that farm-level decision makers appear to make trade-offs between the financial incentives offered by the ESA Scheme, and the constraints and/or missed (future) opportunities which adoption of the ESA may entail. These are reported in Chapter Six. In addition to the incidence of this trade-off, the data point to the *varying degrees* to which the decision makers cite financial criteria as *the* crucial facet. For some, financial issues are paramount, as exemplified by the following quotes:

Firstly, I have to think about finance - whether I can finance the new scheme or not. Then what improvements I'll get out of it, and whether it's worthwhile. It's quite a lot of money to lay out before you get it back... [SONR2:110-117]

ESA issues are financially based. Without the carrot of the basic payment I wouldn't do it except for the dykes. It's a balancing process between what you're asked to do and what you get paid. [NOR4:91-96]

Money is the main attraction; it's money in your hand. The minute you sign, the first cheque's there ... Like the rest of them (farmers round here) I'm not in a position to turn down money. But I wouldn't just sign anything. [SOR3:238-246]

When deciding about the ESA, the two things you look for are the payments and how the scheme fits in with your farm. It's nothing about bias towards conservation; it's because if you're running a business, you have to look at things - including the ESA - through business eyes. There's no other way; you've no other option. But I can't see why the two can't go hand in hand. [SONR1:284-295].

TABLE 5.4. THE IMPORTANCE OF FINANCIAL FACTORS.

For others, financial factors have to be balanced against specific criteria, as shown by the following example:

The ESA is probably a very good thing, provided that there aren't too many strings or ropes attached. I want self-determination on my own land. There has to be a balance between financial benefit and being able to make my own decisions. [SENR2:148-155].

Further, for others, although financial incentives have to be present, they are not a sufficient incentive in themselves to ensure participation in the ESA Scheme; the following quote illustrates this point:

With the ESA, if the money wasn't on offer, I wouldn't bother with it or consider it; BUT, just because the money IS on offer, it doesn't mean that you WILL do it. [SONR3:141-145].

In addition to the above recognition of a variation in the importance of financial criteria in ESA-related decisions, those in the designated area also explained why such diversity exists; the following quotes illustrate these views:

The further you are down the line, the less money you have, the more you think about money. If you've already made your money .. then you've got more time to sit back and do conservation. [NOR4:167-171;173-175]

Financial turnover is important, particularly to farmers with less money. [SER2:269-271]

It's 95% to 99.9% finance, but an awful lot depends on the farmer; if he's not strapped for cash, for example, he looks benignly on what he considers idiocy ... [SONR7:164-169]

When things are getting hard, you have to be sure that you would break even. You've got to have spare money initially for fencing and dyking. [SOR1:196-199]

Bank interest rates, they're 5% as compared with 15%, therefore we're not counting every penny. [SOR10:212-214]

If you're OK money-wise, and have enough with respect to your standard of living, then finances are less important. [SOR6:202-205]

If a farmer's tighter for grazing and cash then he's not likely to be in the ESA. [MI3:111-113]

There's places that canny even afford to give them (ESA) 3 or 4 hectares; they're on such a tight budget, they won't be able to justify giving it up (for ESA). [SER2:368-372]

£2,000 (ESA) is no incentive to us in this case, because this is what we want to do with the farm, so we would be happy to plough the  $\pounds 2,000$  back into the farm. [SOR10:207-211].

TABLE 5.5. VARIATIONS IN THE IMPORTANCE OF FINANCIAL FACTORS.

## 5.5.2. Rumours concerning the ESA.

In the Critical Appraisal of the MAFF Evaluation (Chapter Six), the rumours concerning the ESA are discussed in the context of influence of neighbours upon ESA-related decisions (this influence is also discussed below). The following examples illustrate the *diversity* of those rumours:

The ESA is more strict this time - this is what I've heard. [NOR4:33-34]

I'm hearing from other farmers that they (FWAG) want them (farmers) to fence this bit and that bit, and to keep the stock out ... I hear gossip at the clippings [SENR4:12-15;130]

The reality is that the £1500 for being in the scheme (ESA) is used up ... from other farmers, I heard that the finances would be this way. [SONR1:63-64;66-68]

When the first ESA (first round of Breadalbane) came out, there was a lot of chat amongst farmers. There was a general consensus - it's good to be in. I never heard a bad word. [SENR1:414418]

For the second scheme ... most applications around here were in in the first month; there was no scepticism because of the Breadalbane/Aberfeldy one - money for old rope. [SENR1:437-442]

Down A. (town), the farmers say it's a good thing, so I'm determined to be in it ... At the market, the farmers mostly talk about what they've got out of it (ESA). There's an A. boy who's never been known to buy a 5,000Gn. bull before! They reckon that's because of the ESA! [SENR5:111-113;171-176]

The farmers in the new ESA, and those in the existing ESA, know that the ESA's been financially beneficial, so they were queuing up to join it. [ADV1:8-12]

 TABLE 5.6.
 RUMOURS CONCERNING BREADALBANE ESA.

5.5.3. The ESA and 'good' or 'poor' farming practice.

In the Critical Appraisal of the MAFF Evaluation (Chapter Six), interviewees' comments concerning the ESA as an example of 'poor' farming practice are highlighted. Although the data clearly point to this observation, it is also necessary to highlight two associated variations.

Firstly, comments concerning how one defines 'good' and 'poor' farming vary, as exemplified by the following responses:

A sign of a good farmer is someone who's taken up with cattle and crops, and doesn't have time for estate (ESA-type) work. [NOR1:130-133]

Good farming: considering things and animals that live in the countryside; counting to ten and thinking twice before doing anything - not rushing into things... [SONR1:173-177].

TABLE 5.7. 'GOOD' AND 'POOR' FARMING.

Secondly, a number of farm-level decision makers viewed the ESA as an example of 'good' farming; the following quotes illustrate this:

The ESA is good farming, as compared with pulling down hedges etc.. like some of the English farmers. [NOR3:85-87]

It'll only be the good farmers who'll go into the ESA. Bad farmers are the ones who don't care. [SER2:223-225]

The ESA is possibly helping farmers' image therefore farmers like it - they're clutching at straws. [NONR3:337-340]

The ESA is good farming practice - although you have to qualify that, because to a certain extent it takes people off good farming practice and puts them doing something like dyking, or it could be good farming practice slightly reduced. [NOR7:51-57]

# TABLE 5.8. THE ESA AND 'GOOD' FARMING.

Once again, it is recognised that *diversity* of views exists within this theme. More importantly perhaps, is the recognition that notions of 'good' and 'poor' farming, and their congruence with perceptions concerning the ESA scheme, appear to affect ESA-adoption decisions.

5.5.4. Adapting to future agricultural policy developments.

In Chapter Six, the context within which the ESA policy has been introduced is highlighted from the data as being an important facet of whether ESA policy recipients become involved in the Scheme [see Table 6.21.]. In addition to the cited examples, the data also point to *variations* in the degree to which farmers feel able to adapt to what they perceive as the shifting policy context.

The diversity is illustrated by the following examples:

Underperformance - some realise though that this (ESA) is the way things are going ... farmers are extremely pragmatic. [SER3:124-127]

A lot of farmers in this valley are getting on in years - they've been told to produce. Can we adapt? The younger generation perhaps.... [NONR3:123-126]

The ESA doesn't want fertilisers which is against what farmers used to do. It goes against the grain for some farmers, but then everything's changing. [SOR1:119-123]

An awful lot of the ESA things would be detrimental to the farm. But now we are so dependent on grants that we have to think about things like the ESA. [SOR6.5-9].

TABLE 5.9. RESPONSES TO THE CHANGING POLICY CONTEXT.

5.5.5. Incidence of neighbour influence.

In the Critical Appraisal of the MAFF Evaluation, a key facet which is isolated as having been omitted is that of neighbour influence upon ESA adoption decisions. In Chapter Six, the specifics of this factor are outlined with examples from the data. Associated with those comments made by farmers concerning the nature of this influence, are two other factors which highlight further the complexity of the relationship.

Firstly, interviewees commented on the changing 'neighbourhood' context within which they now farm; the following examples illustrate this point:

There's less and less people actually connected with the land; people who have holiday cottages .... tourism is taking on a greater role; there's more incomers who are not connected with farming; so there's less people available to actually judge what farmers do, or perhaps less from whom a farmer may take notice, in terms of themselves being farmers. [NONR1:1-12]

There's quite a few not living off the farm now. There are fewer and fewer family farms .... There's quite a few hobby farmers - I call them that, its one better than "white settlers". Since they're not making their income from farming, the ESA isn't interfering for them. I don't have much in common with them - what can I talk about with them? [NONR3:213:215:220-225]

TABLE 5.10. THE CHANGING 'NEIGHBOURHOOD' CONTEXT.

In addition, one quote exemplifies the geographical diversity of 'neighbourhood' which some individuals recognised within the designated ESA:

At first, the A. (town) lot were the only ones talking about it, over that side. I don't know why. Perhaps because they're more community spirited ... that might have has something to do with it. No one mentioned it over this side. [SER1:207-214]

Secondly, farmers themselves noted that an individual's susceptibility to neighbour influence in the context of the ESA could vary. Table 5.11a gives examples of individual's responses, and Table 5.11b gives examples of farmers' responses concerning others' general susceptibility:

I didn't want to be the one not to do it (ESA) with people possibly saying "Oh, so she doesn't need the money". [NOR1:154-157]

I listen to other farmers who are older than me; I want to learn. For example, H. has decided not to go into the scheme (ESA) because of the potential restrictions on grazing. He's older than me so I listen to him. [NER1:66-73]

With the ESA, I've had no influence from my neighbours; I would still study the ESA and make up my own mind. [SENRI:411-413]

When we started hearing from others, what they were getting, well .... we started to consider it (ESA) too. [SOR6:176-179]

#### TABLE 5.11a. RESPONSES TO ESA-RELATED NEIGHBOUR INFLUENCE.

There's a range of people in terms of how much they are influenced by others. I may be influenced too much; whereas others, you don't get anything out of them - they're too much the other way. [NSOR4:227-232]

But there are individual personalities involved, so the degree of (ESA) influence will vary. [SENR1:421-423]

#### TABLE 5.11b: COMMENTS ON INDIVIDUAL RESPONSIVENESS TO ESA-RELATED NEIGHBOUR INFLUENCE.

#### 5.5.6. Notions of 'traditional' and 'progressive', in association with the ESA.

The Critical Appraisal of the MAFF Evaluation questions the degree to which the ESA has led to change *per se*; this is developed alongside individual interviewees' responses concerning the extent to which they view farming systems within *their* locality as 'traditional'. The 1993/4 Fieldwork data illustrate this localised geographical diversity. However, further complexity was observed through discussions concerning *definitions* of 'traditional' and 'progressive' farming in the area, and also whether the ESA therefore, was representative of 'traditional' farming practice. The following quotes (Tables 5.12. and 5.13) illustrate the diversity of opinion within this particular theme (20).

Traditional farming is fertiliser inputs ... from the Wartime (11) onwards, farmers used as much fertilisers as possible. That's what you all aimed at. This is 'traditional' to the farmer: the highest yield, least weeds, as many sheep as possible. [SONR7.124-132].

The ESA encourages one or two traditional practices, for example the dyking. BUT high input agriculture is the tradition of the past 20 years, that is, for farmers now in their mid 40s. It depends how far you go back before you decide whether something's traditional or not. [MI3:90-97].

Here, we're still fairly traditional ... cows, sheep, fodder crops, turnips, holiday accommodation, raspberries. Therefore the ESA fits in well with mixed traditional farming. [NONR3:285-290]

Traditional farming -it's livestock, "dog and stick" farming, with animal husbandry skills that have been bred into farmers for centuries. [SENR2:127-130]

Traditional farming's always been mixed stock; there used to be a lot more crops then, and rotation. There were all the people to do it then - and much smaller units. [SONR2:61-65]

Progressive farmers - these are the big farmers down the country, for example, oil seed rape for fuel. There's always something new coming up. [SONRS:105-108].

Progressive farming's improving pasture, plastic bags for silage, applying lime, keeping the farm as tidy as possible. [SONR6-32-35].

Traditional farming - down on your hands and knees to plant turnips; that's going backwards now ... Anyone who's progressive is into conservation. [SOR9 92-94:122-123]

TABLE 5.12. DIVERSE VIEWS ON THE FARMING 'TRADITION'.

<sup>(20)</sup> This theme has not been developed within Chapter Six in the section addressing policy recipients' perceptions of the ESA Scheme and their affect on adoption. The reason is that the precise influence of notions of the 'traditional' and 'progressive' nature of the ESA on its adoption, requires further analysis. However, the data provide insights into the theme itself.

#### THE ESA IS NOT TRADITIONAL FARMING

The ESA is trying to go to traditional farming, to how it was before. [MI5:132-134].

The ESA is trying to promote good old-fashioned farming and stop intensification of farmlands ... it has brought about a bit more traditional farming ... It's trying to get at something that looks like traditional farming, but in fact it's not. I don't think you ever got it very tidy. [NONR7:72-73:81-82:95-100].

The ESA's not traditional. How could it encourage traditional farming? Traditional farming wasn't good - it was a lot of hard work. You wouldn't get people back to that. They was hardworking days ... We wouldn't like to change; now we've got electricity - before, we had oil and tilly lamps. [NENRI-61-71].

The ESA would like to bring back tradition. BUT fully traditional farming is going back to horses and carts ... [SENRS:84-87]

The ESA's not making a great difference; it's not encouraging traditional farming. You can't go for traditional farming now - pressures don't allow you to do it. [SOR10-80-85]

#### THE ESA IS TRADITIONAL FARMING

The ESA is traditional. For example, not using spray; looking after things like wildlife ... The ESA's more traditional than progressive. Although if grants were available, and if they had 300 to 400 acre area, a progressive farmer would say that it's worth getting the money. ESA schemes are important to both types of farmer. [SER1:124-130].

The ESA's more traditional ... its' keeping stocking rates down. It's making the countryside like what it used to look like, with the dykes rebuilt. [SONR2:56-60]

## TABLE 5.13. DIVERSE VIEWS ON THE ESA AND 'TRADITIONAL' OR 'PROGRESSIVE' FARMING.

5.5.7. Concluding points.

The above six examples demonstrate the diversity of interviewees' views *within* certain key themes. Such diversity does not detract from the recognition of the themes themselves, which was facilitated by the use of semi-structured interviewing techniques. Rather, the presentation of what Patton (1980) has termed the "negative cases", that is, those views which do not appear to comply with many of the comments received during the interviews, is crucial to the accurate presentation of the data (see Patton [1980], pp.463).

Thus, in using *selected* data (quotes) within Chapter Six, the author does not intend to obscure the variety of responses; rather, the examples cited serve to *illustrate* the nature and detail associated with the themes which were addressed (what Cloke *et al* [1994], have also referred to as a "more textured and detailed picture" [p.21]).

Thus, although a strength of qualitative data comprises the identification of the *complexity* and *diversity* of expressed views, the rationale in *this* context of expressing the consistent views, lies with the aim of illustrating the observed themes with *clarity*. Cloke *et al* (1994) make a similar methodological comment concerning their presentation of quotations from their "large repository of quoted passages" (p.23):

"... these quotations ... have been selected to indicate common themes rather than to isolate discordant opinions..." (p.23; emphasis added).

Further, this criterion for data selection has been informed by the wider methodological debate concerning the analysis and presentation of data within evaluation. Patton (1980) has made the following observations which are particularly apposite in this context:

"... The qualitative analyst's effort at uncovering patterns, themes and categories is a creative process that requires making carefully considered judgements about what is really significant and meaningful in the data ...qualitative analysts ... must rely on their own intelligence, experience and judgement.." (p.406).

#### Further,

"It is also important that the evaluator does *not* pretend that all findings are equally important or credible. The writer bears some responsibility to help the reader sort out the strengths and weaknesses of various parts of the description, analysis and interpretation. Qualitative analysis does not have the parsimonious statistical significance tests of quantitative analysis. Statistical tests of significance are shorthand ways of telling the reader how seriously to take the findings. In qualitative analysis, the analyst must make judgements that provide clues for the reader as to the writer's belief about variations in the credibility of different findings: When are the patterns "clear"? When are they "strongly supported by the data"? When are the patterns "weak"? Readers will ultimately make their own decisions and judgements about these matters, but the evaluator's opinions and speculations, after he or she has struggled with the data, deserve to be reported" (Patton [1980], p.431).

A theme associated with such debate is raised by Strauss and Corbin (1990), who outline the criteria for judging a particular type of qualitative study. They stress the necessity for modifying the standards by which qualitative studies are judged, away from reliance upon the "usual scientific canons" (see p.250), and towards those which "fit the realities of qualitative research and the complexities of social phenomena that we seek to understand" (p.250).

The aim of this Thesis, however, is not to enter the complex theoretical debate concerning the determination of such criteria (21). Rather, the existence of such a debate - reflected further in comments from both Patton (1980) and Strauss and Corbin (1990) - requires the above specification of the criteria for data selection evidenced in Chapter Six:

"The qualitative researcher has an obligation to be methodical in reporting sufficient details of data collection and the processes of analysis, to permit others to judge the quality of the resulting product" (Patton [1980], p.462).

"Every mode of discovery develops its own standards - and procedures for achieving them. What is important is that all of those criteria are made explicit" (Strauss and Corbin [1990], p.250).

#### 5.6. CONCLUSION.

The *appropriateness* of the data collection method used in the above interviewing was a key criterion in the selection of the semi-structured approach. This was particularly important since the prior sole reliance (in the MAFF Evaluation) on questionnaire approaches and emphasis upon quantifiable information had led to the omission of data essential to an accurate understanding of the ESA's impact and particularly its adoption (see Chapter Six).

The data from the semi-structured interviews resulted in a greater appreciation of the ways in which policy recipients make decisions, the *time-scale* over which this occurs, the *factors* taken into account when making ESA-related decisions, and the *networks* within which farmers and farm households work and make farm-related decisions. The data also illustrated the diversity of views which were expressed within each theme. Associated methodological imperatives when examining such data, are both rigour, and a clear explanation of those criteria applied to data selection; these two facets of the analysis were therefore discussed.

An over-riding observation, which is a key to the whole discussion concerning evaluation accuracy, comprises the fact that policy recipients are not as allabsorbed in ESA-related decision making as are those studying and evaluating this

<sup>(21)</sup> Although such a debate concerning this methodological facet may well be a necessary component of further research into socio-economic policy evaluation.

decision setting. Whether to adopt or not to adopt is typically decided over a six to 12 month period (see Chapter Six), during which time many other farm and family related issues will have arisen. This highlights again therefore, the absolute necessity of recognising ESA-related behaviour and decision making within its *context* - a context which continually informs, regulates, and sets opportunities and constraints for policy recipients.

This recognition of context contrasts, as discussed in Chapter Six, with the specifically focussed (22) and reductionist conventional socio-economic evaluations, of which the MAFF Evaluation is an example. Once again, the argument is that the agri-environmental and socio-economic evaluation remains partial, and in some instances, inaccurate. Thus, the possible retort from funders of such an evaluation, that the call for recognition of context, for example, is moving into the realms of social research, can no longer be accepted as a tenable stance (23). Chapter Six therefore brings these issues together, incorporating the both the literature and data from the preceding Chapters.

<sup>(22)</sup> Chapters Six and Seven touch on the issue of the necessity for focussing on issues within evaluations, and on the difference between 'research' and 'evaluation'. However, this point relates to the need to explicitly recognise the narrowness of focus, which otherwise refuses to acknowledge the very real, and wider, context within which the policy recipients make their policy-related decisions.

<sup>(23)</sup> For discussion, see Chapters Six and Seven.

#### **CHAPTER SIX**

#### **CRITICAL APPRAISAL OF THE MAFF EVALUATION**

#### 6.1. INTRODUCTION.

The aim of this chapter is to assess the extent to which the procedures, methods and concepts employed within the MAFF-funded ESA Evaluation precluded an accurate assessment and representation of Breadalbane ESA's impact and uptake. The chapter therefore examines the following: the 'heuristics and paradigms' (Patton [1981]) employed in the MAFF Evaluation; the ways in which the approaches employed affected the accuracy, and thus reliability, of the MAFF Evaluation; thirdly, the enhanced level of interpretation concerning ESA adoption, made possible through the inclusion of a broader and more accurate data set (the 1993/4 Fieldwork data); and fourthly, the implications of maintaining the conventional evaluation approach (exemplified by the MAFF Evaluation) and therefore the imperative of improving on it.

Although the Critical Appraisal is specific to the MAFF Evaluation, the Chapter argues that the observed methodological conventions are not unique to the Breadalbane ESA MAFF Evaluation. Rather, they represent the approaches which continue to be used in agri-environmental policy evaluations and in turn have implications for policy formulation, since evaluations feed into policy design and re-design stages (see Chapter Three). Further, the specificities of the MAFF Evaluation are reflected widely in the evaluation methodology literature, thus demonstrating the extent to which the MAFF Evaluation of Breadalbane ESA encapsulates a wider debate.

The structure of the chapter is as follows:

6.2. The Breadalbane ESA MAFF Evaluation process.

6.3. Examples of the effects of the MAFF Evaluation process on MAFF Evaluation results and analytical accuracy.

- 6.4. Evaluation methodology: examples from the research literature.
- 6.5. Conclusions.

Throughout the UK, ESAs were being evaluated through contracts between research institutions and MAFF, during 1987-1992. The aim of MAFF was to facilitate a greater objectivity than would have been possible through an exclusively in-house approach. As outlined in Chapter Four, the MAFF Evaluation of Breadalbane ESA was carried out between late 1987 and summer 1990. During this period, the research team at SAC liaised with MAFF and SOAFD with the aim of fulfilling the objectives of the MAFF Evaluation within the specific time-frame. This Section outlines those aspects of the process which affected the MAFF Evaluation itself, primarily with respect to concepts and methods implicit and explicit within the policy study (1).

The MAFF/SAC Contract detailed the objectives of the Breadalbane ESA MAFF Evaluation, and its methodology, time-scale and budget. Further, the research team experienced input from MAFF, through the regular meetings (every six months) which included assessments of compliance with the stipulated methodology and anticipated types of results. The meetings were attended by both MAFF and SOAFD officials who were responsible for the MAFF Evaluation and future development of the ESA programme. The experience was one of top-down decision making, rather than negotiation or flexibility during the lifetime of the project, or in the light of MAFF Evaluation developments. The scenario was very much one of insistence (from MAFF) rather than negotiation. The specifics of this insistence comprised: the curtailing of issues to be evaluated; the gradual evolution of objectives (2); and the application of conventional methods. The implications of

<sup>(1)</sup> The possibility for analyst bias within this account was recognised. Thus the following steps were taken to maintain accuracy whilst being able to report the valuable data and insights gathered through personal experience on the MAFF Evaluation. Firstly, the observations outlined below were extensively discussed and checked through with other colleagues at the time, in order to establish clarity; there was agreement over the facts. Secondly, insightful discussions were held with another research institute (pers. comm. 1993/94) concerning the MAFF-funded ESA Evaluation programme, in order to establish what was unique to SAC and unique to MAFF's input; and to note comparable experiences in this very specific context of MAFF-funded ESA socio-economic Evaluation. Further, the points outlined in Section 6.3. are illustrative and supportive of the overall observations made in Section 6.2. In the light of the above therefore, every confidence is expressed concerning the accuracy and reliability of the observations outlined in Section 6.2.

<sup>(2)</sup> Including, due in some part to unresolved political concerns between MAFF & SOAFD, the removal of the environmental Evaluation from SAC's remit during the lifetime of the MAFF Evaluation.

the immovability of MAFF (and to some extent SOAFD) on these issues are outlined below.

#### 6.2.1. Curtailing of the MAFF Evaluation issues.

Firstly, research deviating (in the view of MAFF) from original ESA-related anticipated avenues of inquiry was curtailed. Thus, when issues such as the landlord/tenant hierarchy (and its effect on ESA uptake), or the possible influence of local area advisers on ESA adoption, emerged during the analysis, a lack of flexibility precluded their investigation. Other examples included:

The evidence of leakage of ESA funds from the designated area (Skerratt [1994], p.116) due to contract labour coming from outwith the ESA boundary to carry out the ESA work. The MAFF Evaluation team was discouraged from pursuing this issue in spite of the fact that part of the remit of the MAFF Evaluation comprised the scheme's impact on the local economy, of which this was therefore an integral part. Further, the recommendations of the MAFF Evaluation team concerning the need to liaise with the Agricultural Training Board (ATB) to encourage training of local farm and non-farm labourers to maximise the benefit of the ESA investment, was again considered superfluous. MAFF stated strongly (pers. comm. 1989) that the ESA was not a job creation scheme for locals, and thus the fact that ESA-related work was picked up largely by outsiders was immaterial.

Further, MAFF perceived a 'deviation' in the overgrazing issue (Skerratt [1994], pp. 112-113). SOAFD pressured the MAFF Evaluation team - particularly when the reporting of findings began - to exclude the overgrazing issue. The stocking density limits of the ESA had been set sufficiently high as to require little, if any, change in farm or estate management (pers. comm. Mowle [1993]; see also Skerratt *et al* [1992]). Hence, "an opportunity for confronting the issue of overstocking was not fully addressed" (Skerratt [1994], pp. 112-113) in the Breadalbane ESA Scheme. This was an example of an issue which could have been perceived as a shortcoming or criticism of the Breadalbane ESA mechanism (3); the MAFF Evaluation team therefore received heavy pressure to exclude the whole debate from the analysis (4).

<sup>(3)</sup> The researcher is aware of the MAFF/SOAFD politics which existed at the time of the MAFF Evaluation. However, the resultant political input and pressure took priority at the expense of the supposed objectivity of the MAFF Evaluation.

A third example comprises the unwillingness of MAFF and SOAFD to recognise, and include within the Evaluation remit, a level of complexity concerning the impact and uptake of the ESA Scheme. Such complexity related specifically to the possibility that a scheme such as the ESA (due to its agri-environment remit) might touch on issues other than those relating to production and profit motives. Such issues included: land ownership and property rights; autonomy in decision making; farm management habits; and confidentiality. Thus 'additional complexity' (even though the boundaries for complexity had not been defined), which the MAFF Evaluation team attempted to address, received no encouragement or support from the funders (MAFF).

The above examples illustrate how the MAFF Evaluation became a rigid following of the wishes of MAFF, rather than one which allowed sensitivity either to emerging issues, or to complexities which had not been anticipated at the outset. The MAFF Evaluation was reduced to a series of data analyses which set out merely to confirm, or qualify, anticipated observations.

#### 6.2.2. Evolution of the MAFF Evaluation objectives.

A second impact of the input of MAFF and SOAFD to the MAFF Evaluation process comprised the evolution of objectives. During the lifetime of the Evaluation, an increasing urgency developed concerning budgetary issues, and the financial aspects of the scheme. Specific examples included: value for money; and costings to The Treasury of current and maximum uptake. Further, as the MAFF Evaluation period progressed, MAFF placed greater emphasis upon the extent to which Breadalbane ESA was meeting its objectives, rather than combining this with any in-depth assessment of the objectives themselves (as had been initially envisaged by the research team; (5)). The MAFF Evaluation moved from understanding to limited explanation; from the *why* of the impact and uptake to the *what* of impact and uptake, and how uptake could be increased - possibly

(5) The MAFF Evaluation also examined alternative policy scenarios; however, the foci remained the policy mechanism and its cost effectiveness rather than objectives, the latter being assumed to be acceptable and understood in the same way by all parties (including policy recipients).

<sup>(4)</sup> An example of the latter arose in a 1992 Conference on ESAs, when SOAFD wanted all mention of the overgrazing issue removed from the MAFF Evaluation presentation.

with fewer financial resources. These emphases were pursued at the expense of data concerning: *reasons* for observations concerning conservation behaviour, attitudes and land-use; examination of non-financial motivations for ESA adoption; and discussion of the role of attitudes in farm-level decision making.

There was confusion over what should have been accomplished within the MAFF Evaluation; research avenues were narrowed down, and there was an increasing rigidity concerning issues that *were* being discussed. The direct consequence was a loss of in-depth analytical material which would have been more informative to policy development in the longer term. Overall, the evolution of objectives reduced the possibility, within the given time-scale and funding, of assessing Breadalbane ESA as a policy, or discussing its uptake in any great depth.

#### 6.2.3. Application of conventional methods within the MAFF Evaluation.

The third significant facet of the input of MAFF and SOAFD to the MAFF Evaluation process consisted of their insistence upon the application of conventional methods for data collection and analysis, these being primarily quantitative, financially-oriented, questionnaire approaches with the individual as the unit of analysis. These were pursued in spite of the fact that ESAs were initially publicised as an experimental measure (see Chapter Two) within the changing policy 'climate' in the UK. This approach contrasted with Patton's (1981) recommendation (within the context of programme evaluation) that: "it is ... important to avoid routine imposition of standard conceptualizations in new situations" (p.274).

At the time of the MAFF Evaluation, reasons for the methodological recommendations were either stated or implied. These are now briefly outlined.

Firstly, conventional evaluation concepts and methodological tools were seen as compatible with the prevailing orthodoxy of aggregate *homo economicus* with their readily quantifiable output. No change in approach was deemed necessary.

Secondly, from the outset of the MAFF Evaluation, it was made clear to the Evaluation team (MAFF pers. comm. [1988] & [1989]) that since the MAFF Breadalbane Evaluation had been funded by the Economics Division, approaches, results, discussion and recommendations had to be expressed in terms which would

be appreciated within such a context; these terms were quantitative (6). There was thus an implied legitimacy of quantitative over qualitative data types. The impact of this is addressed in the Section 6.3. of this Chapter.

Thirdly, MAFF and SOAFD were primarily concerned with timeliness which became an over-riding factor within the MAFF Evaluation. It is recognised that a timely Report on the scheme's progress, impact and uptake was necessary to the policy review of 1991/92. However, the completion of the MAFF Evaluation within the given time-frame became the primary goal for MAFF (7).

Fourthly, the Breadalbane ESA Evaluation Contract (see Appendix III(iv)) specified structured interviewing through questionnaires as the sole methodological tool. Questionnaires were seen, primarily by MAFF, as appropriate to the anticipated (8) survey data and subsequent quantitative analyses. As Kuhn (1970) has stated: "... consciously or not, the decision to employ a particular piece of apparatus and to use it in a particular way carries an assumption that only certain sorts of circumstances will arise" (p.59). The data types were primarily anticipated therefore, as easily accessible (9), totally quantifiable, relating largely to financial (grant-related), production and land-use criteria, and internally coherent. Further, the requirement for aggregate data was also a criterion in questionnaire selection.

These four reasons combined to form more than merely an abstract ethos; rather, they directly informed and channelled the whole MAFF Evaluation procedure and results for Breadalbane ESA (10). Very little new information was obtained; and

<sup>(6)</sup> This reflects back on the government literature concerning evaluations (see Chapter Three).

<sup>(7)</sup> It is worth noting that the MAFF Evaluation of Breadalbane ESA was completed in 1991, although the UK-wide evaluation of ESAs (into which it fed) did not take place until 1992.

<sup>(8)</sup> These had to be confirmed with Survey Control Unit (SCU), London, at the insistence of MAFF. SCU stressed their requirement for all aspects to be structured and prescripted. SOAFD (pers. comm. 1990) stated that this was due to the need to preclude the possibility of unexpected issues or comments arising, which could cause difficulties for MAFF or SOAFD.

<sup>(9)</sup> That is, on the surface. This contrasts with Gasson's (1973) interpretation of peoples' values and motivations being known and revealed/expressed in a series of layers. See also Hermann *et al* (unpublished).

<sup>(10)</sup> This point is made by Patton (1981) who states that "how one conceptualises the evaluation from the outset will play a major role in determining what kinds of findings one has, and the focus of the evaluation" (p.275).

much remained unquestioned, and therefore unanswered. Overall, the issues were viewed at the outset as being structured and rational, primarily concerned with the farming system; and characteristics of farmers and their farms were seen as comprising opportunities or constraints - determinants of ESA-related behaviour. Examples of the impacts of such reasoning are now outlined.

6.2.3.1. Emphasis upon Financial Criteria.

The Breadalbane ESA MAFF Evaluation was described by MAFF as "Socioeconomic"; the precise nature of "socio-economic" was addressed through the objectives of the MAFF Evaluation. However, "socio-economic" itself remained undefined. The influence of "socio" within this context was not overtly discussed, and must be regarded as having been assumed, 'known', and 'obvious'.

This lack of structure in initial and subsequent discussions (with MAFF and SOAFD) led to a lack of definition of the boundaries for the examination of possibly important and significant issues. In addition, there was no overt recognition of the complexity of economic (Gasson [1971], p.32) and socio-economic influences.

Analysis became disjointed, since there was no underpinning through hypotheses. The Evaluation relied on attempts to retrospectively link criteria and factors with ESA-related behaviour and attitudes. There was no initial discussion of what links there may be.

Further, examples of the data collected for the MAFF Evaluation included:

- farm household information (QU.I.). \*
- on-farm labour (QUS. I & II). \*
- objectives (QU.I) \*
- anticipated ESA effects (QU.I) \*
- financial situation (QU.I.) \*
- previous or concurrent experiences of other schemes (QUS. I & II).
- tenureship (QU.I.)
- age, education, succession, retirement (QU.I)
- opinions of the scheme (QU.II.)
- attitudinal change (QU.II)

However, because definition of "socio-economic" criteria was not sought and pursued, the lowest common denominator - financial factors - came to be implicitly in place within the MAFF Evaluation. Thus, many of the above data were not used (those marked with an asterisk). Rather, the MAFF Evaluation used postinterview correlations, but with inconsistent analytical paths. Thus, analyses remained piecemeal and overly-focused around financial criteria.

One example of the inherent emphasis upon financial data and criteria is seen in Questionnaire I, Question 6.c.

"How could the Breadalbane Scheme be made more attractive?"
(PROMPTED; YES/NO):
- higher flat rate payment
- higher item payment
- less constraints
- different form of payment
- other

There was no attempt to investigate why certain answers may or may not be given. The implication was that financial considerations were the primary concern of all farmers. This represented a narrow approach, since the ESA, for farmers and landowners, touched on a variety of issues, *some* of which would be traded off for financial gain (see below). Thus, there was no assessment of what farmers perceived they were being offered, and how this then had to be offset against the promised financial benefits. No attempt was made, and no space was given over, to understanding 'alternative' rationalities which policy recipients might express. A major implication for the MAFF Evaluation was that questions concerning how the ESA might be improved were also seen only in financial terms.

6.2.3.2. Preoccupation with quantification of data.

Firstly, the emphasis upon quantification of data had direct implications for initial 'suitability' of data for the MAFF Evaluation, and for importance of issues in the final MAFF Evaluation report.

In addition, emphasis was placed upon "how many" and "what" changes, such as: ESA-induced land use and stocking changes; ESA-funded conservation work; and

uptake levels (11). These quantitative data were not combined with information concerning "why/why not"; for example, why was the ESA conservation work being carried out; why were there no changes in land use or stocking density (particularly as these had implications for longer term conservation activity, and for the environmental objectives of the ESA). Emphasis was upon *what* factors were involved and *to what extent*; and, more importantly, the cost to The Treasury, and the costs as related to the ESA-induced outcome. These became the only criteria for evaluating the success of Breadalbane ESA, rather than being only one facet of the overall analysis. The use of solely quantitative data is not axiomatically invalid. However, both the literature review (Chapter Four) and the discussion is Section 6.3. of this Chapter, demonstrate why such reliance upon these data types *alone* was particularly inappropriate to this setting, and led to partial and inaccurate information becoming the basis for the MAFF Evaluation.

Further, certain issues were not followed through because quantitatively they did not appear important, one example being that of on-farm labour. At the outset of the MAFF Evaluation, the on-farm labour profile was viewed as a resource or a constraint for on-farm ESA work and therefore for ESA adoption. This was due to the fact that a 'labour unit' represented 'x' man hours per annum, and was therefore a quantifiable resource positively correlated with ESA adoption. As the MAFF Evaluation progressed, it became clear that the ESA's requirement for existing on-farm labour was low - due primarily to the use of contract labour for the majority of the ESA work (see Chapter Three). Thus, the issue was not pursued any further within the MAFF Evaluation. However, further examination would have led to a greater understanding of the interaction between on-farm labour and schemes such as the ESA. The inherent diversity within the on-farm labour force would also have been illustrated, this being an important piece of information when considering the future of ESA-type schemes. There was no discussion of the current workload of the farm; who was involved with particular farm tasks; how the labour resources were currently being used; and the nature and frequency of any additional labour. Such details would have given a greater understanding of how farms could have adjusted to incorporate the ESA, and possibly reduced the use of expensive contract labour.

<sup>(11)</sup> A speculative, but nonetheless important observation is that, because uptake was high (70%) and was highest of all the ESAs, less investigation was made into reasons for adoption beyond payment levels and policy mechanism. If the scheme uptake had been low, would the MAFF Evaluation team have been given permission to look further (possibly to increase uptake)?

#### 6.2.3.3. 'Safe' analytical methods.

Due primarily to the emphasis from MAFF upon timeliness of the MAFF Evaluation, attention was given to answers rather than questions; to certainties rather than uncertainties. Specifically, the outcome was a 'snapshot' mode of assessment (12), using standard, 'safe' concepts, categories and methods. There was a trade-off between completion of the MAFF Evaluation within the agreed time-scale, and the reliability of, and confidence in, the data being produced. The approach once again precluded flexibility and questioning (13). Further, no opportunity was given for analysis of the range of new issues which the ESA of necessity raised as a shift in agricultural support policy.

#### 6.2.3.4. Questionnaires. (14)

The MAFF Evaluation contract, agreed by MAFF and SAC, specified that two surveys (see Appendix VI(i)) were to be carried out: firstly, a sample of farmers, landlords and estate factors, surveyed by direct visit; and secondly, a follow-up telephone questionnaire towards the end of the three year study. The issues to be addressed were also outlined; for example - baseline farm facts, uptake figures, ESA farm conservation plan details, other scheme adoption, and ESA attitudinal impact.

However, factors pertaining to the importance, and possible significance, of data, were excluded from the debate over data selection and methodology for its collection. That is, a consideration of those data required for a cohesive and

<sup>(12)</sup> It is recognised that two surveys were carried out over an eighteen month period; however, this constitutes a 'snapshot' both in terms of the overall time scale of policy development (15 years so far), and with respect to the aims of the scheme (conservation remit: see Nolan and Still [1992]; landscape remit: see Grant [1992]).

<sup>(13)</sup> The associated reliance upon 'tried and tested' methods and data is addressed by Rich (1981). He highlights policy makers' preference for safe, familiar sources and types of information, and argues that it is due to the need for policy decisions to be "subject to the least possible risk" (p.11) - particularly crucial within the given time-scale. Although this explains the scenario experienced by SAC within the MAFF Evaluation, it does not justify the outcomes.

<sup>(14)</sup> It must be stated that this discussion does not comprise an assessment of questionnaire methodology *per se.* Rather, the aim is to focus upon the implications realised in *this* MAFF Evaluation. The questionnaires facilitated the collection of base data and ESA-related data concerning the farming system, amount of ESA-funded conservation activities, number of participants and so on. However, these same questionnaires were inappropriate for the collection of the detailed, often qualitative, types of data required for an accurate evaluation.

accurate assessment, was low on the MAFF Evaluation agenda. As Canter et al (1985) have also observed:

"A self-structuring cycle is set in motion. Data are collected in a form that fits known methods of analysis. Standard analytical procedures are easy to use because they fit the usual data. Data are then commonly collected in the form of standard procedures" (p.82).

The fact that these standard procedures (15) had been adopted without explicit recognition of their implications, led to a specific problem in the Breadalbane ESA MAFF Evaluation. As Patton (1981) states:

"A major difficulty posed by human reliance on paradigms and heuristics for problem solving and decision making is not just their existence, but our general lack of awareness of their existence" (p.271).

This lack of discussion and analysis of methods led to a defensive rigidity from MAFF. The direct consequence of this was that suggestions for alternative, complementary approaches were immediately seen by MAFF as being unsuitable. The following example, which was a key to the MAFF Evaluation process (since it determined data types and delimited fields of investigation, particularly with respect to maintaining the focus on the individual as *the* unit of analysis) illustrates this further.

When one of the SAC Evaluation team (the author) proposed a four month period of fieldwork to gain a fuller understanding of the impact and uptake of the ESA, SAC received the following letter:

"At our meeting, x proposed spending several months living in the ESA in order to get a better understanding of the people and the impact of the designation. Having had more time to consider this proposal I am somewhat concerned on a number of counts ... Before we could agree to this deviation from the proposed work plan ... we may need to clear it through Survey Control Unit.... (Further): (i) exactly what is the purpose of this work and how would the information be collected? Is the proposal

<sup>(15)</sup> Which Patton (1981) has described as those "controlling the analytical process, screening unfamiliar data, anchoring the new situation within the narrow parameters of our past experiences, and making available to us primarily those definitions and approaches we have used most often in the past" (p.271).

to include lengthy interviews with local farmers and families, or is it proposed merely to chat in informal ways to locals in the butchers, bakers and local pubs? (ii) How is the information to be tied in specifically with the ESA designation rather than being a social anthropological study of a rural area? (iii) If this work were to be added to the study, what are the direct consequences ... in terms of its timely completion? ... The review of the ESA policy means that it is essential that the research be completed in the agreed contract time..."

MAFF Economics Division, June 1988.

The consequence of this was the requirement for a level of justification for *deviating* from the previously outlined standard procedure - which was far beyond the (non-existent) justification for the *standard* procedure itself. The appropriateness of the standard approach was not under scrutiny. This assumed suitability, reliability and accuracy of standard methods had implications for the data types collected, and for the subsequent accuracy of analyses (see below).

## 6.3. EXAMPLES OF THE EFFECTS OF THE MAFF EVALUATION PROCESS UPON RESULTS AND ANALYTICAL ACCURACY

# 6.3.1. ESA adoption/non-adoption was represented in the MAFF Evaluation simply as a dichotomous decision.

Within the MAFF Evaluation, the analysis of ESA adoption/non-adoption was reduced to a discussion of a one-off decision (yes/no) on the part of the farmer, with little account being taken of the number of ESA-related decisions which play a part in the final outcome (for comparative examples see Gladwin [1989]; Gladwin and Murtaugh [1980] and [1984]; Byerlee and de Polanco [1986]). However, results from the 1993/4 Fieldwork gave evidence for the superficiality of such a stance. It was possible to define nine key stages in the ESA decision process:

- (i) Preattentive criteria; seeking/sifting Information.
- (ii) Decision to request a survey of the farm.
- (iii) Farm survey.
- (iv) Receipt of the survey information.
- (v) Decision to request Farm conservation plan.
- (vi) Negotiation of the Farm conservation plan.
- (vii) Decision to submit plan to Scottish Office (SOAFD)
- (viii) Consultation with Scottish Office (SOAFD)
- (ix) Participation in ESA Scheme

Further, the 1993/4 Fieldwork results showed that the time-scale over which this total process occurs ranges from six to 12 months. At key points, the decision maker(s) decide for or against the ESA. These decisions and the key points are now discussed briefly, illustrated by the 1993/4 Fieldwork interview data.

Stage (i) concerns the "preattentive" conditions (which lead to an individual "specifying the set of feasible options open to them", Gladwin and Murtaugh [1980], p.17) that farmers place on the ESA when considering the possibility of Scheme adoption (see Table 6.1.):

I wouldn't join the ESA or any scheme if what's being wanted is too contradictory to what I'm doing; or if it's completely alien; or if there are restrictions... [NONR2:51-55]

The main consideration is its (ESA) level of interference with the farming activities. I don't want to be told how to do things. [SENR2:8-11]

The ESA's nice: nothing's laid down about specific stock numbers; it's not rigid. Had it been rigid, and had it not fitted in with our management plan ... we wouldn't have joined. [SER3:20-25]

The paperwork, rules and regulations. Farming's become bogged down with paperwork. So, you decide to do the things that you have to do, and the ESA is voluntary, so you leave it alone. The financial incentive isn't big enough. [SONR4:7-14]

If the ESA were to interfere with the running of the farm, apart from light restrictions, for example, the use of fertilisers, cropping patterns, then you'd have to think again about joining it. [SOR10:139-144]

I would be put off if it (ESA) was conservation directives from a group where I had no control. [SOR2:35-37]

Enough's enough at the moment; there's enough reasons for the Department (SOAFD) to be on my back. [SOR4:620-623]

We could manage without the bits they wanted to fence off, but it didn't make sense. [SER1:158-161]

I feel very angry at being told what to do; the trend in the past 5 years has been more and more towards conservation. [SONR4:47-50]

The final ESA plan - it has to fit in with the farming. [SER2:77-78]

#### TABLE 6.1. INITIAL ESA CONSIDERATIONS

This process of assessing the applicability of the ESA to individual farms occurs over several months, as highlighted in Table 6.2.:

I can't see anything in it for us. I've spent hours - afternoon after afternoon looking at this wretched thing (ESA farm map). [NONR2:142-145]

I've had a brief read of the ESA info ... but we don't want to be pestered by boffins ... I have pushed it to one side... [SENR2:54-55;58-59;75-76]

The Department (SOAFD) reminds us about the ESA when they come to count the cows; the Department then sends out the leaflets, you talk about it amongst yourselves and your neighbours for a couple of days and then put it away again. [SONR4:100-106].

There is a lot to think about with the ESA; I need to think it through very carefully. Also, there's too much other paperwork. [SOR3:103-105]

I haven't got down to it; I'll have to do it soon. I'll put my suggestions to them (SOAFD). [SOR3:267-270]

 TABLE 6.2.
 FARMERS' ESA ASSESSMENT OVER TIME

Farmers themselves appeared to understand that this process of assessment would take some time when the ESA was first introduced to the area (Table 6.3.).

Farmers like the nice routine that you work in farming. They don't like change, but if there's a financial incentive, then they'll think more about it. For example, when the ESA was first mooted, the farmers around here were horrified at first. [NOR4:177-183]

When you're considering the ESA, you have to weigh up a lot. When the first ESA - the Breadalbane one - first came out, there was A LOT of scepticism: it starts off voluntary, BUT what next - compulsory? The ones that did go into it realised it was a good thing, and therefore more joined. [SENR1:1-10]

## TABLE 6.3. PROCESS OF ASSESSMENT

Following the initial assessment by farmers, decision (ii) was made whether or not to have a Farm Survey carried out by FWAG (Farming, Forestry and Wildlife Advisory Group). The cost of such a Survey is £300 per farm business, and thus, for the majority, it was not a decision which was taken lightly; but certainly this did not indicate a firm decision for ESA adoption. The way in which the survey was carried out was observed closely by the farmers, and comprised stage (iii) in the decision-making process. The degree and nature of interaction and mutual understanding between farmer and FWAG adviser was crucial. Although there was later discussion of the plan with an agricultural adviser, the impression left by the FWAG adviser has been crucial in many cases, as it can imply a negation of farmers' own knowledge of the farm and farm management. The following quotes in Table 6.4. are examples of the kinds of feelings and responses generated at this point.

The biggest criticism is that people sit in offices, they've got degrees, they're intelligent, BUT they're all theoretical. And with farming and land, what it says in the book doesn't always happen. [SENR1:249-254]

FWAG - they're very unrealistic. That's what the farmers have been talking about. It did worry one or two of the other farmers ... [NONR3:180-184]

We want the dykes and underplanting. But they (FWAG) are more interested in fencing off bits for regeneration ... The ESA plan is too much telling me what to do... [SOR6:34-47]

The FWAG adviser didn't listen; she came onto my farm without having spoken to me first, and then I had to go and find her towards the end of the visit. She didn't think I had anything worth saying about the farm and how I run it and what I think is important. [NER1:26-34]

#### TABLE 6.4. RESPONSES TO FWAG FARM VISIT

Following the FWAG visit, most farmers waited until they received their Farm Survey before making their decision (iv). This was very much a key moment as farmers had the opportunity not to pursue the ESA Scheme any further, if they felt that the suggestions made were sufficiently incompatible with their farm management. This was also where pre-attentive criteria played a recurring role, since this stage involved moving from general to specific considerations. That is, until this point, the focus had been upon the general ESA management guidelines, and these formed the basis of earlier thinking. Stage (iv) focuses upon the specifics of the ESA for *this* particular farm - "my grazing regime, my shelter, my good pasture, hill ground". Thus, issues that were perhaps satisfied at the general stage now had to pass closer scrutiny. Responses at this stage are exemplified by the comments in Table 6.5.

They were very stupid suggestions from FWAG. They're all concentrated around the farm (ie: close to the steading) and this is the only good ground ... I can't give ground away, because of shelter and if the weather's bad ... The second ESA plan - I don't know how much I can knock off (take out). If they're going to be that pernickety, then it's no' for us! [SOR4:628-654]

FWAG did the farm plans; the farm is mine to do what I want with it; I try and make it viable; they (the conservationists) lost sight of that. [SOR2:20-24]

They (FWAG) wanted land fenced off from 15th May to 15th August, but this is where we lamb, graze and feed ... It's a working farm. The ESA is laughable for anyone who's in the serious business of farming. I can't lose fields. [SOR7:22-25:28-31]

#### TABLE 6.5. FARMERS' RESPONSES TO SURVEY CONTENT

The farmer was then faced with a number of options: (a) give no further consideration to the ESA; (b) postpone any further ESA considerations; (c) wait for discussion with the agricultural adviser (Stage (v)).

It is necessary to examine the third of these options because it became clear that its significance to the farmers was paramount. "J" is an agricultural adviser, well known and well trusted in the area. For the overwhelming majority of farmers within the ESA, he is their next point of contact. The comments in Table 6.6. illustrate J's role at this stage:

Once J has been around for a visit and persuaded you to join, you're persuaded! [NOR1:158-161] I can't do anything about the ESA until I hear from J. I imagine that it'll be OK; he'll have based it very much on the farming side rather than the conservation side. [SER2:113-117] J's role is excellent and very accommodating; he is appreciative of both angles (conservation and farming). [SOR2:35-41] The role that J has as a negotiator seems to be very important, perhaps increasingly this time, as there's more input from the conservation advisers than in the first round. [NOR2:161-166] It's quite a complex Scheme, but if it wasn't complex, it wouldn't work. J. has the ability to come up with a 5 year plan and sensible options. [NER2:16-19]. The local adviser has been there as long as you've been in farming, and this is important. [NOR5:243-245]. I'm delighted that they (ESAs) are administered by the agriculture department - this is terribly important that conservation and care of the environment is introduced to farmers through people they know, trust and can depend upon - the Department (SOAFD) and SAC. [NOR5:46-53] Conservation must not be introduced to farmers through environmental agencies. We don't want a too green approach. Persuasion as compared with legislation is the way forward .... FWAG: it's swinging away from agriculture; they're (FWAG) going up the green path too fast for farmers. They need to introduce schemes through those we know. SAC is important because of this; I've known J. for 30 years, and I know him socially; FWAG I don't know socially. [NOR5:192-196;247-259].

#### TABLE 6.6. IMPORTANCE OF AGRICULTURAL ADVISER'S INPUT

Many of the farmers would not have joined, or would have taken much longer to join, had the agricultural adviser not possessed negotiating skills, and the ability to appreciate both the farming and conservation objectives of the ESA. The essential element of this visit was the role of J in formulating trade-offs and thereby moving towards compromise (Stage (vi)); two quotes illustrate this point (Table 6.7.).

I am working for the minimum ESA work for the maximum ESA money. For me, there are degrees of joining; and if they wanted me to fence off even more areas then I wouldn't join. [NOR3:78-83]

Therefore the ESA MUST have compromise, like, I'll do that pond, BUT I need that rough bit. [NOR5:140-142]

#### TABLE 6.7. ESTABLISHING COMPROMISE WITHIN ESA FARM PLAN

For the majority who reached this stage, and successfully established suitable compromise, decision (vii) is whether to submit the Plan to the Government Department (SOAFD). For those who went to this penultimate stage, there was further negotiation (Stage viii) of the ESA Farm Conservation Plan with SOAFD.

If there were changes which disrupted the balance established at the previous stage of negotiation (stage vi), a decision to opt out of the Scheme could still occur. In the majority of cases, however, agreement was reached. *This* therefore, was the point at which the farmer made decision (ix) and joined the ESA scheme for the initial period of five years.

6.3.2. ESA adoption was represented within the MAFF Evaluation as synonymous with other similar, but different, decisions.

Although not reported directly in the MAFF Evaluation (due to lack of structure and definition, and therefore lack of confidence concerning how data should have been used), QU.7b (Objectives) and Question 7c (Other Agreements) had inherent within them the implication that, if a farmer is investing in x, y, or z, or if he had joined scheme a or b, then he would be more likely to adopt the ESA. What is *implied* is that such decisions represent to the farmer the same meanings, implications, risks or benefits as the ESA, or that the similarity exists to such an extent that it does not require differentiation within the MAFF Evaluation.

The following example from the MAFF Evaluation demonstrates this: Base-level data were collected and subsequently correlated with adoption. One example is that of farmer objectives. The following question was asked in Questionnaire I (Qu.7.b.):

Objectives (PROMPTED; YES/NO/FIGURE): - is there a need to increase family income - by how much a year - are you hoping to expand your business if the opportunity arises - are you interested in new farming enterprises - are you interested in other farm-based enterprises - are you interested in off-farm enterprises - are you prepared to borrow to fund new enterprises - are you prepared to borrow to fund new enterprises - if so, what source would you contemplate: - family - bank - other - what is the most you would borrow
--

The main issue here is that the above scenarios were implied as being similar decision settings to ESA adoption. In addition, no account was taken of the fact that *interest* is different from *intention* (that is, the notion of hypothetical bias; see

Moser and Kalton [1989]). There was no analysis of possible conflicts or areas of integration with ESA; and there were no data on farmers' views concerning why and how they farm, and therefore how the ESA may or may not fit in. The data therefore proved of little use to the MAFF Evaluation.

The following three examples illustrate how spurious these correlations with non-ESA decision setting were.

#### 6.3.2.1. Context of ESA decision.

The ESA decision process generally occurred over a period of six to 12 months. During this time, many other farm and family related situations are experienced. This therefore comprises the dynamic context within which ESA decisions are taken; it is therefore not as all-absorbing for farmers as may be inherently implied by the research focus and emphasis placed on ESA-type adoption studies. Table 6.8. illustrates this further.

```
      The ESA is NOTHING in the grand scheme of things ... The ESA is so marginal to us set in its whole context. [SOR4:151-161;265-266]

      The ESA decision is rather a limited field. [SOR2:43-44]

      Farmers look to the REAL subsidies, but not to the ESA-type ones... [SOR4:601-602]
```

#### TABLE 6.8. THE ESA IN CONTEXT

This observation does not necessarily play down the significance of the ESA decision to farmers, but rather highlights the way in which such a decision-field is seen, and that the context, and factors called in to play, are different for the ESA than for, say, a specifically production related issue (see also Taylor and Miller [1978]). This stresses the necessity for appreciating and analysing the objectives, plans, and concerns which form the dynamic reality of the decision makers' context, and also differentiating them from ESA-related decision making.

#### 6.3.2.2. ESA and risk.

ESA-decision making comprised risk-taking for individuals: to adopt involved risks over the degree of compromise and negotiation which could be achieved. Not to adopt involved the risks of being penalised at a later stage due to shifts in agricultural policy objectives concerning levels of environmental obligation. As a result, risk cannot be linked solely with *adoption* of the scheme, particularly since

it could represent a variety of options or strategies. The quotes in Table 6.9. are illustrative of this complexity.

It's something we have to consider - the future ... If the ESA was a 10 year commitment, that might just stop me from joining. Had you asked me to do that 5 years ago, it was fine. BUT now there are so many fluctuations [NONR3:85-96]

If your eggs are in a few baskets, then it's OK. If they're all in one, then there's problems. The ESA gives a chance to spread those eggs. [SENR4:72-75]

The ESA is a fixed, known figure for the next 5 years, as compared with stock which is unsure, even at market. There's nothing certain about stock; it might improve a bit. So, in some ways, the ESA is LESS risky financially. [SOR1:165-171]

#### TABLE 6.9. THE ESA AND RISK

The specificity of decision makers' contexts must therefore be appreciated, and the uniqueness of what the ESA represents to farmers in terms of either negative commitment, or risk reduction, must continue to be ascertained rather than implied.

#### 6.3.2.3. The public nature of farming.

This criterion was alluded to on a number of occasions during interviews, as was its influence on behaviour; the following quote is illustrative:

Farmers care what others think of them; it is the most important thing after the economics of the farm. You put so much of your life into it, you want it to look right. [NOR4:216-220]

The delineation of such influence was made clear, however, the contrast being made between the specific and limited ESA scenario, and farming as a whole. In the context of the ESA, each farm is viewed as unique and individual, in terms of size, ratio of rough grazings to inbye, and so on, and thus the ESA may suit one type of farm, but not another. Further, ESA works are carried out at different times of the year to suit the farmers concerned; they are not necessarily cyclical - and thus there are not the same levels or means of comparison. This observation is also reflected (below) in the data illustrating that neighbour influence diminishes as the ESA process becomes more farm-specific. However, in terms of farming *per se*, the following examples (Table 6.10) illustrate the possible scenarios:

I always want to be one step ahead, for example, with feeding my sheep. I want to very quietly have it better. Round here, most farmers put their fertiliser on at the end of May - well, I'll put mine on in March to get the best grass in the district. But the ESA is a very individual thing, as compared with farming activities. [SENR1:423-435]

Farmers are quick to criticise other farmers if their stock aren't looking right ... With farmers, they notice when each other's combining (harvest); they see each other doing particular jobs, like baling hay. You see you neighbour doing something like baling, and you think to yourself, "perhaps I should be doing that". And if your harvest isn't ready, but you see your neighbour getting his is, you wonder whether you should do yours. And of you're getting your in before your neighbour, that's a good feeling! ... Neighbour influence tends to involve things that are affected by the weather, like spraying. [NOR4 221-223,234-246;264-266]

## TABLE 6.10. THE PUBLIC NATURE OF FARMING PER SE.

This distinction raised by farmers is crucial to an accurate representation of neighbour influence in specific decision settings.

6.3.3. <u>Reasons and Factors associated with ESA adoption were interpreted (within the MAFF Evaluation) as being structured around predetermined issues.</u>

The reasons and factors associated with ESA uptake were either retrospectively correlated (16), or were linked to farmers' anticipated considerations concerning the scheme, these having been primarily structured into 'conservation', 'financial' or 'policy mechanism' terminology.

<sup>(16)</sup> Correlations included individual farmer's age, farm size, and tenureship status.

The MAFF Evaluation of the ESA addressed the factors affecting ESA adoption/non-adoption in the following manner. Farmers were asked why they had joined the ESA, or why they might join it. (Questionnaire I):

```
QUESTIONNAIRE I: Qu.6.a. (prompted; yes/no)
Why did you join an ESA scheme?/Why might you join an ESA scheme if
available?
- interest in conservation and the environment
- need for fencing and walls
- additional source of income
- other .....
```

However, this prompted question did not allow for a pursuing of any of the issues raised, and led to a severe over-emphasis within the MAFF Evaluation Report on: "interest in conservation and the environment", and "income/extra monies". The narrowness of this emphasis is known since, when farmers were asked - subsequent to the ESA Evaluation - what they considered when thinking through the ESA, and what influenced them, a whole variety of factors emerged (see below). This approach used in the MAFF Evaluation is too 'safe' (see Footnote 13), with its emphasis upon being able to fit respondents' reasoning within the predetermined categories (see Canter *et al* [1985], pp. 80 & 83). The following comparable quote from Patton's evaluation research provides further indication of issues that need to be taken into account:

"...."Why did you join this program?" The actual reason for joining .. is probably made up of a constellation of factors, including the influences of other people, the nature of the programme, the nature of the person being interviewed, the interviewees' expectations, and practical considerations. ... the person to whom the question is posed must pick out some level at which to respond" ([1990] p.314).

The results from the 1993/4 Fieldwork contrast with the above narrowlyinvestigated approach and results. These data are now discussed. The criteria used by farmers when questioned concerning their ESA-related decisions are presented in Table 6.11. Although not a prioritised list, trading off financial gain versus restrictions on farm management was the most cited response.

- \* Financial aspects and trade-offs
- \* Other related experiences
- \* Perceptions of the ESA Scheme
- \* Shifting Policy Objectives

## TABLE 6.11. FACTORS CONSIDERED IN RELATION TO ESA ADOPTION

6.3.3.1. Financial aspects and Trade-offs.

Farmers were aware of the levels and types of payments available under the ESA. The influence of such payments as incentives towards ESA adoption varied between farms: Table 6.12. gives some examples of responses.

Satisfaction with grants: As a tenant, I'm paying £6,000 a year for n as it only involves about a fortnight's work difference; the flat-rate payment is a real in	ny rent the ESA's therefore a big help, especially each year. So the ESA money makes a big ncentive. [NOR4:123-124;135-141]
Management payments of £80/hectare is mo that from prime land. [SENR1:393-396]	ore than we'd make from farming it - we wouldn't get
Dissatisfaction with grants: The level of (ESA) grant aid should be calc nowhere on a big farm like this it's a dr	ulated in relation to farm size; £4,000 per year goes op in the bucket. [NONR2:85-88;91-92]
	t. The ESA's of no financial benefit to us

TABLE 6.12. FARMERS' RESPONSES TO ESA GRANT LEVELS

In addition, farmers aligned payments with two other factors: firstly, the extent to which the grants met the costs of carrying out the conservation work; and secondly, the restrictions imposed by the ESA on the management of their farms. These two factors were important at both the preattentive stage of adoption/non-adoption and at the specific stage of Farm Plan negotiation, where the costs and benefits were traded off against each other. Table 6.13. illustrates these points.

Whether	r or not y	ou join the	ESA deper	ids on whi	at you war	nt to give	up for	money.	[SER1:	58-60]
I'm traa	ling off p	otential ES	SA income d	igainst po	ssible incc	onvenience	e; if I d	lecide n	ot to jo	in the
			st. [NOR3:7							
Thara h	as to he	i balance l	etween the	financial	benefit an	d being a	ble to	make m	vown	
		2:152-155]		J	,	0				
<b>D</b>		sina ta ius	t take the n	iones for	amething	and do it	though	n• there	s got t	o be
			intage to y			una ao n		,	- 0-	

## TABLE 6.13. FARMERS' TRADE-OFFS ASSOCIATED WITH THE ESA

Thus, the view that money was crucial to initial consideration of the ESA, but did not guarantee adoption, was cited on a number of occasions, and was certainly evidenced at the preattentive and later stages. For the majority of farmers, trading off was the key to their ESA adoption/non-adoption decisions.

It is worth noting that, for some farmers and landowners, trade-offs to accommodate the ESA were less of a hurdle than for others, since the scheme was providing extra funding for work they had planned in any case (Table 6.14.).

There's nothing in the ESA that we're not doing here on the estate anyway ... And if someone is prepared to pay me for what I'm largely doing anyway, then fine ... [SENR2:86-87;93-95]

The ESA has come at the right time for us; we're over the moon. It's getting money to do what we want. [SENR3:316-318]

#### TABLE 6.14. ESA CONGRUENCE WITH EARLIER INTENTIONS

This congruence increased both willingness to join the Scheme, and efforts at accommodating the ESA within their current system; for example:

£2,000 (ESA) is no incentive to us in this case, because this is what we want to do with the farm, so we would be happy to plough the £2,000 back into the farm. [SOR10:207-211]

This factor was important when the ESA was being considered at a general level, since the Management Guidelines provided a clear vision of ESA possibilities on the farm. Subsequently, at the specific stage, congruence enabled negotiation for plans which would tie in most with pre-planned works.

PHOTOGRAPH 6.1. DYKING WORK BEING CARRIED OUT WITH ESA . FUNDING IN BREADALBANE ESA.



6.3.3.2. Other related experiences.

Another example which farmers cited as significant to their ESA adoption/nonadoption was previous related experiences, both ESA and non-ESA.

## ESA related experiences:

Firstly, farmers cited examples of how their previous ESA farm conservation plan had progressed. For example, the experiences which were stated as having a direct negative effect on future ESA adoption comprised, primarily, the sufficiency of the ESA grants for dyking; the following quotes (Table 6.15.) illustrate this:

In the last year, I fell foul of the Department (SOAFD). We were restoring an important, historical dyke ... Anyway, we overspent by a chunk of money -  $\pounds$ 800! The grant was at  $\pounds$ 10 a square metre, and I claimed  $\pounds$ 2,500; they wouldn't pay me! I then closed the (ESA) scheme. Now the dyke will fall down and I'll have to put up a fence. [NOR5:85-87:92-98]

From the first ESA, we're out of pocket on dykes; we've been waiting for money for over 6 months. We lost thousands even in interest. They were high dykes, so we had to pay £18 a square metre. [SOR7.59-65].

In the last scheme, the compensation payment (flat-rate payment) was used to pay the dry stane dyker. We got no financial benefit. Dykers know what farmers are getting paid through the ESA; so therefore farmers end up out of pocket. [SOR7:183-193].

TABLE 6.15. PREVIOUS EXPERIENCES OF THE ESA.

In addition to these direct experiences, farmers made comparisons between the first and second ESA Schemes. The basis for these comparisons comprised either experience of the first ESA, or discussions with neighbouring farmers. The criteria for comparison related to benefits which the farmer could derive from the scheme, and the level of conservation input; examples of these are cited in the following Table (6.16.):

EXTENT OF BENEFITS FROM THE ESA: The new ESA is of less benefit to me than the first round. There's a couple of areas which are being fenced off in the ESA for grazing and management which are of no use to me whatsoever. NOR3-65-70]
The first ESA was largely beneficial to the farmer - dykes etc It's good because at the end of he day, once a dyke's there, you don't have to put up fences every 20 years. [SENRI:165-171]
in the new ESA, the financial incentives are greater, but so are the restrictions. [SONR1:10-12]
Farmers want to see some benefit - dykes and fences. I don't see that this time (second ESA). The last scheme (ESA) was better; there were more practical things that helped us; there was some physical benefit. [SOR7:155-158;169-172]
<b>INDEPENDENCE, AND THE CONSERVATION ELEMENT OF THE ESA:</b> The ESA is more strict this time - this is what I've heard. [NOR4:33-34]
I've a sneaking feeling that once you are in the ESA scheme, you are under the thumb with respect to what you'll be able to do. [SER2:50-54]
It frightens me - what they'll find (conservationists); all these rules and regulations SONR4:85-87]
The ESA, it's voluntary at the moment, but once you've entered, they'll say "this little bit's compulsory". I worry that we are going to get penned in. [SOR4:574-578]
They'll (conservationists) want more and more every time the plan's reviewed; the business of farming will become secondary. [SOR7:145-148]

TABLE 6.16: CONCERNS OVER THE ESA AND CONSERVATION INPUT.

## Non-ESA related experiences:

A number of issues had become increasingly important to farmers at the time of the 1993/4 Fieldwork, including: the modified CAP and the subsequent requirement for extensive form-filling under the Integrated Administration and Control System (IACS); and the continued debate over Sites of Special Scientific Interest (SSSIs) and their associated restrictions on land use, particularly grazing. These directly influenced approaches to the ESA, as exemplified by the Table 6.17.

The whole thing (SSSI) has made us more determined against the ESA ... SSSI - I don't agree with that at all [SONR4:44.45;73-74;77-83]

Forms - too many to do: VAT, Returns etc. And the ESA is just another one. It puts you off because everything is boiling down to statistics. [SOR6:99-102]

## TABLE 6.17 THE IMPACT OF NON-ESA ISSUES

These experiences in fact became the criteria by which the ESA was judged. In certain cases, previous non-ESA experiences led to non-adoption at the preattentive stage of the decision process (Table 6.1.).

## 6.3.3.3. Perceptions of the ESA Scheme.

The perceptions that farmers and landlords held of the ESA affected the extent to which they viewed the scheme as appropriate to, and workable within, their own contexts. The main facets cited were: the nature of the ESA-funded work; and compatibility with good farming practice.

Firstly, the ESA was seen by many individuals as being primarily appropriate to sporting estates and larger farms with a sporting interest (Table 6.18).

The ESA - it's all estate management things, for example, fencing off a bit of ground to increase the game-holding capacity, the aesthetic look etc.. [SENR2:206-209]

The ESA also does planting; there's no way a tenant's going to do that because he would be doing it on someone else's property. [SOR10:153-159]

THE TENANT: the ESA hasn't got a lot to offer him; dykes are the landowner's responsibility; enclosing areas - this may be where he feeds stock; prohibition of grazing - may lead to problems. Therefore the restrictions are more onerous on the farmer who's trying to make every bit of ground count - sheep and cattle - these are the two options for him here ... THE LANDOWNER WITH TENANTS: he's at the other end of the spectrum; The ESA is seen as a very good thing. The landlord doesn't worry if the tenant farmer is bothered by the restrictions; he (landlord) sees opportunities for ponds for wildfowl, it enhances his playpark, he sees the dykes. You have to look at all these standpoints. [SOR8:320-348]

## TABLE 6.18 PERCEIVED NATURE OF ESA WORK

It is not possible at this stage of the research to estimate the precise degree of influence that tenureship (see Gasson and Hill [1984]) has on ESA adoption. However, the image of the ESA as "estate" work, and the reality of the landlord-tenant hierarchy in this region, reinforces tenure as a particularly significant factor. Table (6.19) illustrates this issue further.

The Laird's permission is important. Lairds can stop farmers from joining the ESA. They could object to 4 or 5 things, and then it's not worth your while being in the Scheme. [SOR1:94:98-102]

The Factor and the Laird are pushing me to join the ESA. Money is being spent on the farm, on dykes, BUT I'm losing ground on the inbye for grazing and I'm being asked to reduce sheep numbers. The estate is getting the benefit... [NER1:138-144]

## TABLE 6.19 LANDLORD INFLUENCE ON ESA ADOPTION

PHOTOGRAPH 6.2. AN ESTATE OWNER WITHIN BREADALBANE ESA.



PHOTOGRAPH 6.3. A TENANT FARMER ON AN UPLAND ESTATE WITHIN BREADALBANE ESA.



Secondly, farmers within the area have defined "good farming" as a concern for, and awareness of, livestock, and aiming for high standards of production. For many, the ESA is definitely seen as a move away from such standards (Table 6.20); and, for a number of farmers, the ESA is not an option on these grounds alone.

I cannot lose ground and continue farming in the same way; I'd need to improve other bits to carry on: In terms of genuine farming practice, that's the problem. The ESA goes against good farming practice. [SOR4:641-647]

The ESA - it's pushing people away from good farming. [SOR6:80-81]

It's a working farm. The ESA is laughable for anyone who's in the serious business of farming. You can't lose fields .... No farmer worth his salt would move his land out of production ... The ESA - it's miles away from good farming practice... good practice is keeping the place tidy. [SOR7:28-31,204-206,256-258]

With the ESA, farmers are being encouraged to stray away from farming, to trees, wetlands etc.. Now there are grants to encourage wetlands ... as compared with the 1960s and '70s, where farmers were getting money to drain land. This has led to a lot of disillusionment of farmers. [MI4:242-250]

BUT what about job satisfaction?? My sons, who are aged 24-30, are trying all the time for peak performance. They push for production - the peak in cattle and sheep. The change in emphasis towards conservation: how much satisfaction will there be? [NONR3:114-121]

## TABLE 6.20 THE ESA AND FARMING STANDARDS

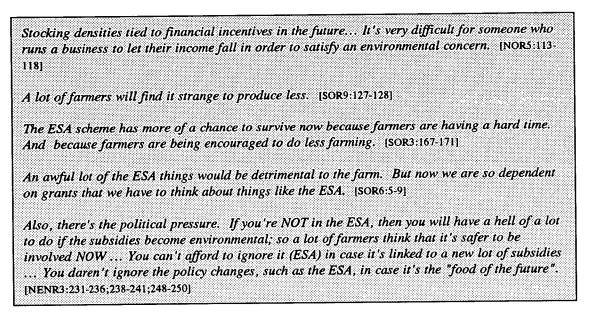
A farmer's comments concerning an ESA Farm Visit provide a further insight:

The Estate manager pointed to a boggy bit on the farm, and said to us that 30 years ago, that would have been considered bad farming, and as a Manager of a tenant farmer, he would have served an order on him for bad farming; and NOW they (conservationists) want to put a fence around it! [NOR5:261-281]

The influence of these perceptions is both at the general level - the principle of the Scheme - and at the specifics of having to view farming in a different way. This remains a contentious issue, and is one which causes concern, anger, confusion, and uncertainty amongst potential ESA participants.

#### 6.3.3.4. Shifting Policy Objectives.

A number of farmers discussed the changing agricultural policy context within which they now farm, and how the ESA is part of this; Table 6.21 provides examples of these views, and their effects on ESA adoption.



### TABLE 6.21 SHIFTING POLICY OBJECTIVES

These issues are important at initial stages of ESA decision making. In addition, they also represent farmers' resignation to what they perceive as a major policy shift - and are thus a factor in encouraging ESA adoption at the latter stages of decision making.

6.3.4. Factors affecting adoption were seen in terms of the individual.

The singular reliance within the MAFF Evaluation upon questionnaires and interviewing of individuals resulted in a lack of information concerning the relationships between farmers, and within farm households. This is a particularly significant omission when addressing the uptake of this voluntary Scheme.

#### 6.3.4.1. Neighbouring farmers.

The Questionnaires used in the MAFF Evaluation focussed on the individual decision maker; no reference was made to neighbouring farmers. However, the MAFF Evaluation Report did note that 4% of farmers had mentioned that their

neighbours had had some influence on their ESA adoption. However, this was not pursued since only a small percentage of interviewees had highlighted it.

However, the 1993/94 Fieldwork revealed (see below) that, although farmers feel that the *final* decision to adopt/not adopt is theirs alone (due to the individuality of farm circumstance), neighbouring farmers and colleagues definitely have some influence. This important point was therefore omitted (17) during the MAFF Evaluation, due firstly, to the focus on individual questioning; and secondly, because such data could not readily be aggregated - since 'neighbour influence' represented an interaction *between* farmers rather than simply an *individual* farmer activity. The methodological scope to accommodate it did not exist within the MAFF Evaluation structure. These data (from the 1993/4 Fieldwork) are now discussed further.

From the outset of Breadalbane ESA's implementation, farmers have gained information concerning the Scheme from neighbouring farmers and landlords. They felt this to be particularly important as the ESA represented a departure from conventional product support measures and thus its farm-level implications were less certain.

Although farmers recognised increasing isolation, as exemplified by the following quote, it was also stressed that a good neighbour is not necessarily the person next door, but relates to a close association with whom interaction and discussion on important issues can take place easily (the "significant other(s)" - defined by Coughenour [1976]; Schroeder *et al*, [1985]; Gasson [1971]).

Isolation - we're farming here on what were 4 farms. Our nearest neighbours are 2 miles away in either direction. Everyone's so busy. Unless you're at market you don't see folk. It's something we have to overcome, and rethink how we keep in touch... If you're tied to a stock farm, it's not so easy to get around. [NONR3:354:361]

In addition to those individuals who are important to a farmer, rumours from other farmers or landlords on similar farms/estates influenced thinking. As one landlord explained:

I know one of my neighbours is in it, and his concerns are probably much the same as mine ... It's easier to talk with someone who's done it, and who knows all the rules; someone who's in the scheme (ESA) and has first hand experience. Someone who has a similar set up and the same outlook as me concerning land use. [SENR2:171-177]

<sup>(17)</sup> Also, by implication, the adoption dynamics within a community/communities is omitted.

Thus, neighbour networks do exist and are vitally important in providing opportunities for direct discussion of the ESA Scheme (Table 6.22); also, the influence of community leaders in such networks was recognised by extension agencies connected with the ESA's implementation.

I've never heard anything against it ... My neighbour is in the ESA; one bit he showed me benefits him a fair bit financially. If there's money in it, I want to get involved in it. A few neighbours - chatting about the ESA. [SONR2:66-70:85-88]

With the original ESA Scheme, a lot of people were not in it until they realised how easy the scheme (ESA) was. Then they all wanted to join. [SER2:247-250]

Initially, there were quite a number of people who didn't want to join. The first people in got money, and this gave their neighbours the idea to do it because they saw their neighbours getting money for nothing. [SOR8:249-255]

Most farmers, if they see their neighbours benefiting financially, then they want it too. [SONR6:85-87]

A. (town) has been in it for a number of years; they've said it's money for old rope - money for farming how they've been farming anyway. [SENR4:37-141]

The ESA leads to improvement of the farm I'd say. A neighbouring farmer - the ESA's helped him, he's not had to change his farming at all. [SONR6:78-82]

The farmers in the new ESA, and those in the existing ESA, know that the ESA's been financially beneficial, so they were queuing up to join it. [ADV1:8-12]

#### TABLE 6.22 FARMERS' DISCUSSIONS OF THE ESA

Farmers emphasised that the ESA-related discussions in the network diminish as an individual's adoption/non-adoption procedure moves towards the specific, single farm, basis (Table 6.23).

Farmers talked a lot initially to each other about the ESA, then once they are in it, they don't talk about it much. [NOR4:185-188]

The ESA depends on each farm. So if your neighbour joins it doesn't really affect whether or not you join. [SOR4:676-679]

It's your own decision ... The ESA affects everyone differently. [SONR2:88;93-94]

#### TABLE 6.23 LIMITS ON NEIGHBOUR INFLUENCE

This is an important distinction, demonstrating the differences within neighbour influence. Farmers are clear about where such influence occurs, and when it becomes an individual's decision (18).

#### 6.3.4.2. The farm household.

The focus on the individual also implicitly reinforces the view of the farmer as an autonomous, decision-making unit, whereas the reality of the decision-making nexus is far more complex and dynamic (see Chapter Four). The former emphasis omits the potential complexity of the domestic dimension, which in conventional evaluations (such as the MAFF Evaluation) is often merely seen as a "black box" for which there is no time to investigate. The following quotes, however, illustrate how it is an error to assume the level of involvement/non-involvement of the farm family in farm-related, and ESA-related, decision making.

Firstly, the 1993/4 Fieldwork data illustrated the types of farm-level decision making arrangements which exist on farms within the Breadalbane ESA; the following quotes exemplify the variations:

I am in partnership with my husband and brother; they're older then me, and they're thinking of retiring. They have three sons... [NONR3:74-76].

We're both involved in the decisions; we're brothers and we run the farm together. Mother here lets us run things; she doesn't interfere, she lets us get on with it. [SONR1:93-99]

I farm with my son; most things are done with him now; he's got to take over eventually. [SOR1:82-84]

My wife and son are in the farming partnership with me, so decisions are joint. [SOR10:69-71].

Decisions are mostly made with my husband ... Also, anything that involves spending money, I'd talk through with my sister and mother (they're business partners too), but not the day-to-day running. [W1:3-4;23-27]

TABLE 6.24 VARIATIONS IN FARM HOUSEHOLD DECISION MAKING ARRANGEMENTS.

<sup>(18)</sup> These findings are consistent with those reported in Section 6.3.2.3. concerning the distinction between (i) neighbour influence associated with farming *per se*, and (ii) neighbour influence associated with ESA adoption.

Secondly, the data concerning two generational households and ESA decision making often pointed to the changes which the senior of the two generations (within a farm business) anticipated upon their retiral from the farm. The following two quotes illustrate the types of changes which farmers identified, and their implication for ESA adoption:

If they (the sons) take over, they may want less cattle and more sheep. But this change would interfere with the ESA, because the absence of sheep from this farm from March to October is what's led to the orchid area etc.. [NONR3:74-84].

In 10 years' time, my son - who HATES sheep - would go into the ESA scheme (if I'm too old to go up the hill!). [SOR3:295-298].

#### TABLE 6.25. TWO GENERATIONAL FARMING AND THE ESA.

The 1993/4 Fieldwork interviews with farmers' wives (see Chapter Five for discussion) facilitated the collection of data concerning husband and wife involvement in farm-related decision making. The interviewees emphasised the importance of clarifying the extent of the involvement of the farmer's wife, rather than assuming her input. This point is illustrated through the following quotes:

It's a conscious decision on the part of the farmer's wife - whether she's going to become involved in the farm. It's her decision. There'll be some wives who won't get involved in the farm at all - there's no way some of them would get their hands dirty... Less and less wives are involved in the farm now. [W1:167-174:188-189]

Most tenant farmers survive because their wives teach or are nurses (sometimes nightshifts so they can then work on the farm) or do B&B. I'm the only stay at home farm wife around here ... Some wives work because they WANT to work not because they HAVE to [W2:113-114]

It's a definite decision to be or not to be involved in the farm on the part of the farmer's wife. You can't assume that they're involved just because they live on the farm. [W2:163-167]

The farmers' wives that I knew had to make a decision whether to be involved in the farm, or to take up a previous or new skill, like teaching or nursing. [W3:62-67]

Before farmers' wives came onto an ATB Training Course, they'd come to a decision that they were going to take over that aspect of the farm business. [W3:172-176]

## TABLE 6.26. THE EXTENT TO WHICH FARMERS' WIVES ARE INVOLVED WITH THE FARM.

It is evident therefore, that the level of input from the farmer's wife can vary considerably between farms, depending on whether she has *chosen* to be involved with the farm business and associated decision making. If she *is* involved, then her

input will be important to the decision making process. Therefore, it is necessary to know, for the geographical area under study, the actual extent of farmers' wives active involvement in farm-related decision making, and the implications this may have for ESA adoption decisions.

Further, for those farmers' wives who had decided to become involved with the farm business, the interviewees highlighted variations in the *degree* of their potential involvement. The following quotes (Table 6.27) illustrate the issues raised:

#### **BOOKS:**

Who does the books (accounts) is a major factor; if the man does the books, he'll wear the trousers, and the wife won't know very much about the farm business. If the wife does the books, it doesn't necessarily mean she wears the trousers. [W1:87-93].

D. (my husband) does the accounts because he did accountancy ... If I was more aware of the cashflow and what it was doing, then he'd be able to ask me a question about tractor purchase without having to fill me in on the cash flow ... Those who know the farm accounts would have a more valuable contribution to make to farm decision making. [W2:34-35;41-45;63-66].

#### BACKGROUND, AND WHO OWNS THE FARM:

Who makes the decisions depends a lot if the wife is from a farming background in the first place ... And it depends on who was in the farm when they got married. The family in the farm first is in the driving seat ... The two-generational farming household: I feel sorry for a young wife coming into that. In some cases it's OK. [W1:95-100;103-105].

There's a lot of trouble in two-generational farming; the older generation has got to get out of farming or move somewhere. [W3:161-164].

Inheritance is a big factor as to who's in control on the farm. [W3:55-56].

#### YOUNG FAMILY:

A young family does it ... it throws you into your traditional role - like keeping the house cleaner and cooking for the baby ... He does the firewood, I change the nappies - we do these roles because that's the way it works ... I'm second in command here, but it's due to the circumstances. All the decisions in the first year were very much on an equal footing, and that's how we mean it... [W2:85-88;53-57].

#### **MONEY:**

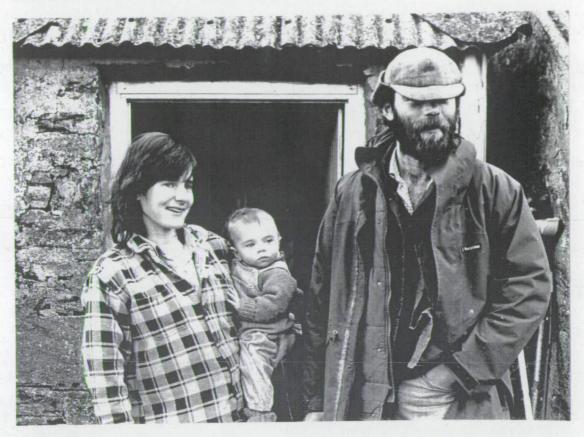
We both began farming together on a dairy farm. It was very much a joint thing; both our monies were involved. This is because we were both trained and so we looked on it as an equal thing. We would discuss most things. [W3:1-8]

#### **DIVERSIFICATION:**

When we moved here, we diversified into tourism ... This is more the woman's realm ... I then didn't have time to be involved in the sheep. Then the horses and the accommodation became the biggest earner. The farming side was definitely cut back. [W3:25-27;33-37]

TABLE 6.27 VARIATIONS IN THE INVOLVEMENT OF FARMERS' WIVES IN FARM-RELATED DECISION MAKING.

PHOTOGRAPH 6.4. A YOUNG TENANT FAMILY ON ONE OF THE UPLAND ESTATES IN BREADALBANE ESA.



PHOTOGRAPH 6.5. A DIVERSIFIED FARM WITHIN BREADALBANE ESA



In addition to clarifying the varying extents to which a farmer's wife may be involved in farm-related decisions, the interviewees also differentiated between decision *types*, and therefore who would be involved in them. The quotes in Table 6.28 comprise examples of these decision types:

A major decision is like buying a new vehicle - buying anything, including fertiliser and machinery; also when you're going to sell the calves or the lambs, when we're going to gather sheep for clipping and dipping. A lot of the time, it's the same decisions each year. [W1:6-13].

Routine decision are like, who's going to get up first! Certain things, the day to day things, just seem to happen. [W1:66-67]

A typical day starts off with feeding the sheep. If he's going to change the feed then he'll ask. If the decision is to be made on the spot then he'll do it; anything that can be planned, we'll discuss. [W2:28-33]

#### TABLE 6.28. TYPES OF FARM-RELATED DECISIONS.

In this context, decisions relating to the ESA were described as being 'major'; the following quotes (Table 6.29) illustrate this observation:

Decisions are mostly made with my husband ... the ESA would be a major (rather than day-today) decision... [W1.3-4;69]

We share big decisions ... we work as a team ... With the ESA plan, we both had points to make. [W2:17;22-23;137-138]

#### TABLE 6.29. ESA DECISIONS

The above discussion concerning the farm household has highlighted: the individuals within households who may be involved in farm-related decision making; the variations in the involvement of farmers' wives in this decision-making; the types of farm-related decisions, and the ESA's location within that typology. These facets of context are complex and dynamic. The 1993/4 Fieldwork data clearly demonstrate therefore, that to evaluate scheme adoption whilst bypassing the reality of the farm household within which such decisions are made, is simplistic, inaccurate and incorrect.

# 6.3.5. Farm and Farmer characteristics were simply retrospectively correlated with ESA adoption/non-adoption, within the MAFF Evaluation.

"Cronbach (1975) places particular emphasis on the importance of interpreting data in context *rather than reducing context to arrive at generalisations*" (Patton [1980], p.280; emphasis added).

The MAFF Evaluation addressed the influence of farm and farmer characteristics on ESA adoption/non-adoption. Such characteristics included: tenureship status, farm size, successor situation, age and education. The use of this classification of farmers was assumed in the early stages as crucial to increasing the understanding, and prediction, of ESA uptake; they were accepted implicitly (within the MAFF Evaluation) as being behavioural determinants for both farm-related and ESArelated settings. For example, the following assumptions existed within the MAFF Evaluation:

*Tenureship:* a tenant is less likely to invest in a property which he/she does not own. Therefore the ESA is less appealing; the ESA is a long-term investment (like planting trees) therefore it is less attractive to the tenant. The reverse is true for owner-occupiers since they are interested in increasing the farm's capital value, and have long term planning horizons.

Age: the older a farmer is, the less willing he/she will be to adopt something like the ESA, since it represents change. The younger farmers have got nothing to lose, and are more adventurous, therefore they are more likely to adopt.

*Farm size:* that the bigger your business, the more likely you are to join the ESA because you can do more under the ESA and therefore the grants are more attractive. Also, a smaller farm is put off by the low flat-rate payment.

It is argued, in this context, that the linear correlations carried through in the MAFF Evaluation impose a superficial account of the influence of such characteristics on ESA adoption (19). That is, although they are indicative of

<sup>(19)</sup> Further, although not stated overtly in the MAFF Evaluation report, MAFF held the view that the ESA decision was virtually synonymous with, say, farm investment decisions, decisions to diversify, risk taking and so on - for the purposes of analysis. As such, they were interchangeable decision scenarios. Thus, what a farmer did in one circumstance *because of being a tenant*, for example, he would be likely to do in another. The shortcomings of this interpretative stance are outlined elsewhere in this Chapter (Section 6.3.2.).

possible links between, say, resource base and scheme adoption, they did not, and could not, provide a thorough picture of such a relationship - and yet these explanatory tools were given authority as such (what Daly and Cobb [1990] have termed "misplaced concreteness").

The reasons for potential shortcomings in this area of analysis include: (i) farmers' own views on such factors and the ESA; (ii) the inherent diversity of these farmer categories.

(i) The views of farmers on such correlations.

"The conceptual framework of constructs and categories on which the respondent draws, are seen  $\dots$  as the starting point for understanding the respondent's actions in the world  $\dots$ " (Canter *et al* [1985], p.81).

The views of policy-recipients concerning these categories were not considered within the MAFF Evaluation. This comprised a major omission, particularly in the Evaluation of a voluntary scheme such as the ESA, where the interplay of factors in decision making is so crucial (Skerratt and Dent [1994]).

Examples of farmers' views on the conventional categories used within the MAFF Evaluation were ascertained through the 1993/4 Fieldwork (see Chapter Five). Their comments included the following (Table 6.30):

\* Tenureship and ESA adoption/non-adoption.

TENURESHIP: On our owned farm, the ESA is enhancing the capital value of the farm. The long-term point of view is that most of the ESA is also of capital advantage. [MIR:1-3]

As a tenant, I'm paying £6,000 a year for my rent; the estate put up the rents by 25% last year ... so the ESA money makes a big difference [NOR4:123-125:139]

Security of tenure, and length of tenureship arrangement are important to me and I imagine to other farmers, when you're considering a scheme like the ESA. Short-term partnerships may dissuade some tenant farmers from joining the ESA ... If you're an owner-occupier, or on a long-term tenancy, you'd be a fool not to take the ESA. There's so much you can do for your farm. [NOR2.21-28, 59-62]

It's mostly owner-occupied round here; this means that more ESA-type conservation is getting done... [SONR6:89-92]

There's no way a tenant's going to do that (planting trees, dyking etc...) because he would be doing it on someone else's property. [SOR10.156-159]

To go into a long term scheme like the ESA - 5 years; that's a commitment. Tenants have shortterm plans as compared with the owner-occupiers. If a tenant bumps up his income through the ESA, they (landlords) will bump up the rent. [SOR4:272-277]

We don't own the farm which makes it all the more annoying to invest heavily .... There's no point in investing when it costs you. If you invest, they put up your rent .... I'm in the ESA so they put up my rent [SOR7:208-210,214-215;218-220].

#### TABLE 6.30. TENURESHIP.

Evidently, there is some congruence between long term and short term investment (it must not necessarily be implied, however, that owner occupiers invest); this brings to light the issue of the extent to which the ESA is seen as an investment, rather than aids to current farming, such as stock control. However, even from this small selection of quotes it can be seen that another issue is beginning to unfold: that of passing on ESA financial benefits to the landlords by subsequently paying increased rent. This is an important disincentive to adoption. There is also the issue of landlord influence. \* Farm size and ESA adoption/non-adoption.

	I SIZE: rmer's tight for grazing and cash, then he's not likely to be in the ESA [MI3:111-113]
Biggei [MI5:2]	farmers - they're going to be in it (ESA) for finances rather than because of conservation 18-280]
There	s not enough financial compensation for a large farm like this. [NONR2:119-121]
	s farm, we're limited to livestock units. We are running on a very tight acreage. If we fence off more, we may have to sell some stock. We may have to. [NOR4:98-102]
	s places that canny even afford to give them (the ESA) 3 or 4 hectares; on such a tight 1, they won't be able to justify giving it up (for ESA). [SER2:368-372]
	farms - no difficulty finding bits and pieces for the ESA, compared with the very small cre) arable farm - they couldn't do much. [SORIO:196-200]
option	ve only got 300 acres, you want to make that 300 acres count, and you haven't the s to extensify. The ESA is extensification and diversification away from farming. 377-382]
	e very small farms, the May, June, July grazing restriction is hard because they are so ive. [ADV1:19-21]
	size - the bigger farm also carries a shoot, therefore a small pond or area of trees is an tage. [SONR7.181-184]
areas that y They (	rger farms, you can walk wherever you want, and they (farmers) are happier for certain to be fenced off. On the smaller farms (say, 300 acres) they are much more concerned ou (FWAG Adviser) will want to fence off bits of the land, and they haven't got that much. can be less flexible in their grazing than the larger farmer. If you have more ground you ake more concessions to conservation. [ADV2:167-179]

TABLE 6.31. FARM SIZE.

Thus, farm size, although relating to the scope of ESA work, also relates to the impact the ESA would have on grazing areas, associated stock numbers, and ultimately income. This relates to seeing the ESA within the grand scheme of things (see above), and trading off its perceived pros and cons. In addition, on larger farms, farmers consider other aspects of scheme, such as leisure. However, in the MAFF Evaluation Report, the ESA's suitability to farm size was phrased in solely financial terms.

\* Age and ESA adoption/non-adoption.

AGE: Whether a farmer joins (ESA) or not is a lot to do with his traditional attitudes; this is an age and education related thing. [MI3:114117]

The older type ... is more a farmer; the younger farmer with broader horizons is more likely to join (ESA). [M13.82-85]

Age has got something to do with it (ESA adoption). All those who are joining are under 40 - they're looking for change. Older ones are less willing to change. Also, form-filling for people in their 60s is a problem ... forms are a very difficult thing for the older farmer. [NER1:75:88-89]

... Young farmers who've got more going for them are bound to join (ESA), there's no reason why they shouldn't join. Whereas older farmers are more cynical, they don't want to be bothered with policy; they are less fit ... [NONRI:51-58]

The older the farmer, the less likely he is to be bothered with the ESA. The younger to middle aged farmers may well see advantages in it. [SONR7:121-125]

The ESA may suit older ones who want to run things down a bit (on the farming side). [SER3:141-143]

### TABLE 6.32. AGE

In addition to above assumptions concerning age and change, other issues evidently exist: the required form filling; arranging contractors to do the ESA work; phoning SOAFD when there are problems - the "hassle factor"; the perceived physical demands of the ESA work. Also, older farmers often have had more past experiences of schemes, for example the AIS, and as a result they cannot be bothered with the ESA. In addition, there are the older farmer's objectives - the example here being the option of running things down a bit on farming side, with the ESA therefore being attractive. This range of issues contrasts with the simplistic notion of ESA non-adoption amongst older farmers representing solely an unwillingness to change (as reported in the MAFF Evaluation).

Thus, correlations cannot be assumed, and indeed can only be inferred to a certain degree, since they must be qualified - with these qualifications revealing more as to the nature of the influence. Further, such statements of relationship may well overplay the significance of a factor to farmers in their ESA-related decision making; and similarly, they may lead to the omission of other factors which may well be both idiosyncratic and important. In contrast with such an approach is one which assesses, and makes explicit, the degree of congruence between those

assumptions informing the MAFF Evaluation, and farmers' views and explanations of such relationships or correlations. This requires therefore, a working, and modifiable, awareness of the degree of qualification to be included. This leads to more confidence in more accurate observations.

6.3.5.2. Inherent diversity of the categories: Age, Farm size, Tenureship status. As well as misplaced or superficial correlations, the above categorisations themselves also conceal information due to their inherent diversity. However, within the MAFF Evaluation, there was no description or elucidation of these categories; they were felt to be basically known.

Such information may well be crucial when aiming to *predict* behaviour from context. This takes us back to Cronbach's (1975) point that the context is being reduced to arrive at generalisations rather than providing a framework within which behaviour, such as ESA adoption/non-adoption, can be interpreted. It is argued therefore, that the diversity *within* such farmer categories must be attended to, if accurate representations of their influences are to be made. The following examples of diversity serve to illustrate this point (20):

#### Tenureship & Farm Size.

\* Owned Farms: The major variation within this category is farm size, in terms of the number of hectares. The following subdivisions reflect the diversity within this classification criterion: richer, larger farms (similar to estates); richer, smaller farms; other small farms; medium farms. These are discussed in turn.

Richer, larger farms, similar to estates (500 acres plus): The farmers are often middle-class and well educated; many refer to the farm as "the estate" rather than the farm, and this appears to denote both the range of land-use activities, which include shooting and fishing as well as the agricultural aspects of the business, and also the status of being an estate owner rather than a farm owner. The emphases can therefore vary, being either (i) predominantly concerned with hunting, fishing, forestry (small scale), holiday accommodation, with animal production

<sup>(20)</sup> The source for these observations is fieldwork notes taken both during the MAFF Evaluation, and during the 1993/4 Fieldwork.

(predominantly sheep, and occasionally Highland cattle) being of lesser significance; to (ii) a more solely farm production oriented approach.

There tends to be a small number of staff, including a shepherd and an accounts person. The farms are often two-generational, with the parents being in their 50's/60's, the husband retired from "the city" or the army, or another profession; the offspring also stay on the farm (and in-laws, that is, those married into the family). Often the different family members have different areas/tasks of responsibility within the farm.

It is also the case that the offspring may live and work away from the family farm, but will inherit it at a later date. The farm has generally been in the family for a couple of generations or more; the older members of the family may have lived, and been educated, away from Scotland, but have "roots" in Perthshire; they then returned to the family "estate" to run it as a family concern.

They tend to be well-read about farm conservation matters, their sources being primarily the Game Conservancy Council, Scottish Natural Heritage, and Scottish Landowners Federation; they state that they have always cared for the environment and are very proud of the fact that their family has always done so in this region; and they can refer to specific areas that were planted up in their parents' or grandparents' generation; they talk of themselves as guardians of the land.

Richer, small farms (less than 250 acres): There are a number of examples within Breadalbane ESA including farms where retired wealthy couples had returned to the wives' family roots in Perthshire, and own small land areas. The farmer and spouse can be retired, or part-time, and not necessarily drawing an income from the farm, in fact it may be making a small loss (they would be termed "hobby farmers"; Gasson [1988b]).

Other Small landowners (less than 250 acres): These tend to be family run farms. The annual average income for a full-time farm is approximately £10,000 p.a. including all subsidies (Skerratt *et al* [1992]). This size of farm does not necessarily support a full family (that is, two people or more); often the wife works part-time in order to supplement the family income; her income from an on-farm activity such as tourist accommodation, may serve as "pin-money" thus allowing for some independence; however, a part-time job off-farm may lead to the money being put back into the farm business. The amount of family labour input

varies between farms and over time; this variance is due to a number of factors, both family and farm related. However, the trend increasingly is that, due to limited financial resources and insufficient work *consistently* throughout the year, contract labour is often employed to carry out the necessary agricultural tasks.

Such farms may be run full-time or part-time; part-time examples include a farmer who is full-time with an non-governmental organisation (NGO); a carpenter, and an architect. The nature of the part-time farming varies between farms, depending on the proportion of total income it provides.

A large number of these farms tend to be on lower-lying ground; they are more farming oriented than the larger farms and estates, having less interest in, or opportunities for, hunting, shooting and fishing activities.

In terms of farm conservation activity, many of the full time, smaller, family run farms stressed how pushed they were for money, and how they would like to carry out more farm conservation but were unable to do so, due in large part to financial factors.

Compared with larger farmers, the majority of full-time smaller farmers are more likely to have been in farming all of their life. Larger farmers have often done other things first (or at least for a part of their adult working life). This factor may well lead to different perspectives between such individuals, concerning what farming (including farming "as a way of life" or as a "business") is all about.

Medium Landowners (250-500 acres): Within this size category, labour may comprise family members, with the possible addition of permanently employed labour. These farms are different from estates of a similar size, in that the emphasis is upon agricultural, rather than leisure and forestry oriented, land-use. Compared with smaller farms, there is greater investment in machinery and higher levels of borrowing. There tends to be more money available for farm conservation, or alternatively for non-farming activities.

Medium landowners may range from wealthy to poor (just as in the small size category); this picture is fairly dynamic due to the changes in agricultural support policy over the past 10-15 years; as a result there are some farmers within this size range who feel 'out of their depth' both managerially and financially, but are

unable, or unwilling to scale down their business. The reasons for this may include tenureship arrangements, or not letting the family down with respect to being the farming generation that was not able to keep the family farm going. There will therefore be differing levels of investment, and differing objectives, within this size category. Farms of this size may have the opportunity to diversify into farming and non-farm related businesses; they may have the necessary margin of reserves (both finances and labour) in order to set up, say, tourist accommodation, haulage contracting, pony trekking, a farm shop, and so on (examples of these exist within the study area)

\* Tenanted Farms.: Differentiation within this category relates both to farm size and a range of other criteria; these are now discussed.

Farm size and type: The larger (greater than 500 acres) farms tend to be on areas of open upland and hill land, and comprise extensive sheep farming units. The estate is responsible for the forestry and sporting aspects of land use. For example, many tenant farmers commented that the tree planting was solely the landlord's responsibility. Smaller (less than 250 acres) tenanted farms tend to be on lower-lying ground, and are more likely to be solely farm production oriented, and mixed - sheep, cattle and some arable (primarily silage); or purely arable.

The tenant and landlord (or factor): Gasson and Hill (1984) state that "the quality of the landlord-tenant relationship, or the tenant's relationship with the landlord's agent, may in some cases assume such significance that it overrides all other considerations" (p.39). Within Breadalbane ESA the relationship between tenants and landlords, and its importance, appears to vary from one estate to the other. Generally, it appears that estates are responsible for the maintenance of some of the farm fabric, for example, repair of boundary dykes; however, a number of tenant farmers stated that this responsibility was not fulfilled, but rather the farmers were One farmer was left to 'go it alone', particularly on a day-to-day basis. incredulous as to how the estate expected him to run a viable farm business when the buildings were in such a bad state of repair. The way in which tenants actually manage the farm business appears to be their own affair, for example, how many staff they employ, investment in machinery, and so on. However, changes in landuse, participation in schemes, and diversification appear to be the only areas of landlord and factor involvement; their input varies between estates. For example, one tenant farmer had a three-year 'running battle' with his landlord before he was finally given permission to join the ESA. Another tenant was prohibited by his previous landlord from joining the ESA due to the fact that the landlord was in the process of selling the estate, and felt that an ESA agreement could undermine the sale; the tenant's new landlord has given him permission to join. A third example is of one estate which is farmed by a number of tenants; they were all encouraged to join the ESA scheme, and were offered top-up payments to meet the shortfalls in the grant.

The age and personality of the estate factor also plays a role. In one particular estate office, the factor was known to many farmers and had worked in the area for a long time. His replacement was a much younger man, from England, whose interests lie primarily in the 'hunting, shooting and fishing' aspects of the estate. The tenants sense his lack of experience and knowledge with respect to farming; he is also very young; and a combination of these factors has made him relatively unpopular with the farmers who have to deal with him. Finally, factors may also provide information to farmers on schemes and grants. The individual therefore plays an important role in the dissemination of such information.

#### <u>Age.</u>

Within the MAFF Evaluation of Breadalbane ESA, age brackets were used to subdivide the farmers, in order to correlate this individual characteristic with ESA adoption. The brackets were: 16-24, 25-40, 41-64, 65+. These were subsequently referred to as: Younger farmers (16-35), Middle-aged farmers (36-54), and Older farmers (about 55+). Examples from these categories are discussed.

Within this category, farmers have a range of Younger Farmers (<35): \* farming; intensive/extensive, for example, different attitudes towards environmentally aware (as defined within government farming policy)/sole concern of production targets. Also, younger farmers may see farming either as a career in itself, as a stepping stone towards related agricultural work, or as a way of biding their time while waiting for another, possibly non-agricultural, job. The majority of younger farmers have been to, or are going to, Agricultural College in Scotland or England; in addition, a number of them have had specific formal training from the Agricultural Training Board (ATB). They have different levels of farming

experience; some may have been involved with farming since they were very young, having grown up on the farm and helped out; some may be totally new to farming; and some have intermediate experience.

The level of individual, and farming, confidence will vary. Issues of selfconfidence, individual business confidence and confidence concerning the UK farming industry are all involved here and are different for each farmer. The implicit assumption within the MAFF Evaluation that younger farmers are more confident and are therefore "willing to give things a go", is superficial in two senses; firstly, seeing young farmers as necessarily confident; secondly, linking the "willingness to give things a go" with confidence - it was pointed out that a willingness to try something new may well be in desperation rather than confidence.

Older Farmers (55+): Within this category, there is a significant amount of \* variation with respect to an individual's approach to his or her age, and retirement from farming. For example, some farmers at, say, sixty years of age, will decide that they have had enough of farming and will retire. Others state that they will never retire - that you farm until you die. Their decision will be based on a range of factors including current agricultural policy (such as the Early Retirement Scheme), experiences as a farmer, changes in farming in his or her lifetime, the presence or absence of successors to the farm, whether a tenant or and owneroccupier, personal health, things that have been achieved on the farm as compared with what they would like to have achieved, financial security, and family ties to These will affect the current and anticipated involvement in active the farm. farming of the older individual. In addition, the size of the farm may well affect the degree of "hands-on" farming, and also the actual roles and duties of the farmer. On larger farms where there are usually more staff, owners may have taken on more of a managerial role, and therefore may not have been involved so much in the physical side of farming; so, the shift to retirement may not be as great as compared with the farm on which the owner has always played a more active, 'hands-on', part.

In this age category, the majority of farmers, particularly those on the smaller family farms, have not had schooling beyond the age of 14; many of these farmers state that they have learned to farm from living and working on the family farm.

Many are very aware of a difference between how and what they have been taught, and how the majority of younger farmers are taught at agricultural colleges, with the latter leading to a more business-like, and non-local approach, to farming; some of the farmers recognise that a college education is now necessary because farming has changed so much, primarily in terms of mechanisation. Exceptions to this educational pattern exist; one or two farmers have been to agricultural college, and a very small number have been to university; it appears that these individuals are from backgrounds where the farms are large, and owned.

In addition, it is important to highlight the fact that some of the factors are not agedependent. Experience in life, and in farming, may well be more influential than age itself, and it must not be assumed that the two are coincident (21).

In conclusion, the cosy correlations (within the MAFF Evaluation) between farm and farmer characteristics and ESA adoption have been presented, as have the primary reasons for questioning the certainty with which such correlations were reported (22). Therefore, in the light of the above examples, it is evident that further levels of qualification are crucial in order to inform such correlations accurately.

<sup>(21)</sup> A further issue which needs to be followed through, since it has potential behavioural implications, is whether the age-related generalisations (made by other farmers, and possibly those within the age category themselves) and images, are perpetuated as people adopt them, thus leading to older and younger farmers behaving as they are "expected" to behave. These expected modes of behaviour, or of decision making, may exist in a number of settings, for example, the two-generational farming household, where there are issues of retirement and "taking over" by the next generation (see Potter and Lobley [1992b], p.61). The age-related issues need to be examined in order to be able to assess the extent to which they shape, modify or change the individual's behaviour.

<sup>(22)</sup> An additional issue comprises the interplay between characteristics. Within the MAFF Evaluation, correlations were made between farm and farmer characteristics and ESA adoption. However, these relationships were only described in linear terms. The reality is, however, that such factors are often interlinked and that to simplify relationships this much is to lead to error. Examples include: tenureship and farm size; age and tenureship or succession status. Interplays must be considered because they represent the possibilities and constraints associated with trade-offs which farmers can make concerning the ESA.

# 6.3.6. <u>Attitudinal change of the policy recipients towards conservation and the environment was anticipated as a direct result of implementing the ESA.</u>

One significant aspect of the MAFF Evaluation comprised the assessment of the impact of the ESA on farmers' attitudes. The focus within the MAFF Evaluation became solely this impact, rather than also investigating the types of attitudes which existed and why.

Two assumptions can be read into the reporting and conclusions of the MAFF Evaluation: firstly, that the ESA represents change (to the farmer/landowner), and sufficient incentive to change; and secondly, that attitudes could be logically inferred from ESA-related behaviour. These are now discussed.

#### 6.3.6.1. The ESA and change.

In reporting the findings of the MAFF Evaluation, there was the inbuilt assumption that the ESA represented change (to the farmer/landowner), and sufficient incentive to change. In questioning this assumption, it is helpful to consider 'change' as defined by Strauss and Corbin (1990): "What is change? Change in conditions of sufficient degree that it brings about a corresponding change in action/interactional strategies" (p.149). The extent to which the ESA represented this degree of change to farmers has to be examined in the light of the following three criteria:

*Firstly*, the context within which this particular policy (ESA) had been introduced. The ESA was part of a general policy shift, for example, away from the 1970s and early 1980s support of hill land reclamation. This therefore leads to the question of whether the ESA comprised sufficient change on its own, to *lead* to change; or was it part of a general policy shift, the *overall effect* of which may have been change. The ESA was not analysed in its wider policy context within the MAFF Evaluation, that is, in terms of how farmers themselves saw it; rather, the MAFF Evaluation implied a degree of change initiated solely by the ESA Scheme. However, a more in-depth analysis is evidently crucial due to the changing policy context within which farmers interpret its implementation.

Secondly, the degree of ESA-induced change actually experienced by farmers is important. The first ESA (1987-1992) appeared to require no change in the farming system (Skerratt *et al* [1992]; and Skerratt [1994]). However, a degree of

change and impact was assumed within the MAFF Evaluation. The following comments (Table 6.33.) are illustrative of this point:

Some folks see the ESA as money for old rope. [NENRI:88-92] The ESA leads to improvement of the farm I'd say. A neighbouring farmer - the ESA's helped him, he's not had to change his farming at all. [SONR6:78-82] ESA: there wasn't a change in the first round (in the farming system) - it was just some extra cash. [NONR3:129-131] The ESA hasn't made a difference in farming production terms. [NOR5:232-234]

#### TABLE 6.33. ESA-INDUCED CHANGE

Thirdly, within the designated ESA, there was the implicit assumption (within the MAFF Evaluation) that approaches to, and intensity of, farming were uniform. This, however, is incorrect, since some farmers view themselves as far more traditional, the "hill boys"; they perceive no change in their farming in the past 20 or so years; whereas those on the lower ground have changed more. That is, differences exist within the ESA; thus the ESA represented different degrees of change depending on the current farming system (see Chapter Five, Section 5.5.6.). So, whether the ESA represents change has to be examined also within the farmers' context rather than assumed, before it is possible to then accurately assess whether the ESA will bring about change.

#### 6.3.6.2. ESA adoption and attitudinal change.

The second facet of the assumptions associated with ESA-induced attitudinal change within the MAFF Evaluation, comprised: a positive attitude towards conservation could be implied from conservation behaviour, that is, from ESA adoption. More specifically, within the MAFF Evaluation, there was the implication that because of all the ESA-induced conservation work, farmers were becoming long-term "custodians of environment"; that is, the ESA was producing inherent long term positives for the environment. The MAFF Evaluation Report gave the impression that conservation behaviour (synonymous with ESA adoption) was indicative of motives of conservation (23). However, there was a wide

<sup>(23)</sup> Further, the issue of implicitly relating behaviour to attitude gave no scope to the potential gulf between attitude and behaviour; that is, there was an assumed coherence.

spectrum of responses as to whether ESA adoption implied an interest in conservation, for example (Table 6.34):

Joining's (ESA) not to do with conservation, but to do with the (ESA) scheme; the way it was drawn up; the financial incentives.... [SONR1:183-186]

When deciding about the ESA, the two things you're looking at are the payments and how the scheme fits in with your farm. It's nothing about bias towards conservation .... [SONRI:284-288]

#### TABLE 6.34. ESA AND CONSERVATION INTEREST

The 1993/4 Fieldwork data highlighted the fact that reasons for ESA-type conservation could be various. They comprised, for example: financial interest; the need for dyke repair; to increase the value of farm; to have the work done now rather than later; amenity considerations on estates; and long-term interests, in terms of the heritage of the countryside. These are summarised below in Table 6.35.

- \* Receiving grants to continue farming in the same way.
- \* Congruence that is, receiving grants for work which had been planned prior to the introduction of the ESA.
- \* The financial incentive; the anticipated income benefit.
- \* Political pressure, in the context of the development of agricultural support towards an agrienvironmental remit.
- \* To enhance the capital value of an (owned) farm or estate.
- \* Landlord influence.
- \* A moral obligation to do conservation; custodians of the land for future generations.
- \* An interest in conservation and the environment.
- \* An opportunity to make the farm look better, by tidying up hedges and dykes.

TABLE 6.35. SUMMARY OF REASONS ASSOCIATED WITH ESA ADOPTION (24).

These reasons, however, were not emphasised within the MAFF Evaluation Report. Rather, ESA scheme adoption was implied as being primarily synonymous with conservation interest. This interpretation is clearly erroneous; further, it comprises a key facet of the expectations of MAFF (and SOAFD) concerning ESA scheme impact and uptake.

<sup>(24)</sup> The source for this Table comprises the quotes from earlier Tables in both Chapter Five and Chapter Six. They are summarised here in order to illustrate the narrow interpretation within the MAFF Evaluation concerning attitudes to conservation and ESA adoption. The summary is not intended as a prioritised list. Further, these were cited by interviewees as either sole reasons, or as a combination of one or more reasons.

# 6.4. EVALUATION METHODOLOGY: EXAMPLES FROM THE RESEARCH LITERATURE.

The detailed Critical Appraisal presented in this Chapter has focused on key facets of a particular Socio-economic Evaluation - the MAFF Evaluation - and their specific implications. It is necessary, briefly, to examine the extent to which the issues arising from the MAFF Evaluation Critical Appraisal are also recognised more widely within the evaluation methodology literature. The following discussion examines examples of the specificities which have emerged from the Critical Appraisal (25). These can be categorised as: initial and ongoing focusing of the evaluation remit; and methodological specification.

#### 6.4.1. The focusing of the MAFF Evaluation remit.

This has been discussed extensively in the literature, in the context of tailoring evaluations to the needs of the information users. It has been termed "utilization-focused evaluation" (Patton [1986]). Authors pursuing this line of reasoning argue for a recognition of the differences between research and evaluation, for example:

"Evaluation ... is intended to be used by decision makers, and seeks answers to questions posed by decision makers, rather than by academics" (Bulmer [1986], p.155).

That stereotypes exist does not help to overcome the perceived gap between what some have termed the "two cultures" (Rich [1981]; see also Booth [1988] for other theories of evaluation utilisation) - the researcher/evaluator and the policy maker. Indeed, Rich (1981) discusses the view that policy makers feel that they do not understand social scientists' reports, since "they do not deal with the immediate problems on the agenda, and that the reports are not sensitive to political and bureaucratic pressures" (p.6). In turn, "researchers and scientists feel that decision makers do not clearly communicate their needs, (and) do not have a sense of how long it takes to produce accurate information" (p.6).

The issue of accuracy and rigour is pursued in this context. Rich (1981) has stated that: "decision makers are concerned with the restrictions imposed by the need for

<sup>(25)</sup> That is, rather than giving an overview of evaluation methodology literature per se. For such reviews the reader is referred to: Patton (1980; 1981; 1986; 1990); Murphy and Sprey (1982); Casley and Lury (1982); Smith (1981); and Drew (1976).

timely decisions: *immediate partial information is more useful than complete information...*" (p.6; emphasis added). Further, Patton (1990), in his "Typology of Research Purposes", argues that the "Standard for Judging" basic and applied *research* is "rigour ... and theoretical insight into the problem"; whereas *evaluation* is judged according to its "generalisability ... (and) usefulness to and actual use by intended users in the setting studied" (p.160).

The following cartoon demonstrates this further:

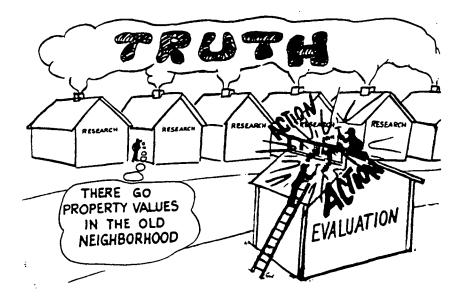


FIGURE 6.1. SOURCE: Patton (1986), p.15.

Although recognising the need for a working awareness of the decision makers' information requirements, the experience of the MAFF Evaluation has illustrated those facets which are of necessity traded for the focus upon utilisation purposes (26).

<sup>(26)</sup> Such as the emphasis upon financial and economic criteria to the detriment of social and cultural factors. In Marsden and Oakley's (1990) text on evaluation methods, they state: "The myth of the separation of the social from the economic ... allows us to marginalise social issues if we are not careful, so that they are seen as secondary to the seemingly important economic concerns" (p.9).

Quotes from the evaluation literature serve as further examples:

"Government ... may have a limited capacity to tolerate scientific enquiry that intensifies uncertainty" (Booth [1988], p.221).

"Research tends to complicate issues by showing them to be more ticklish than they first appeared, whereas the art of policy-making lies in simplifying things to the point where action becomes possible" (Booth [1988], p.229).

The marginalising of rigour is a grave shortcoming, particularly since it can, and does, abstract policy recipients from their context - a context which comprises the setting for decision making (27) and the realisation of a scheme's impacts. Indeed, Bulmer (1986) has even argued that there is a need within policy evaluation "for rigorous and high methodological standards in designing such (evaluations) which is greater than in the case of basic research, because findings may immediately be fed to and influence the decisions of policy makers" (p.175; emphasis added). It is argued that 'focus' and 'rigour' need not be, and indeed cannot continue to be, mutually exclusive. As Bulmer (1986) states:

"There is a need in designing evaluations to blend the potential effects derived from social science knowledge and theory concerning the subject in question. Such a multi-goal, theory-driven approach to evaluation is likely to be more fruitful than one which simply takes the administrator's goal at face value" (p.179).

#### 6.4.2. Methodological specification.

The second facet of the MAFF Evaluation Critical Appraisal which is reflected in the research literature is that of methodological specification (28). As with the above issue, the debate is far from resolved. The following quote augments the already established scenario (see above) of the reasons behind methodological preferences of the information users (see also Patton [1981], pp. 269-272):

"Decision makers' reliance on familiar sources of information is analogous to their preference for familiar methodologies ... (they) consistently prefer studies that employ a distinctive methodology familiar to them, and use those studies rather than those which employ a methodology with which they (have) had little experience" (Rich [1981], p.12).

<sup>(27)</sup> An example being the fact that farmers and landowners within Breadalbane were not as allabsorbed in ESA-related decision making as were the Evaluators. The focus on adoption, of necessity, reduced the analytical import of those other facets under the decision makers' consideration.

<sup>(28)</sup> The specifications in the case study being primarily the sole use of questionnaires for the interviewing of individuals.

In this connection, Weiss (1986) has observed:

"Officials do what the agency has traditionally done. Even if the situation is unprecedented, officials may interpret it to fall within customary procedures. In doing so, they in effect make new policy by subsuming the novel contingency within a familiar rubric" (p.223).

However, in his critique of such a continued deference to inflexible heuristics, Patton (1990) cites the following quote from *Halcolm's Political Treatise on Evaluation:* 

"The establishment of an orthodox evaluation methodology is no different from the establishment of a state religion. Officially telling you what methods to use is only one step removed from officially telling you what results to find" (cited in Patton [1990], p.494; emphasis added).

This quote is particularly poignant in the light of the ESA Evaluation experience, an integral part of which comprised the prior approval of questionnaires and anticipated data by the Survey Control Unit (see Footnote 8).

In addition, evaluation literature addresses issues of *degrees* and *appropriateness* of methodological specification within the evaluation process. These two aspects are crucial in developing a flexible, "situationally-responsive" (Patton [1981], p.271) framework for socio-economic evaluation. Specifically, there is a recognised need to move away from a sole reliance on those instrumental methods which ensure that culture and context "tend to get squeezed out, in the interests of developing standardised objective measures" (Marsden and Oakley [1990], p.8) - as demonstrated in the MAFF Evaluation. Further, Cochrane (1979) states: "cultural factors can no longer be thought of as extrinsic ... (project design) has to conform to take account of the social landscape" (p.5).

An example of this recognition concerning flexibility in evaluation methodology comprises the necessity for recognising policy recipients within their network of social contacts (29). For example, in an Economic Development Institute Training Manual for "Social Aspects of Project Preparation and Appraisal", Ingersoll (1985) stresses that the following points require analytical attention:

"... people have long organised themselves in networks to pursue one or more aspects of their livelihood ... However loose, weak, or informal such human networks may seem, they are essential at almost all economic levels ... projects thus operate among people whose lives are already organised, and whose social organisations are as significant for them as the physical features of the environment" (pp. 2-3; emphasis added) (30).

This facet of context requires a methodology which is itself context-sensitive. Leach (1967) for example, in his critique of questionnaires versus in-depth interviewing methods, states: ".. a statistical orientation presupposes that the field of observation consists of 'units of population', 'individuals' (rather than) the data being made up of 'systems of relationship'" (p.77).

Methodological responses to social networks cited in the evaluation literature include "Social Mapping" - the identification of social groups and organisations (see Cochrane [1979], pp. 20-45); and Fernandes' (1990) "Check List of Social and Power Relations" for use within overall evaluations. Further, there is an emphasis upon "mixing methods" (see Patton [1981]), such that quantitative and qualitative methods do not remain mutually exclusive (see Doorman [1989]; Cernea [1979]; Cochrane [1979], and Fernandes [1990] as examples). However, although recognised by many evaluation researchers as the way forward, the potential problems of 'language' and concepts, for example, are not overlooked (31).

<sup>(29)</sup> What Daly and Cobb (1990) refer to as "person-in-community" (p.7).

<sup>(30)</sup> A further example is Cernea's (1979) Report for the World Bank, where he stresses the significance of social structures, and thus their imperative investigation within evaluation (p.63).

<sup>(31)</sup> One such difficulty, for example, is cited by Finch (1986): "... there are additional difficulties when research has been based on qualitative methods, and when policy makers are operating within the dominant tradition, where research is expected to provide generalisable 'facts'" (p. 176). See also Redclift's (1985) comments concerning such a dilemma.

The following cartoon illustrates this further:

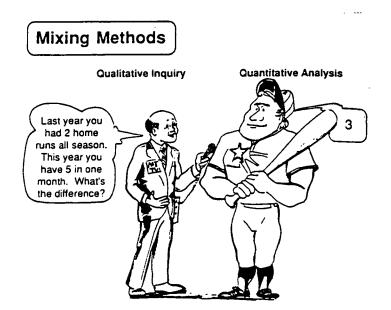


FIGURE 6.2. SOURCE: Patton (1990), p.466.

In concluding this brief overview of the parallels between the ESA Evaluation appraisal and wider evaluation literature, it is helpful to cite McDermott's (1987) research which focuses specifically upon a contract evaluation with which McDermott was involved. There are a number of similarities between her findings and those discussed within this Critical Appraisal (and with those highlighted in connection with the government guidelines for evaluation outlined in Chapter Three); these are now summarised.

The author notes that "increasingly, governments have become the major source of research funds for academics" (pp.135-136), and that there is a range of conflicts and scenarios which subsequently arise. These she cites as, firstly, the importance of the initial setting of evaluation objectives by government, which subsequently form the "frameworks in which it (government) sought answers from the research" (p.138). Secondly, McDermott discusses the evaluation *process*, and the integral roles of committees and mediators (p.138). Thirdly, there are debates within the evaluation over "context" - that is, its definition and its importance to the analysis of the key evaluation questions (pp.138-139). Fourthly, she cites a conflict over the time factor and the need for results for the funders; specifically: "... All too

often we found ourselves quickly writing reports with *partial data*" (p.139; emphasis added). This particular frustration was added to by the government department (funding the research) giving more credence to the quantitative data rather than the qualitative information; McDermott comments that:

"... the government just gathered the numbers and used them to legitimate its own role (in the programme)" (p.139).

Finally, the evaluation team experienced problems due to the changing context within which the programme was being implemented, during the lifetime of the longitudinal evaluation (McDermott [1987], p.139). These were seen by the funders, however, as non-problematic, whereas McDermott recognised their importance to the evaluation.

The above specific observations comprise an important illustration of parallel issues to those prevalent within the MAFF Evaluation.

#### 6.4.3. Evaluation methodology: concluding comments.

In the light of the above examples from the literature concerning evaluation methodology, it is possible to see that the issues pertaining to the MAFF Evaluation - although specifically unique to this scenario - are also addressed within the wider context of evaluation research, including that directly funded by government. The methodological and conceptual implications of this are discussed below and in Chapter Seven.

#### 6.5. CONCLUSIONS

This Chapter has examined the nature and effects of the procedures and tools applied within the MAFF Evaluation of Breadalbane ESA.

The influence of MAFF as the funder of the Evaluation was significant. The outcome raises serious questions as to the real degree of detachment and objectivity purported for this 'independent', as compared with in-house, approach. This is not to advocate an Evaluation which had no final relevance to MAFF's requirements; rather it highlights the need for a crucial re-examination of the operating procedures which precluded the MAFF Evaluation team from being "situationally responsive" (Patton [1981], p.23), that is, flexible - within a structured programme

- to the idiosyncrasies emerging during the lifetime of the MAFF Evaluation. Both the methodological insistence and the underlying assumptions and expectations concerning issues and data types, need to be examined and questioned, since - as demonstrated - they had clear implications for the MAFF Evaluation, largely in terms of its accuracy. As Patton (1981) has observed:

"... research findings from studies of human heuristics ... support (the) claims that most of the time... in order to make even trivial decisions, we rely on routine heuristics, rules of thumb, standard operating procedures, tricks of the trade, and scientific paradigms ... Yet... it is possible to become aware of our paradigms and heuristics, and in that awareness take control of our decision processes..." (p.271; emphasis added).

This is the key: to be aware of what informed the MAFF Evaluation process and why, and to state this explicitly, rather than assuming its appropriateness as selfevident and self-justifying. These are the very criteria required for justifying *deviation* from conventional approaches. In a case such as the MAFF Evaluation, which touches on issues beyond production and finance, the same level of explanation should be forthcoming for a *continuation* of conventional methods and modes of questioning and analysis.

The conceptual emphases and assumptions inherent within the MAFF Evaluation comprised issues relating to the definition of "socio-economic"; the ESA-related decision making of farmers; the effects of farm and farmer characteristics on ESA adoption; and ESA-induced attitudinal change. An over-riding observation concerns *lack of definition and the associated prevalence of assumptions*; this echoes the above observations concerning the inherent bias of the MAFF Evaluation towards implicit rather than explicit understandings, the former underpinning the MAFF Evaluation to its detriment. The implications comprised significant under-utilisation of data, and disjointed analyses. Further, the MAFF Evaluation reduced understanding of ESA adoption to its quantifiable constituents, thus *introducing* inaccuracy to the MAFF Evaluation. Since the issue of ESA adoption/non-adoption was a key part of the MAFF Evaluation, this outcome is particularly serious. The following observations are therefore crucial:

Firstly, adoption/non-adoption of the ESA cannot be reduced to a single dichotomous decision taken at one point in time. Rather, it represents the final part of a decision *process* comprised of a series of decisions each possibly as important as the final outcome. Secondly, understanding of decision as process

allows investigation of the internal heterogeneity of influential factors - thus contrasting with a narrow description of influences as entirely consistent. The decision framework allows for greater precision in identifying the location and nature of such influences, with 'financial' factors, for example, being seen within the ongoing decision process of preattentive, general and specific trade-offs. It also allows for the identification of constraints (or 'bottlenecks') and incentives in the adoption process. Thirdly, the ESA adoption/non-adoption decisions comprise a distinct and unique decision setting, thereby reducing the accuracy of inferences made from similar (but different) decision scenarios, such as risk-related behaviour, and adoption of similar policy initiatives. This is not to imply a lack of value for comparing decision scenarios. Rather, to make explicit the caveats and qualifiers necessary for such comparisons.

The need for qualification of observations was also expressed in the context of farm and farmer characteristics and their relationships with ESA adoption/nonadoption decisions. Once again, there is the requirement for definition rather than inference, such that both 'certain' and uncertain relationships can be examined, and their influence assessed. This facilitates both greater accuracy and utility of The conventional approach (exemplified by the MAFF Evaluation), results. however, ensures that these assumptions of uniformity (Leach [1967], p.80), which emphasize generalizability (and predictability for other similar policy scenarios), reduce the opportunity for both applying and questioning these groupings of Thus standard relationships continue to be addressed through farmers. conventional channels and perspectives, when an inclusion of a broader range of data would begin to facilitate a fuller understanding of the extent to which these categories determine ESA responses (rather than assuming a standard existence of such relationships).

The MAFF Evaluation of the attitudinal impact of Breadalbane ESA was built both on the wishful outcome of both MAFF and SOAFD, and a lack of clarity in definition. The former relates to the issue of funder pressure concerning the results of the MAFF Evaluation (addressed above); the latter again raises the issue of the paucity of an Evaluation which was so riddled with assumptions that its conclusions must be severely qualified.

The data collection methodology applied within the MAFF Evaluation comprised sole reliance on questionnaires and structured interviewing. The implications for

data accuracy have been discussed specifically in the light of data concealment and omission. Leach (1967) in his paper comparing the survey method with participant observation has made the following comment:

"there is a wide range of sociological phenomena which are intrinsically inaccessible to statistical investigation of any kind" (p.77).

Since this is the case, as has been illustrated through the Critical Appraisal, there needs to be a recognition of the limited nature of the questionnaire methodology as the *sole* approach for addressing certain critical issues within an evaluation such as the MAFF Evaluation. Further, since it has been demonstrated that neighbouring farmers and farmers' wives can and do play a part in ESA decision-making, the shortcomings of structured interviewing of the individual farmer as the only approach do put its efficacy into serious question.

The particular contribution of the Case Study (that is, the MAFF Evaluation and the 1993/4 Fieldwork) therefore, lies in its demonstration of the *effects* of considering the degree of focus, and methodological appropriateness. Further, brief examples from the literature have illustrated that such effects are not unique to the MAFF Evaluation setting. More specifically, in the context of *government-funded* evaluation, McDermott (1987) has observed:

".. the government *does* try to use the research data to legitimate its role, as well as trying to control the framework in which the research takes place" (p.142; emphasis in original).

These observations have wider implications for future socio-economic evaluations of agri-environmental schemes such as the ESA. This is particularly evidenced in the light of government-produced literature on policy evaluation (see Chapter Three), and discussion with other institutions concerning the MAFF-funded ESA evaluation experience (see Footnote 1).

The next chapter therefore addresses the options of: either continued deference to the context and heuristics of 'homo politicus' - demonstrated particularly through methodological and conceptual conventions (exemplified in MAFF Evaluation); or a response to the apparent methodological imperative away from the 'dominant tradition' towards approaches which incorporate context and rigour as key priorities.

#### **CHAPTER SEVEN**

#### CONCLUSIONS AND RECOMMENDATIONS

#### 7.1. INTRODUCTION.

The thesis has described the current socio-economic evaluation procedures, assumptions, and methods, exemplified by the MAFF Evaluation. The implications of these approaches for accuracy and rigour of results concerning the impact and uptake of an agri-environmental policy have also been outlined. The case study of the MAFF Evaluation has therefore facilitated the Critical Appraisal of conventional evaluation, in the light of the literature and the data from the 1993/94 Fieldwork. This has resulted in a presentation of *specific* effects of MAFF Evaluation process upon MAFF Evaluation outcome.

The aims of this concluding Chapter are, firstly, to examine the import of these observations for the overall socio-economic evaluation of ESAs which have been largely government-funded. Secondly, to assess the extent to which those commissioning such evaluations can continue to respond to the above observations of partial and inaccurate data with retorts such as: (1)

"Evaluation is only of use if one believes that some systematic information is better than none" (Patton [1986], p.151).

"To a harried policy maker, relevance to a specific problem at hand is worth a five-foot shelf of books of general theory", since "policymakers value instrumental knowledge before explanatory knowledge" (Rose [1982], pp.5 & 7).

The aim therefore, is to move the discussion from the observation and elucidation of the shortcomings evident within the MAFF Evaluation, to an assessment of the extent to which these are salient for the ongoing socio-economic evaluation process to which the government - by legislation - is currently committed.

<sup>(1)</sup> The aim, therefore, is not to pursue the debate at a general level, incorporating issues of evaluation utilisation/non-utilisation, and the degree of capitulation to policy-makers' requirements for data types, results and so on (see, for example, Weiss [1986]; Booth [1988]). Although these issues are touched on, the emphasis is upon those conclusions and imperatives relating to this particular policy scenario. Thus, although the observable *status quo* can be explained and debated, it is argued here that it cannot continue to be excused.

The Chapter begins with conclusions concerning the Critical Appraisal of the MAFF Evaluation of Breadalbane ESA (Chapter Six). Facets of the *status quo* - exemplified by the MAFF Evaluation - relate to: the omission of context; the focus upon financial criteria as the ESA-related behavioural determinants; and the compartmentalised analytical approach. These conclusions, reflected in the earlier hypotheses (Chapter One), demonstrate the necessity for considering improvements in the Evaluation process, heuristics and methods, as *imperative* rather than *optional*.

The discussion then moves on to examine those specific Evaluation 'imperatives'. It is argued that, although these relate primarily to the MAFF Evaluation, they are also applicable in the wider setting of government-funded socio-economic evaluation of agri-environmental policy *per se*. The recommendations are examined within three categories: the influence of MAFF upon the Evaluation process and ongoing remit; the conceptual emphases and assumptions inherent within the MAFF Evaluation; and the data collection methodologies.

The Chapter concludes with those specific areas of further research which have become necessary in the light of the above discussion. These comprise the scope and feasibility for incorporating 'context', often as qualitative data, within this specific evaluation setting; and the ongoing analysis of farm-level 'context' and decision making in relation to agri-environmental schemes such as the ESA.

### 7.2. <u>CONCLUSIONS CONCERNING THE CRITICAL APPRAISAL OF THE</u> BREADALBANE ESA MAFF EVALUATION.

This thesis has examined conventional socio-economic evaluation policy, through the case study of the MAFF Evaluation, and the government-published literature concerning overall evaluation methodologies and guidelines.

The primary conclusion from the farm-level research literature, and from the comparative Critical Appraisal of the MAFF Evaluation data with the 1993/94 Fieldwork data, is that current evaluation conceptions, assumptions, heuristics and methods, address cogent issues only partially. More seriously, such an approach leads to errors in conclusions reached. This has implications for the policy development process and the continued design of voluntary policy measures.

This scenario can no longer be justified with claims that to analyse in further detail would be superfluous, and would meet the research requirements of a social science remit rather than those of a focused evaluation. Rather, it is evident that, to analyse further is in fact necessary for an accurate agri-environment policy evaluation.

The arguments developed within the thesis demonstrate that conventional socioeconomic evaluation approaches do not facilitate the structured recognition and analysis of the complex scenarios within which the impact and uptake of the scheme occur. Firstly, research concerning the farm-level context (Chapter Four) demonstrates the complexity of:

(i) the motivations and objectives of farmers and farm households,

(ii) the social environment within which 'the farmer' operates (and the associated public nature of farming), and

(iii) farm-level decision making.

Secondly, the 1993/3 Fieldwork data (Chapters Five and Six) demonstrated the complexity of the ESA-related decision making process, including the time period, and context(s), within which it occurred. Further, the range of factors and motives involved in ESA-adoption/non-adoption decision-making were outlined, demonstrating the need for a broader data base beyond simply financial criteria.

In addition, the thesis has demonstrated the link between the initial and ongoing perceptions which informed the MAFF Evaluation (such as suitable methods of data collection), and their direct outcome. The following quotes are particularly apposite in this context. Firstly, Patton (1981), in his discussion of the need to examine methodological norms within evaluation, states:

"How one conceptualises the evaluation from the outset will play a major role in determining what kinds of findings one has, and the focus of the evaluation" (p.275).

Secondly, McDermott (1987) highlights the importance of the funder's input (which, in McDermott's research, is the government) to the evaluation programme:

"... the government's definition ... determined what the government viewed as the solution and created the framework in which it sought answers from the research" (p.138).

The Critical Appraisal of the Breadalbane ESA Evaluation (Chapter Six) demonstrated how the methods, prejudices, dogmatic preconceptions and associated insistence from MAFF had specific implications. Examples included:

\* Sole reliance upon questionnaires for data collection, the underlying assumptions being that the relevant data would be structured, accessible and quantifiable, and appropriate at the level of individual respondents.

\* Uptake Evaluation focused on numbers, and upon policy mechanism issues relating primarily to financial data.

\* Impact Evaluation was again analysed with respect to numbers and extent of ESA-funded conservation works; plus an emphasis upon the quantification of the anticipated ESA-induced attitudinal change.

These implications of the conceptual and methodological preconceptions inherent within the MAFF Evaluation were also reflected in the wider evaluation literature, including McDermott's (1987) paper concerning government-funded evaluation. The research thus illustrated the fact that, although unique to the Breadalbane ESA MAFF Evaluation, the observations concerning methodology and underlying heuristics are recognised as important facets within the wider evaluation debate. Further, and perhaps more importantly, the issues were also evidenced in the government-published guidelines for policy evaluation (Her Majesty's Treasury [1988] & [1991]; Department of the Environment [1991]). It was noted that although there are no specific government guidelines for agri-environmental policy evaluation, the underlying premises and methods of the three published reports were consistently reflected in the Case Study (MAFF Evaluation).

These observations raise a serious question which comprises the focus of this final Chapter. Although the evidence presented throughout the thesis demonstrates the shortfalls of the MAFF Evaluation (which is further argued as exemplifying the conventions within the socio-economic evaluation of agri-environmental policy), to what extent do these indicate the need for fundamental change? That is, how do the 1993/4 Fieldwork data, and the arguments from the literature, imply the necessity for a shift in the conceptual and methodological norms of socio-economic evaluation?

The answers to this central question are structured around the following issues observed within the MAFF Evaluation: the omission of context (both 'policy' and 'social environment'); the focus upon financial criteria as the ESA-related behavioural determinants; and the compartmentalised approach resulting from the sole application of 'etic' (Evaluators') analytical divisions and the exclusion of 'emic' (farmers') understandings and decision processes.

#### 7.2.1. The omission of context: 'policy environment'.

The nature of the post-productivist policies (Shucksmith [1993]), which some have viewed as asking farmers to be "heritage farmers" (Potter [1990], p.5), represents a fundamental cultural shift in support for agriculture. It touches on a range of fundamental issues which current evaluations (exemplified by the ESA) fail to incorporate in their "anaemic" (Rapport [1993]) and partial accounts of, say, 'scheme impact on attitudes' and 'scheme adoption ratings'.

Shucksmith (1993) has observed that although:

"the productivist era of post-war farm policy is over ... obsolete ... it was possible for many ... farmers to fail to grasp the fundamental nature of this sea-change in policy and the impact which it is likely to have on their businesses and lives" (p.466-467).

Further, the author commented that, for some farmers, "a mood of pessimism about future prospects pervaded the responses ... (there was) a marked fatalism ... " (2), and that:

"to overcome this reluctance to engage in post-productivist policies will require not only reformulation of those policies ... but also a cultural transformation which re-defines the image of 'a good farmer' in his own eyes and in those of his peers" (Shucksmith [1993], pp.467 & 477; emphasis added).

This fundamental shift was highlighted in Chapter Two with respect to the development of the case-study policy of ESAs. Further, the 1993/4 Fieldwork data (Chapters Five and Six) exhibited farmers' uncertainty over the future, and a level of bemusement, anger and confusion concerning the farm-level activities they were now being funded to carry out - as compared with their immediate past which had comprised "the exhortation 'to make two blades of grass grow where one grew before'" (Shucksmith [1993], p.466).

<sup>(2)</sup> An observation also reflected in the post-Evaluation data for Breadalbane ESA.

The sense of "farmer-bashing" (Walston [1988]) still continues (for example, Farmers Weekly: 11/3/94 & 26/8/94), and the recent rise in pressure groups formed by Hill Farmers (in Scotland, the Scottish Hill Enterprise and Farming [SHEAF]; in England, the Hill Farming Initiative) comprises the shifting and uncertain context within which farmers, such as those in Breadalbane ESA, perceive a scheme such as the ESA.

These shifting norms of environmental obligation (see also Colman and Lee [1988]) which the ESAs represent therefore, comprise the dynamic reality within which farmers are making scheme-related decisions. To omit such a facet of context from the socio-economic evaluation of agri-environmental policy, to view it as irrelevant or 'non-problematical' (Rapport [1993], p.180), is to lose a vital dimension of the Evaluation.

A specific example of this omission is evidenced in a key facet of the MAFF Evaluation - that of the assessment of ESA-induced attitudinal impact. The presumptions inherent within the MAFF Evaluation led to an emphasis upon questions of "what" had changed, rather than "why". This reflected the preoccupation, within the MAFF Evaluation, with the type of expectations associated with Scheme's anticipated success - one example being that the ESA was changing farmers' attitudes towards conservation (3). This approach again viewed the ESA as potentially the sole instigator of attitudinal change, thus omitting the scenario also observed by Colman and Lee (1988) in their evaluation of the BGMCS, that the agricultural policy context into which the scheme was introduced, and the shifts that this wider process was already initiating, could well - itself - comprise the forces for change.

The narrowly-focused analytical approach outlined above, produced Evaluation results which did not facilitate progress in underlying policy development ideas and directions. Rather, the emphasis was upon assessing only the scheme's concordance with 'inevitable' outcomes as previously perceived. Weiss (1986) has observed:

<sup>(3)</sup> The vagueness of this assumption was increased further by the lack of distinction between: attitudes to 'conservation', attitudes to 'the environment', and attitudes to 'conservation on my farm'.

"... every agency, even the most progressive, tends to grow musty and stale. It settles into a rut, taking old assumptions for granted, substituting routine for thought, *tinkering at best with policy minutiae rather than venturing in new directions*" (p.227; emphasis added). (4)

#### 7.2.2. The omission of context: 'social environment'.

The fact that farmers live and work within a "dense social environment" (Rapport [1993], p.151) has been established through the literature and through the 1993/4 Fieldwork data (see Chapters Three, Five and Six). This contrasts significantly with the dominant discourse which informs evaluation methods and understandings. The anthropologist Rapport (1993) comments:

"In differentiating social life from the refinements of the laboratory ... it is an immeasurably greater complexity ... (which) we must recognise, a complexity which ... (is) a condition of any social life which people would consider worth living" (p.151; emphasis added).

The focused nature of the MAFF Evaluation, and the MAFF Evaluation results (Chapter Three), suggest that this level of complexity (see Cohen [1992], p.225) is presumed sufficiently irrelevant to the MAFF Evaluation setting; it is a 'given' which has received no more than covert assent within this context (5). Reasons for preference for this 'laboratory setting' have been outlined. However, the arguments presented within this thesis provide weighty evidence for the necessity of a structured recognition and analysis of social context within the socio-economic For example, the influence of the evaluation of agri-environmental schemes. 'significant other' and debates over 'adoption dynamics' of a scheme within a given farming area were omitted from the MAFF Evaluation, thus reducing those facets which inform and regulate farm-level behaviour to residual parameters, the emphasis being upon 'the farmer' in his social vacuum (in contrast, see Seabrook and Higgins' [1988] work which touches on the public nature of farming; the 'cultural sanction' [Phelan, pers. comm. 1993]; and farm household decision making [Whatmore 1991], Berlan Darque, [1988], and Gasson and Errington [1993]).

<sup>(4)</sup> In the case of the Breadalbane ESA Evaluation, the focus was simply upon policy mechanism, primarily with the aim of increasing participation levels.

<sup>(5)</sup> This covert assent may often progress no further because the otherwise ensuing data are preconceived as 'messy' and not amenable to 'necessary' aggregation.

The omission of these two facets of policy recipients' context is particularly detrimental to socio-economic evaluation, when the future of agri-environmental policy will continue to be built upon voluntary agreements introduced into the very 'public' setting of farming (see Chapter Two). Thus, not only will the impact continue to be little understood (for example, on attitudes of policy recipients), but also uptake itself.

# 7.2.3. <u>The focus upon financial criteria as the ESA-related behavioural</u> <u>determinants.</u>

As outlined, motives and reasons for adoption were viewed within the MAFF Evaluation as primarily financial (see Chapter Three - MAFF Evaluation Results). The partiality of this interpretation has been demonstrated (see Chapter Six). Although financial criteria are recognised (for example, as a 'constraining' factor [see Potter and Gasson [1988]]; and Shucksmith's [1993] comments concerning the resource base), they are also analysed in conjunction with the other issues that have been noted: firstly, from the 1993/4 Fieldwork data (neighbours, policy context, trade-off opportunities, other related experiences, and perceptions of the Scheme); and secondly from the literature (attitudes, congruence, selectivity, stewardship motives, and ethics).

Further, the emphasis on 'financial' within the MAFF Evaluation presents a paradox in MAFF Evaluation interpretation. The motives for scheme adoption are apparently financial, but they are also recognised within the MAFF Evaluation as attitudinal, since one aim of the MAFF Evaluation was to emphasise that conservation was being carried out due to the ESA increasing positive conservation attitudes among farmers. This discrepancy in analysis is clearly lacking in a consistent underpinning, and leads to conflicting conclusions which are fed into future policy development.

In addition to the assumed primary importance of financial criteria to farmers being incorrect, it can also be viewed as potentially demeaning (6). However, policy

204

<sup>(6)</sup> Potter (1994) comments on this issue: ".. But then everything was given its price-tag, and the price-tag became the only gospel. And that gospel is very thin gruel indeed. If you start measuring humankind in those terms, everything else becomes less important, or laughable - all the things that bind us together as community...(p.14).

mechanisms continue to be structured and restructured around financial data, thus omitting the range of criteria which farmers themselves consider.

Once again, end-users of the MAFF Evaluation appeared satisfied with a partial picture, believing this to be sufficient in order to explain *most* of the scenarios being evaluated; this perspective is reflected in the following quote:

"... the notion here is to focus on *those "vital few" facts among the "trivial many"* that are high in payoff and information load. The "20-80" rule expresses the importance of focusing on the right information. The 20-80 rule states, as a rule of thumb, that 20% of the facts account for 80% of what is worth knowing" (Patton [1986], p.80; emphasis added).

It is necessary to make two points. Firstly, it has been established within this thesis that the "unexplored remainder" (Daly and Cobb [1990]) comprises an equally, and for some far more, important part of their context. Secondly, the quote cites data that are "worth knowing". However, as has been pursued in this thesis (and is discussed in Section 7.3. of this Chapter), the criteria for determining what is "worth knowing", and when to therefore "... cut out the mundane and idiosyncratic as 'noise' " (Rapport [1993], p.180) is a crucial area which continues to be bypassed. This is particularly important since:

"Focusing involves choice. The decision to look at something is also the decision not to look at something". (Patton [1986], p.81).

As Weiss (1986) explains:

"... data are not 'given' but created. Which variables are considered, how they are conceptualised and measured, and the completeness of the explanatory models, all influence the nature of the results" (p.229; emphasis added).

Although such issues have not received scrutiny in this parsimonious MAFF Evaluation context, the continued, often implicit, reliance upon assumptions and presumptions inherent within the MAFF Evaluation has now to be justified.

7.2.4. The compartmentalised approach resulting from the sole application of 'etic' (Evaluators') analytical divisions and the exclusion of 'emic' (farmers') understandings and decision processes.

Not only is adoption to be seen as being affected and directly informed by a wider range of criteria (than purely financial), but it must also be recognised as occurring within a wider decisions framework. The MAFF Evaluation of Breadalbane ESA focused upon adoption; with this focus came the implicit notion that the same degree of focus must be inherent for policy recipients. Thus, ESA adoption was allotted a position at the top of the farmer's decision hierarchy by the Evaluator. The MAFF Evaluation implicitly comprised a dogmatic presumption concerning the crucial place and centrality of the ESA in farmer's life and decision making, and thus how everything related to IT, rather than seeing IT as moving into something already established (see Cronbach [1975] in Patton [1980], p.280).

However, the 1993/4 Fieldwork data demonstrate the error of this assumption. The 'decision' to adopt or not to adopt the ESA typically comprised a *number* of decisions taken over a 6-12 month period; there were many other incidents, developments, opportunities, constraints, and concerns which occurred during this time-period.

Such a compartmentalized, 'etic' approach to data gathering and interpretation evidenced within the MAFF Evaluation - naturally led to compartmentalized data, from which correlative inferences and relationships were retrospectively constructed. This contrasts with a recognition of decisions taking place in an established context. That is, the evaluation requires and demands an 'holistic' approach:

"This holistic approach assumes that the whole is understood as a complex system that is greater than the sum of its parts. It also assumes that a description and understanding of a person's social environment ... is essential for an overall understanding of what is observed" (Patton [1990], p.49).

The above quote is pertinent for two reasons. In addition to underlining the points already made, the 'assumptions' cited (in the quote) can no longer be accepted as 'assumptions' within the context of the Critical Appraisal of the MAFF Evaluation. The 1993/4 Fieldwork data, *and* the literature, both *demonstrate* the complexity of context which is synonymous with the decision-making environment; the compartmentalisation, to the extent observed, is thus artificial. It is particularly serious since it becomes a self-perpetuating categorisation which continues to narrow down the area of inquiry; and its 'concreteness' remains beyond its use as an 'analytical tool' or category. Patton (1990) has made the following observation:

"that despite the totality of our personal experiences as living, working human beings, researchers have focused ... on *parts* to the virtual exclusion of *wholes*.." (p.51; emphasis added). This continued partial approach appeared to require no justification in the MAFF Evaluation, or within the government produced guidelines (see Chapter Three), since an alternative holistic approach was viewed as an *optional* methodology which could be dismissed for a number of reasons (often implicitly). However, the 1993/4 Fieldwork data and the literature demonstrate that incorporation of 'emic' understandings and decision processes can no longer remain an *option* (see quote by Marsden and Oakley [1990], cited below). As Gladwin (1989) states:

"Discovering the insider's world from an insider's point of view is a far different goal from that of collecting data about people and testing a model based on an outsider's view. Decision criteria should thus contain 'emic' categories, ie. units of meaning drawn from the culture bearers themselves, which can be contrasted with 'etic' categories, which may have meaning for researchers, but need not have meaning for the people of the specific culture under study" (p.9).

The above findings concerning the omission of context, the focus upon financial criteria, and the compartmentalised analytical approach, are supportive of the hypotheses outlined in Chapter One:

\* That the current underlying concepts, and associated heuristics and methods, applied within conventional socio-economic evaluation of UK agri-environmental policy, are inappropriate, and lead to inaccurate and partial results.

\* That conventional, government-funded socio-economic evaluations of agrienvironmental policy comprise a *poor* evaluation of the impact and uptake of such policies.

\* That, through a case study, it is possible to isolate key facets of these conventional evaluations which lead to the inadequacy of the results.

\* That future socio-economic evaluations of agri-environmental policy must comprise a broader data set than currently employed; and that the data must comprise qualitative and quantitative components, as appropriate to the issues concerned.

\* That a revised set of criteria and methods are necessary both to replace and complement existing socio-economic evaluation procedures.

The Chapter now outlines those conceptual and methodological imperatives which thus become paramount in this context of socio-economic evaluation.

## 7.3. <u>CONCEPTUAL AND METHODOLOGICAL IMPERATIVES FOR THE</u> <u>SOCIO-ECONOMIC EVALUATION OF AGRI-ENVIRONMENTAL POLICY.</u>

Earlier in the thesis, two quotes were given as the dual foci of the research; it is worth reiterating them here, as they continue to provide the emphases of the recommendations presented below:

"A major difficulty posed by ... reliance on paradigms and heuristics for problem solving is not just their existence, but our general lack of awareness of their existence ... Yet it is possible to become aware of our paradigms and heuristics, and in that awareness take hold of (the) decision process" (Patton [1981], p.271).

"Evaluation is .. much more than providing useful information to decision-makers; it is learning from people about their own methods of evaluation and incorporating that learning into a redesigned practice" (Marsden and Oakley [1990], p.14).

The specific recommendations and imperatives are presented in point form; they are structured broadly around the three following areas:

7.3.1. The influence of MAFF upon the Evaluation process and ongoing remit.

- 7.3.2. The conceptual emphases and assumptions within the MAFF Evaluation.
- 7.3.3. The methodologies used in data collection within the MAFF Evaluation.

### 7.3.1. The influence of MAFF upon the Evaluation process and ongoing remit.

7.3.1.1. There must be a serious questioning of the purported degree of funder objectivity and detachment from Evaluation process and outcome. Further, this must be continually assessed during the Evaluation, and in the reporting of the conclusions. In addition to evidence provided in Chapter Six, this point is re-emphasised by the following quote:

<sup>&</sup>quot;... (there is) the possibility that decision makers support research because the use of objective information is one of the hallmarks of rationality. They go through the motions of commissioning studies and searching for evidence in order to lay claim to the mantle of intelligent choice. In effect they seek to demonstrate the quality of their decisions, in situations where criteria for 'quality' are highly ambiguous, by appropriate performance of the rituals of information processing ... In this way, (political actors) seek to bolster their reputation for intelligent and unbiased decision making" (Weiss [1986], p.226).

Further, in her discussion of the contract evaluation research relationship, McDermott (1987) comments:

"As more social scientists are engaged in contract research an opportunity presents itself to scrutinize the culture of the bureaucracy, to analyse power networks and to discover the hidden functions of ... contract research. However, this can only be done by stepping in and out of the contract research role, by acting as a true participant observer, by viewing the negotiations and the decisions over the research itself as part of the data" (p.142).

7.3.1.2. The observed MAFF Evaluation scenario demands an increased liaison with policy-makers at the time of an evaluation being formulated, concerning: accuracy versus speed, and accuracy versus method. That is, data requirements, and data types ensuing from different data collection and analysis methods must be outlined. The strengths and weaknesses inherent in qualitative and quantitative methodologies, and the appropriateness of qualitative analyses within certain settings, must be explained. This recognition and discussion of implicit trade offs when using certain methods, in addition to allowing for the assessment of *one facet* of data requirements, will also prepare the ground for the use of qualitative data.

The Evaluation also requires more interaction, and more *insistent* interaction (from the Evaluation team) not only at the Evaluation planning stage, but also during the life time of the Evaluation, at 6 months, 12 months, and at interim stages. The aim would be *interactive debate* rather than simply opting for convention.

# 7.3.2. The conceptual emphases and assumptions within the MAFF Evaluation.

7.3.2.1. The Critical Appraisal of the MAFF Evaluation demonstrated the implications of the continued deference to inbuilt assumptions, particularly in the context of methodological suitability. There is clearly, therefore, an overriding need for evaluations to be informed by *definitions* rather than *assumptions*. This demands an increased awareness of the reasons and criteria informing the evaluation, and a questioning of conventional heuristics and the ongoing emphasis upon *focus* versus *context* (see Patton's [1981] discussion of "Creative evaluation").

7.3.2.2. An aim in these recommendations is the increased utilisation of data gathered within an evaluation. It was cited in Critical Appraisal (Chapter Six) that certain data from the MAFF Evaluation could not be used due to insufficient

underpinning from hypotheses. Thus, greater consistent attention must be given to the following: why certain questions are asked and not others; hypotheses as a basis for sifting possible avenues of inquiry; and therefore greater rigour. This is not to preclude ongoing flexibility as issues arise, but this flexibility itself is to become explicit and recorded in the evaluation methodology, rather than simply emerging.

#### 7.3.2.3. The MAFF Evaluation has illustrated that:

"Economists pay lip-service to non-financial aspects of people's motivation, but because they are difficult or impossible to measure, we proceed to ignore them in our analysis and concentrate purely on those aspects which can be measured" (Gasson [1971], p. 34) (7).

The understanding and analysis of scheme adoption/non-adoption, however, has to be broadened - consistently - beyond financial, and other quantifiable, criteria. Evaluation requires an inbuilt recognition of the range of factors which farmers and landowners see as crucial to *their* scheme-related decision making. Further, analysis needs to incorporate decision making *stages*, and the importance of factors at certain stages. This is no longer an option - the evidence, presented in the thesis, is too strong for the observed conventions to continue.

7.3.2.4. From the 1993/4 Fieldwork data, it appeared that the ESA decision setting could not be viewed as synonymous with other similar decision scenarios, one example being risk taking behaviour. The data demonstrated that there must be a recognition of the limitations of inferring adoption behaviour from other (non-ESA) decision settings; further, there is a need for a working awareness that such an approach requires extreme caution, with the explicit recording of the required caveats.

7.3.2.5. The Critical Appraisal (Chapter Six) illustrated the complexity of the farm/farmer 'characteristics' which had been retrospectively correlated with ESA adoption within the MAFF Evaluation. The 1993/4 Fieldwork data demonstrated that a socio-economic evaluation must *examine*, rather than *assume*, the nature of such a relationship between ESA adoption and farm/farmer characteristics. Again,

<sup>(7)</sup> It must be stressed that the citing of this quote is not intended to criticise economics *per se*; rather, 'economic' criteria appear to have directly informed the Evaluation assumptions, which have in turn led to the observed scenario.

definition rather than inference is crucial. Discussing evaluation results with farmers would provide the opportunity to examine reasons behind relationships within the data. This would ensure greater understanding of the *extent* to which these categories are determinants of ESA adoption, and therefore indicate the degree of certainty with which these observations and correlations could be made.

7.3.2.6. Important evidence has been presented for the examination of the *context* within which the ESA is introduced (site specific, policy specific, farm and farmer, farm household, social environment, and so on). There is a need for an evaluation to be "situationally responsive" (Patton [1981] p. 23), that is, to pursue - within the analysis - those issues pertaining to the local 'environment' of the decision maker (see also Patton [1990], pp. 221-222).

7.3.2.7. One emphasis of the MAFF Evaluation comprised the ESA-attitudinal impact upon attitudes to conservation. The Critical Appraisal, however, demonstrated that, when evaluating the attitudinal impact of an agri-environmental scheme such as the ESA, there must be clarity of definition concerning the attitudes being assessed and the reasons for their assessment. There also needs to be an outlining of assumptions and 'results preferences' of funders (see McDermott [1987]).

7.3.2.8. The data within the MAFF Evaluation were exclusively quantitative; those used in the Critical Appraisal were qualitative, since the issues being investigated within the 1993/4 Fieldwork required a semi-structured, qualitative approach (see Chapter Five). However, although the research has involved a *process* which has moved from quantitative to qualitative data sets, this is not intended as an advocation of such a step-by-step approach (8). Rather, there is a substantial requirement for qualitative *and* quantitative data types to be incorporated within an evaluation in a structured manner, as compared with qualitative information being 'tagged on' in an appendix (see McDermott's [1987] account of the use of case studies; p.139). Possible approaches include: liaison with the end-users of the evaluation; the use of a qualitative data base (for example, *The Ethnograph*); and an examination of the potential - within this setting - for applying analytical techniques for qualitative data, such as matrices, circles

<sup>(8)</sup> This having been determined by the nature of the analysis. That is, the quantitative MAFF Evaluation came first, followed by the 1993/4 Fieldwork and then the Critical Appraisal, which of necessity focused upon the inadequacy of data type as a key facet of the MAFF Evaluation.

(see Patton [1990]); Hierarchical Decision Models (see Gladwin [1989]). The issues of presentation of qualitative data are touched upon below. It is important that such approaches, however, must not detract from an emphasis upon the indispensable role of qualitative data as an information source appropriate to the issues and data types under discussion.

7.3.2.9. Contrasts between 'research' and 'evaluation' have been discussed (see Chapter Six). The Critical Appraisal of the MAFF Evaluation has demonstrated, however, that trading off accuracy and rigour for conformity to methodological convention, constraints, and data expectations, is no longer a satisfactory option (see also Weiss [1986], p.234). As Patton (1981) has stated in his discussion of 'Utilisation-Focused Evaluation', "A concern for utility (of data) includes concern about misutilisation and data abuses" (p.274). Thus, the objectives of *reducing the partial nature of data* and *increasing the rigour of the analysis* must become paramount considerations in the formulation and execution of a socio-economic evaluation.

7.3.2.10. The Critical Appraisal of the MAFF Evaluation illustrated the implications of the evolution of Evaluation objectives; the evaluation methodology literature also pointed to the importance of defining the evaluation remit. There is the need within an evaluation to insist upon an initial clarity of the scheme objectives to be analysed, and a definition of time scale or 'end-date'. As McDermott (1987) has observed:

"In order to conduct any type of evaluation, an understanding of just what is being evaluated - that is, the underlying assumptions of the programme - must be made clear" (pp.137-138).

Further, the MAFF Evaluation of the extent to which the scheme was meeting its objectives was carried out over a very short time period (see also Whitby and Lowe [1994], p.23). Increased accuracy is necessary, from an evaluation occurring either over a ten year time period, or through a comparative follow-up study five and/or ten years later. This longitudinal approach would facilitate the assessment of *ongoing* impact and uptake, which could then be analysed alongside the *projections* made at the time of the first evaluation, rather than relying solely on projections.

Finally, it was noted within the Critical Appraisal that the objectives of the ESA Scheme itself were outwith the remit of the MAFF Evaluation; they were afforded apparent legitimacy by MAFF. However, it is argued that there needs to be an examination of the objectives of a Scheme as a facet of its overall evaluation. Issues, such as those raised by Colman (1994b) concerning the paying of farmers for what they are/should be doing anyway, cannot be omitted, since they may well have both implications for the adoption of a scheme, and possibly an impact on any long-term attitudinal change of policy recipients (towards environmental obligation) anticipated by the government.

7.3.3. The methodologies used in data collection within the MAFF Evaluation.

7.3.3.1. The Critical Appraisal of the MAFF Evaluation clearly demonstrates the necessity for the explicit discussion of methods adopted, rather than accepting implied suitability. The conventional scenario, exemplified by the MAFF Evaluation, is particularly serious since, not only are cogent data evidently omitted, but they are also seen as optional extras, as "icing on the cake" (pers. comm. MAFF [1989]). This fundamental perspective, which otherwise assures continued use of conventional methodologies, *must* therefore be reviewed and changed. Paradigms and views concerning suitability and validity, must be debated rather than assumed. As Patton (1990) has observed:

"Measurement and methods decisions are not simply a matter of expertly selecting the best techniques. Researchers *and* decision makers operate within quite narrow methodological paradigms about what constitutes valid and reliable data, rigourous and scientific design, and personal or impersonal research methods. Design and data collection decisions are far from being neutral, objective or rational; such decisions are political and subjective ... " (p.126).

7.3.3.2. There must be a recognition of the *limited* appropriateness of questionnaires (in themselves, and as the sole approach) for this type of evaluation which has to focus on complex issues, including social networks and their role in decision making. That is, a review of the inherent credence given to the methodology in these settings is essential to the accuracy of an evaluation. This requires the evaluation methodology to be "situationally responsive" (Patton [1981]).

7.3.3.3. The above recommendations necessitate establishing a methodology which comprises both structured questioning where it is appropriate (for example,

for collecting certain farm details), with open ended, and semi-structured, questions. This could have parallels with what Patton (1990) has termed "thoughtful questionnaires". As Gladwin and Murtaugh (1980) have noted, there must be a recognition of the bias "induced by unanalyzed preattentive suppositions" (p.132) that are present within questionnaires - "this is true of the presuppositions of farmers as well as of observers and social scientists" (p.132). They argue that "preattentive suppositions operate in any conversation; there is no reason to suppose that they will not operate within questionnaires" (p.132).

There needs to be a shift away from methodological inflexibility, such as in the following comparable example referred to by Cloke *et al* (1994):

"... our strong preference was to interpret information from the surveys in categories and under headings which reflected people's own reporting of their problems and significant issues rather than preconceived notions on our part about what their problems should be. This preference, however, was constrained by ... a survey method which involves the collection of information under 'logical' headings" (p.23).

This issue is also noted by Canter et al (1985):

"... an understanding of the meanings used by others ... must draw upon an intensive rather than an extensive approach to data collection ... This contrasts with the use of standard questionnaires or structured interviewing procedures in which the researcher has formulated views on what the respondent will wish to comment upon, and so the researcher is, in effect, checking the extent to which the respondent will endorse the experimenter's speculations ... procedures that allow some possibility for the respondent to frame his/her answers are essential if the essence of any given individual's conceptual system is to be established" (pp. 80& 83; emphasis added).

Relationships between data must no longer be established solely through retrospective, 'logical' and anticipated correlations between quantitative data sets. Rather, quantitative data need to be analysed alongside the qualitative data as a totality of information concerning uptake and impact issues.

The Critical Appraisal of the MAFF Evaluation, together with the farm-level research literature and the 1993/4 Fieldwork data, have demonstrated the complexities inherent within the evaluation *context* which must therefore be analysed. Thus evaluations must have a methodology which allows complexities to come through and be assessed more accurately, rather than marginalising them as an unnecessary nuisance or 'noise'; examples of such data include: scheme attitudinal impact; scheme-related decision making.

There is an associated need to develop those tools which pursue "why/why not" rather than just "what/how many". These comprise methods which actively integrate an 'holistic' (rather than compartmentalised) perspective into the data collection stage:

"The advantages of qualitative portrayals of holistic settings and impacts is that greater attention can be given to nuance, setting, interdependencies, complexities, idiosyncrasies and context" (Patton [1990], p.51).

7.3.3.4. Finally, the Critical Appraisal of the MAFF Evaluation demonstrated the total unsuitability of the sole reliance upon the individual as *the* unit of analysis. There is an absolute necessity for interviewing beyond the individual farmer, to establish the nature and importance of relationships to farm-related decision making. Specifically, this requires: interviews with farmers' wives and/or other family members who are participating in farm decision making; interviews with groups of farmers; and a further discussion with individual interviewees concerning the nature of, and variations within, neighbour influence. Once again, this is not an optional methodological scenario. Rather, it is a fundamental pre-requisite of an evaluation which incorporates those 'realities' which currently are considered (within conventional evaluation) as 'alternative' to the dominant tradition.

7.3.4. Summary of imperatives for future socio-economic evaluations.

The three facets of conceptual and methodological imperatives for the future socioeconomic evaluation of agri-environmental policy have been outlined (Section 7.3.). Table 7.1. comprises a summary of the fundamental components of such evaluations which, when applied, will ensure greater rigour and accuracy in both the evaluations themselves, and thus in future policy formulation.

#### INFLUENCE OF FUNDER ON EVALUATION PROCESS AND REMIT:

\* Both the evaluation team and the evaluation funders must recognise the necessity for funder objectivity and detachment from evaluation process and outcome, and ensure this throughout all phases of the evaluation.

\* Liaison between policy makers (and information users where different) and evaluators must be carried out during the evaluation, to ensure a clear understanding of the implications of chosen data types upon data analysis and results.

\* In addition to a clear outline of the objectives of the evaluation and definition of the evaluation remit by evaluation funders, an accurate evaluation requires that this stance must not *evolve* during the lifetime of the evaluation; however, should a change be deemed necessary, it should not be implemented without a clear statement of the implications of such a change for the evaluation.

#### CONCEPTUAL EMPHASES AND ASSUMPTIONS WITHIN AN EVALUATION:

\* Clear definitions and hypotheses must be applied in guiding the avenues of inquiry within the evaluation, rather than a reliance upon inbuilt assumptions. Further, this will necessitate a reassessment of conventional criteria and modes of analysis, in terms of their appropriateness to the evaluation setting.

\* An holistic approach to data collection and analysis, incorporating information beyond the solely financial and quantifiable, is crucial for an accurate representation of both the decision settings, and decision behaviour, of policy recipients.

\* The evaluation must incorporate the complexity of adoption decision making, and the context in which it takes place, thereby re-emphasising the holistic perspective.

\* There must be an integrated use of both qualitative and quantitative data where appropriate to the scenarios being analysed and presented.

#### METHODOLOGIES USED IN DATA COLLECTION WITHIN AN EVALUATION:

\* The evaluation team and evaluation funders must discuss those methods adopted for data collection within the evaluation, rather than accepting the implied suitability of conventional approaches.

\* There is a need to recognise the limited appropriateness of questionnaires for an evaluation focusing on complex issues and upon context of decision maker.

\* An evaluation must focus, and therefore interview, *beyond* the individual farmer as *the* unit of analysis, since relationships between individuals affect adoption of policy initiatives.

TABLE 7.1.SUMMARY OF IMPERATIVES FOR FUTURE SOCIO-ECONOMIC EVALUATIONS OF AGRI-ENVIRONMENTAL POLICY.

#### 7.4. FURTHER RESEARCH.

The Critical Appraisal, and the above summative discussion, have highlighted key imperatives for the future socio-economic evaluation of agri-environmental policy. In addition, there are a number of research areas which will need to be addressed alongside these methodological improvements. These are now briefly outlined.

7.4.1. The Critical Appraisal of the MAFF Evaluation shows the necessity for ongoing discussion of the scope and feasibility for incorporating 'context', often as qualitative data, within the specific evaluation setting. The following implications for research are now discussed.

7.4.1.1. This involves further analysis of the approaches of policy-makers towards qualitative data. Although arguments concerning qualitative data utilisation have been examined within the broader evaluation methodology literature, there is a need to assess them specifically within the setting of agri-environmental policy evaluation. Further research will therefore need to touch on issues of:

(i) the feasibility of changes in data utilisation heuristics;

(ii) qualitative data analysis and presentation;

(iii) awareness of preconceptions towards qualitative data, but also the imperative of using it in this specific area;

(iv) issues raised in evaluation methodology literature concerning the 'quality' and 'credibility' of qualitative research (see Patton [1980], Chapter Nine).

Possible references include: Finch (1986), pp.183-188; Patton (1986), Chapter 10, pp.245-280; and Roberts (1984). The investigation of the scope and feasibility of these imperatives concerning the use of qualitative data alongside quantitative data is crucial, such that they do not simply remain as "recommendations".

7.4.1.2. It is crucial that further research specifically examines the detailed requirements arising from the integration of both qualitative and quantitative data, where they are each appropriate to the issues being addressed. This will necessitate investigation into the associated issue of methodological suitability.

7.4.1.3. Whitby and Lowe (1994) highlight the diversity of approaches which have been used in the MAFF-funded Socio-economic Evaluations of ESAs (see p.22). Whitby (1994) cites the need for 'methodological advances' in this context (see pp.263-264). The associated areas for further research therefore include:

(i) the appropriateness of current methodological approaches;

(ii) the appropriateness of a single methodological framework for the socioeconomic evaluation of agri-environmental policy, with a core element common to each evaluation, together with crucial elements facilitating flexibility and "situationally responsive" (Patton [1981]) evaluation foci.

7.4.2. Secondly, the Critical Appraisal of the MAFF Evaluation highlights the importance of the ongoing analysis of farm-level decision making in its context (that is, decision setting). This is particularly cogent since agri-environmental policy comprises the post-productivist agenda, and will remain voluntary in nature for the foreseeable future. The following specific elements of this 'context' therefore require more detailed research attention:

7.4.2.1. *Decision as process:* the stages within the process need to be taken back to farmers for discussion. This would enable, firstly, the accuracy of the process to be assessed; secondly, the identification of any 'loops' in the process; and thirdly, the highlighting of any hierarchical ordering of decision stages. The work of Gladwin (1989) concerning Hierarchical Decision Models could prove a comparable example.

7.4.2.2. Farm household decision making: The importance of the farm household, rather than the individual as the unit of analysis, must be pursued, and incorporated within future socio-economic evaluations. To assist in the representation of the farm household within the evaluation, the variations in the input of the farmer's wife, and other family members, to decision making, needs specific analysis. Thus, within a given geographical area selected for evaluation, the decision-making scenarios can be represented accurately rather than being assumed. Further, the influence of two-generational farming upon adoption/non-adoption of agri-environmental schemes such as the ESA needs assessing.

7.4.2.3. 'Trading off': the trading of perceived advantages and disadvantages when considering scheme adoption/non-adoption was highlighted as a key process by policy recipients. The inter-relatedness of the factors under consideration must be recognised in a structured manner within analysis, and their precise nature (and dynamism) must be clarified. This must replace the analysis of factors in isolation from one another, this approach being contrary to farmers' own assessment methods.

7.4.2.4. Time period for decision making: The 1993/4 Fieldwork data pointed to the time period over which ESA-related decisions were being made; this comprised a dynamic context for the decision makers in which the ESA therefore became one of a number of concerns or options. The premise for studying ESA adoption/nonadoption therefore must shift: away from the decision(s) per se, towards the context(s) within which ESA related decisions are being made. That is, there is a holistic rather than adoption/non-adoption from an need to assess Further research must therefore focus upon compartmentalised, perspective. adoption/non-adoption context as it is perceived by the decision makers.

7.4.2.5. *Perceptions of the ESA scheme:* The ESA scheme raised issues relating to 'good' and 'poor' farming, and notions of 'traditional' and 'progressive' approaches. These need to be further investigated in order to ascertain the extent of their influence upon adoption/non-adoption of future agri-environment schemes, and the nature of their congruence with the 'self-concept(s)' of policy recipients.

7.4.2.6. *Data Diversity:* The diversity within the themes of the 1993/4 Fieldwork have been highlighted and discussed. These need to be analysed further, in order to assess the reasons for such diversity, and their implications for adoption/non-adoption of schemes such as the ESA.

#### 7.5. CONCLUDING COMMENT.

The research presented in this thesis has demonstrated - through the Critical Appraisal of the MAFF Evaluation - that there is an *imperative*, rather than an *option*, to examine the "unexplored remainder" (Daly and Cobb [1990]) rather than implicitly adopting the "20-80" rule. This does not comprise simply a recommendation for theoretical niceties to be observed; rather, it calls for a willingness to recognise and incorporate the realities, the 'contexts', of the policy recipients.

#### As Cronbach et al (1980) have argued:

"Instead of promoting single definitive studies that promise unquestionable guidance on a narrow issues of policy, evaluations should be contributing to the slow, continuous, cumulative understanding of a problem or an intervention..." (p.47).

While it is recognized that

"it would be unwise to commend any single blueprint for undertaking (policy) analysis" (Williams, [1983], p. 79),

the above imperatives will enable socio-economic evaluation - as exemplified by the MAFF Evaluation - to move away from what Lipsky (1971) has termed 'the paprika role', that is, having "no substantive effect other than to add a bit of colour to decisions" (Booth [1988], p.239), towards a rigorous source of data and understanding for agri-environmental policy development.

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#### APPENDIX: II(i)

#### <u>THE AGRICULTURE ACT 1947</u> EXCERPTS CONCERNING RULES OF GOOD ESTATE MANAGEMENT AND GOOD HUSBANDRY.

#### **Good Estate Management:**

"... his management of land ... is such as to be reasonably adequate, having regard to the character and situation of the land and other relevant circumstances, to enable an occupier of the land reasonable skilled in husbandry to maintain efficient production as respects both the kind of produce and the quality and quantity thereof...(that is) the extent to which the owner is providing, improving, maintaining and repairing fixed equipment on the land so far as it is necessary to enable an occupier of the land reasonably skilled in husbandry to maintain efficient production as aforesaid" (II [10], p.1059).

#### Good Husbandry:

"... the occupier of an agricultural unit shall be deemed to fulfill his responsibilities to farm in accordance with the rules of good husbandry in so far as the extent to which and the manner in which the unit is being farmed is such that ... the occupier is maintaining a reasonable standard of efficient production, as respects both the kind of produce and the quality and quantity therefoe, while keeping the unit in a condition to enable such a standard to be maintained in the future" (II [11], p.1059).

("Further), regard shall be had to the extent to which:

(a) permanent pasture is being properly mown and grazed and maintained in a good state of cultivation and fertility and in good condition;

(b) the manner in which arable land is being cropped is such as to maintain that land clean and in a good state of cultivation and fertility and in good condition;

(c) the unit is properly stocked when the system of farming practised requires the keeping of livestock, and the efficient standard of management of livestock is maintained where livestock are kept and of breeding where the breeding of livestock is carried out;

(d) the necessary steps are being taken to secure and maintain crops and livestock free from disease and from infestation by insects and other pests;

(e) the necessary steps are being taken for the prection and preservation of crops harvested or lifted, or in the course of being harvestd or lifted;

(f) the necessary work of maintenance and repair is being carried out" (II [11], p.1059-1060).

#### **APPENDIX: II(ii)**

#### **LEGISLATION SPECIFIC TO ESAs**

#### The Broads Grazing Marshes Conservation Scheme.

This was established in 1985 as an experimental grazing management scheme to run for 3 years. This was possible under Section 40 of the Wildlife and Countryside Act. It was the model for the future development of ESAs in terms of its voluntary nature, its payment mechanism (within England, Wales and Northern Ireland), and the aims of maintaining traditional farming systems where the practices were consistent with environmentally-friendly farming.

#### EU Negotiation on the draft Structures Regulation 1984-85

This significant debate is outlined in the HMSO Publication ..... The focus of the discussion was the need, in the Committee's, view to increase the remit of the proposed EU Structures Regulation 797/85 to include environmental objectives. As a direct result of the debate, Article 19 was introduced to the legislation, and ESAs were given a legal basis at European level (12th March 1985).

#### COUNCIL REGULATION (EEC) No 797/85 On Improving the Efficiency of Agricultural Structures

#### Article 19

#### National Aid in Environmentally Sensitive Areas

1. In order to contribute towards the introduction or continued use of agricultural production practices compatible with the requirements of conserving the natural habitat and ensuring adequate income for farmers, Member States are authorised to introduce special national schemes in environmentally sensitive areas.

2. For the purpose of this Article, 'environmentally sensitive areas' means in particular areas of recognised importance from an ecological and landscape point of view.

3. The aid may be granted to farmers who undertake to farm environmentally important areas so as to preserve or improve their environment.

The farmer's undertaking must stipulate at least that there will be no further intensification of agricultural production and that the stock density and the level of intensity of agricultural production will be compatible with the specific environmental needs of the area concerned.

4. Member States shall forward to the Commission all such prospective schemes, together with a list of areas qualifying for aid under those schemes.....

SOURCE: OJ (30/3/85) L93/10 & L93/11.

#### Agriculture Act (1986) Section 18

The Agriculture Act 1986 Section 18 enabled the designation of ESAs within the UK:

# Section 18 Designation and Management of Environmentally Sensitive Areas (Relevant excerpts)

If it appears to the Minister that it is particularly desirable:

 (a) to conserve and enhance the natural beauty of an area;

(b) to conserve the flora and fauna or geological and physiographical features of an area; or
(c) to protect buildings or other objects of archaeological, architectural or historic interest in an area,

and that the maintenance or adoption of particular agricultural methods is likely to facilitate such conservation, enhancement or protection, he may, with the consent of the Treasury and after consulting the persons mentioned in subsection (2) below as to the inclusion of the area in the order and the features for which conservation, enhancement or protection is desirable, by order designate that area as an environmentally sensitive area.

(2) The persons referred to in subsection (1) above are-

(a) in the case of an area in England, the Secretary of State, the Countryside Commission and the Nature Conservancy Council; and
(b) in the case of an area in Wales, the Countryside Commission and the Nature Conservancy Council; and
(c) in the case of an area in Scotland, the Countryside Commission for Scotland and the Nature Conservancy Council.

(3) If the Minister considers that any of the purposes mentioned in paragraphs (a) to (c) of subsection (1) above is likely to be facilitated in a designated area by doing so, he may make an agreement with any person having an interest in agricultural land in, or partly in, the area by which that person agrees in consideration of payments to be made by the Minister to manage the land in accordance with the agreement.

(4) An order under this section designating an area may specify-

(a) the requirements as to agricultural practices, nethods and operations and the installation or use of equipment which must be included in agreements under subsection (3) above as respects land in the area;
(b) the period or minimum period for which such agreements must impose such requirements;
(c) the provisions which must be included in such agreements concerning the breach of such requirements; and
(d) the rates or maximum rates at which payments may be made by the Minister under such agreements may be made.

(5) Subject to the foregoing provisions of this section, an agreement under subsection (3) above may contain such provisions as the Minister thinks fit and, in particular, such provisions as he considers are likely to facilitate such conservation, enhancement or protection as is mentioned in subsection (1) above.

(6) The Minister shall not make an agreement with any person under subsection (3) above in respect of any land unless that person has certified to the Minister-

(a) that no person other than he is the owner of the land; or
(b) that he has notified any other person who is an owner of the land of his intention to make an agreement under subsection (3) above in respect of

and in this subsection references to the owner of the land are to the estate owner in respect of the fee simple in the land or, in Scotland, the absolute owner of the land within the meaning of section 93 of the Agricultural Holdings (Scotland) Act 1949.

(7) The provisions of an agreement under subsection (3) above with any person interested in any land in England and Wales shall, unless the agreement otherwise provides, be binding on persons deriving title under or from that person and be enforceable by the Minister against those persons accordingly.

SOURCE: MAFF (1989).

In addition, Section 18(8) calls for the relevant agriculture departments within the UK to be responsible for monitoring and evaluating the ESAs. The Article is as follows:

"Where agreements have been made .. with persons having an interest in land in a designated area, the Minister shall arrange for the effect on the area as a whole of the performance of the agreements to be kept under review and shall from time to time publish such information as he considers appropriate about those effects".

The Agriculture Act also stipulated a number of specific criteria for the establishment of ESAs:

"(i) each area to be designated must be of national environmental significance;

(ii) its conservation must depend upon adopting, maintaining or extending particular farming practices;

(iii) farming practices in the area must have changed, intensified or accelerated (or be likely to do so) in ways which pose a major threat to the environment;

(iv) each area must represent a discrete and coherent unit of environmental interest"

SOURCE: MAFF (1989).

### EC Regulation 2328/91, Articles 21-24.

### COUNCIL REGULATION (EEC) No 2328/91 On Improving the Efficiency of Agricultural Structures

### Articles 21-24

### TITLE VII

Aid in areas sensitive as regards protection of the environment and natural resources and as regards safeguarding the landscape and the countryside.

### Article 21.

In order to contribute towards the introduction or the maintenance of farming practices compatible with the requirements of the protection of the environment and of natural resources or with the requirements of the maintenance of the landscape and the countryside, and thus to contribute to the adaptation and guidance of agricultural production according to market needs, and having regard to agricultural income losses resulting from this, Member States may introduce a specific aid scheme for areas which are particularly sensitive from these points of view.

### Article 22.

The aid scheme referred to in Article 21 shall consist of an annual premium per hectare granted to farmers in the areas referred to in Article 21 who undertake, under a specific programme for the are concerned, to introduce or maintain, for at least 5 years, farming practices compatible with the

protection of the environment and of natural resources or with the requirements of the maintenance of the landscape and of the countryside.

Article 23.

Member States shall determine the areas referred to in Article 21. In the light of the objective to be achieved, they shall define those production practices compatible with the requirements of the protection of the environment and of natural resources or with the requirements of the maintenance of the landscape and of the countryside. They shall also lay down rules and criteria to be complied with as regards production practices referred to in Article 22, in particular with regard to the maintenance or reduction of the intensity of farming and/or the required density of livestock. They shall fix the amount and duration of the premium, which must depend on the undertaking entered into by the farmer under the programme.

Article 24.

The maximum amount of the annual premium per hectare specified in Article 22 eligible under the Fund shall be ECU 150.4 per hectare covered by an undertaking referred to in Article 22.

SOURCE: Hughes (1992)

### Agri-Environment Regulation 1992.

This concerns the specific development of environmental objectives within agricultural support policy as part of the CAP Reform. ESAs are now no longer part of the EC Regulation Structure, but are part of the CAP.

EC Regulation 2078/92, the Agri-Environment regulation, requires Member States to support farming methods that protect or enhance the environment.

Measures should support:

(a) reduced use of chemical fertilisers and pesticides, or support for organic farming;

(b) extensive forms of cropping, including forage production, or conversion of arable land to extensive grassland;

(c) extensification of livestock production;

- (d) existing farming practices that are environmentally sensitive, or to rear animals of rare breeds;
- (e) better management for abandoned farmland or woodland;

(f) re-creation of wildlife habitat or protection of water catchments by long-term set-aside of farmland;

(g) provision of public access and leisure activities.

Support should also be made available for the training of farmers in environmentally sensitive practices.

The Regulation states that the measures should 'reflect the diversity of environmental situations'. It also requires Member States to introduce all the above measures across the whole countryside, unless there is a good reason for not so doing.

SOURCE: SOAFD (1992).

### **APPENDIX II (iii)**

### **INDIVIDUAL DESIGNATION ORDERS.**

Individual Designation Orders.

The following list comprises a chronological account of the UK ESA Designation Orders, beginning with the first round in 1986/87.

### FIRST ROUND

Implementation Date March 1987

Country & Area Designated ENGLAND: Broads Pennine Dales Somerset Levels and Moors South Downs (East) West Penwith WALES: Cambrian Mountains N. IRELAND: Mourne Mountains SCOTLAND: Breadalbane Loch Lomond

March 1987

March 1987

May 1987

### SECOND ROUND

Country & Area Designated ENGLAND:	Implementation Date January 1988
South Down (West)	
Test Valley	
Suffolk River Valleys	
Shropshire Borders	
Breckland	
North Peak	
WALES:	January 1988
Cambrian Mountains extension	
SCOTLAND:	April 1988
Whitlaw and Eildon	
Stewartry	
Machair Lands of the Uists,	
Benbecula and Vatersay.	
WALES:	June 1988
Lleyn Peninsula	
•	
N. IRELAND:	June 1989
Glens of Antrim	

CONTD.

### Country & Area Designated

SCOTLAND: EXTENSIONS to: Breadalbane Loch Lomond

ENGLAND: Avon Valley Lake District South Wessex Downs Exmoor North Kent Marshes South West Peak

SCOTLAND: Shetland Cairngorm Straths Argyll Islands Central Southern Uplands Western Southern Uplands

ENGLAND: Shropshire Hills Cotswold Hills Upper Thames Tributaries Essex Coast Blackdown Hills Dartmoor 1994

January 1993

1992

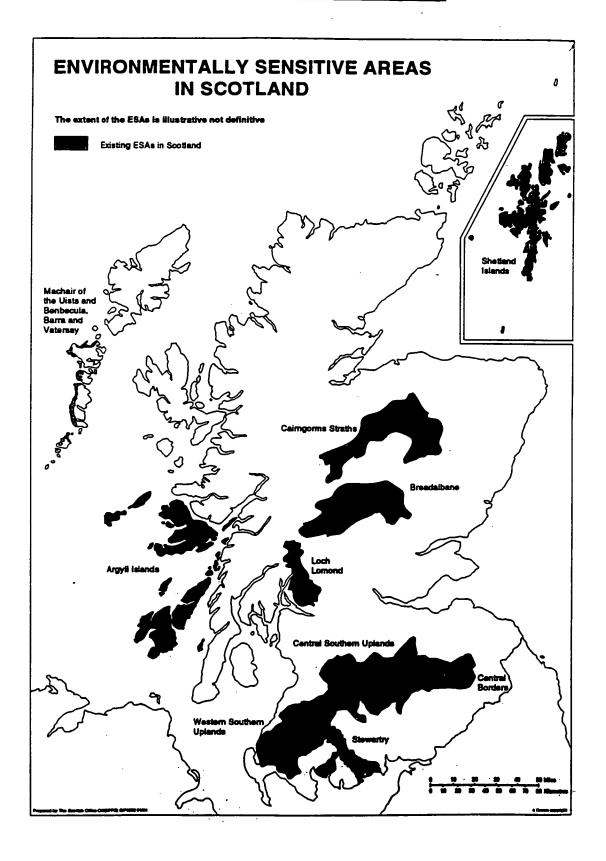
1994

240

### Implementation Date

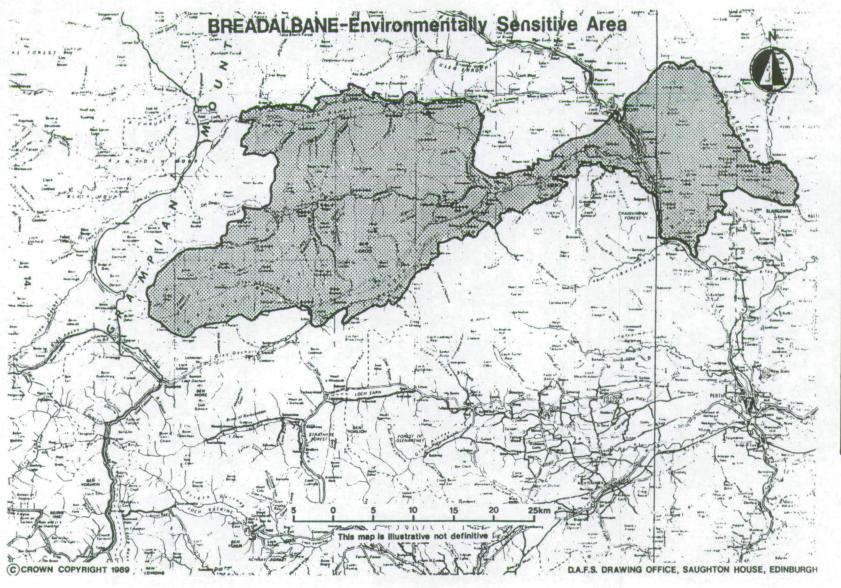
### **APPENDIX II (iii)**

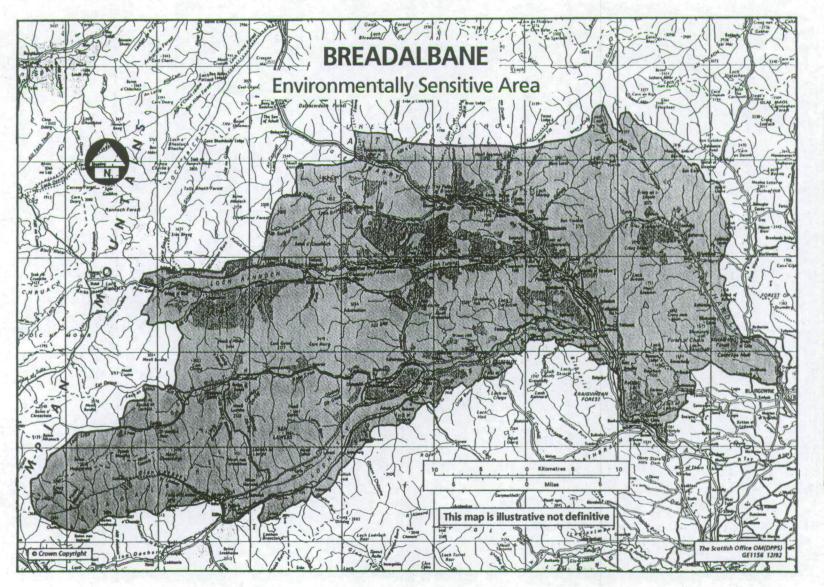
### MAP OF ESAs IN SCOTLAND [1994].





## MAP OF BREADALBANE ESA [1987-1992]





### APPENDIX III (ii)

MAP OF BREADALBANE ESA [POST APRIL 1992]

### <u>APPENDIX III (iii)</u>

### CHANGES TO BREADALBANE ESA [POST APRIL 1992].

PAYMENT LEVELS INCREASED:

Flat rate: from a maximum of £1500 per annum to maximum of £2000 per annum.

Itemised: these have been increased in recognition of the increased actual cost of the works. For details, see SOAFD (1992).

### PONDS AND STYLES

These are now funded, and represent an expansion of Tier 2.b.

### **BIENNIAL REVIEW OF PAYMENTS.**

The payments are reviewed every two years, with possible revision of the amounts paid. However, the levels may increase or decrease, that is, they are not automatically index-linked.

### ENLARGED GEOGRAPHICAL AREA.

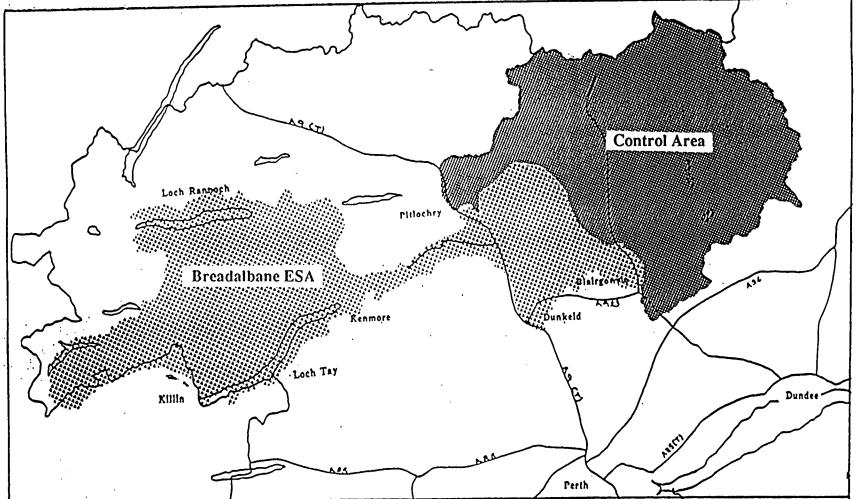
The original ESA has been enlarged to the north, to include the Loch Tummel area, and to the east to cover the eastern and northern extent of Strathardle.

### TIME SCALE INCREASED.

It is now possible to join Breadalbane ESA Scheme for a period of ten years, with an opt-out clause after five years. The original arrangement was for five years only.

### CHANGES IN APPLICATION TO JOIN THE SCHEME.

In the original Breadalbane ESA, each applicant was required to draw up a Farm Conservation Plan, and an outline of expected conservation activities over the fiveyear period. The revisions mean that the applicant now has to draw up two Farm Plans, one descriptive and the other showing the proposed conservation activities for the first five years; and a separate "Schedule of payments" expected from SOAFD.



# MAP OF BREADALBANE ESA AND CONTROL AREA

APPENDIX III (iv)

### APPENDIX V (i)

### LETTER TO FARMERS IN BREADALBANE ESA [1993/4 FIELDWORK]

Edinburgh University. c/o Bridge House. Trinafour, By Calvine, PERTHSHIRE.

### Breadalbane Environmentally Sensitive Area Study.

Dear

I am writing to you in connection with Breadalbane ESA. I am a researcher at the University of Edinburgh; I have been working on research projects connected with the ESA since 1988 (based at the Scottish Agricultural College), and I am now in the final stages of that work.

I am staying in the ESA over the winter, and I will be carrying out a small number of informal interviews in your area. Your farm is one that has been randomly selected from within the ESA.

The interview would take about an hour, and would be arranged at a time which is convenient for you. Anything that you say during our discussion would remain totally confidential. Issues discussed would include your own views concerning the ESA and farm conservation, and also whether or not you anticipate becoming involved in the new stage of the ESA.

I will be phoning you in the next few days, to see if it is possible for you to take part, and to arrange a convenient time.

Yours sincerely,

Sarah J. Skerratt. (Research Assistant, University of Edinburgh).

**INFORMATION ON THE ETHNOGRAPH** 

### The Ethnograph

A User's Guide

(Version 3.0)

March 1988

John V. Seidel Rolf Kjolseth Elaine Seymour

Copyright © 1985, 1988

Qualis Research Associates

### **SImplifying Mechanical Tasks**

In general, personal computers have the potential to provide solutions to the problems of unwieldy data. Just as some computer techniques have simplified the tasks of quantitative data analysis (including file management, data cleaning, recoding, and statistical analysis) other computer techniques can simplify the mechanical tasks of ethnographic data analysis.

THE ETHNOGRAPH enables you to code, recode, and sort data files into analytic categories. You can review text, mark segments, and then display, sort, and print segments in any order or sequence you desire. This makes it easy for you to interpret and compare those segments either with each other, or with differently categorized segments. Further more, as you go along, you can revise your coding scheme with additions, deletions or modifications. What was once done with pencils, scissors, and paste, can now be accomplished almost entirely with your personal computer.

### Start THE ETHNOGRAPH

Go to the floppy disk drive (e.g.,type A:) or hard disk directory (e.g., type cd\ethno) that contains THE ETHNOGRAPH. At the system prompt (A> or C>) type ethno, then press RETURN.

### This ETHNOGRAPH PROCEDURE MENU appears:

SCREEN 3-1. The Procedure Henu

Une	COPYRIGHT (C) JU uthorized copies	ETHNOGRAPH V3.0 ) 1985, 1986, 1987, 1988 DHW V. SEIDEL are violations of US copyrior License Agreement	SN: 0000 ight_law
	CURRENT DAT	A FILE DIRECTORY = \ETHNO	
	ETHNOG	APH PROCEDURE MENU	
	S - SEARCH M - MODIFY L - LIST G - CATALOG T - TEMPLATES	A Data File Numbered/Coded Files For Coded Segments Coding Schemes Code Words	,
I	Select Option:	· · · · · · · · · · · · · · · · · · ·	

### Select "NUMBER a File"

You are now ready to proceed. Select Option N for NUMBER A FILE and this OPENING MENU appears:

### SCREEN 3-4. Number a File - Opening Menu

		NUMBER	a File - OPENING MENU
	C	URRENT DATA	FILE DIRECTORY: C:\PAINDATA
	:	SELECT A CA	TALOG OR ENTER FILE NAMES
E		ENTER	Individual File Names
s	•	SELECT	A Catalog of Files
D		DIRECTORY	Change Directory/List Files
è		RETURN	To Procedure Nenu

Our first code begins at line 3 and so we type in 3 and press RETURN. The cursor jumps to the next field where we type in the code word PATIENT ID and press RETURN. The cursor jumps to the next field and there we type in 4 as that is the STOP LINE for our segment. The cursor jumps to the right of the number 2. It is ready for us to enter a second code word that begins on the same start line as the first code word.

As you can see, a Code Set Entry Form permits you to enter up to <u>as many as 12 code words that all begin on the same</u> <u>start line</u>. We haven't gone to that length in coding our example text, but we did code the text with one other code that begins on line 3, namely PAT REVIEW, so now, at 2-, we type in PAT REVIEW, press RETURN, and the cursor jumps to the next field where we type in 8 as the STOP LINE.

Our result now looks like this:

\_

SCHEEN 3-18. A Filled-in Code Set Entry form

PREVIOUS S		UP-Prev Fiel T LINE: 0					2-1ms o View Code Ser	ta Hen
START LINE		CODE 14070	STOP		CCCE VORD	STOP	CODE VORD	STOP
3	1-	PATIENT ID	4	5-			۶-	
	2-	PAT REVIEW	8	6-			10-	
	3-			7-			11-	
	6-	-		8-			12-	

The cursor is sitting to the right of the number 3. However, we do not have pny more code words to enter that begin with the same Start Line. We want to get on to the next code word, which begins on line 6. That is the next code set to enter. Notice that just above the box on the right side there is the advisory END = Go to Next Code Set

### SCREEK 3-20. Third Blank Code Set Entry Form

LP-Prev Fle PREVICUS START LINE: 6	Exter code vores loi DN-Next Field l	
START LINE CODE VORD	STOP - CODE NOR	0 570P 000E 40R0 57
1-		ې
2-	6-	10-
3-	7-	11-
6-	8-	12-

It now registers the PREVIOUS START LINE: 6 and on the right above the box is the advisory: END = Go to View Code Sets Menu. That's exactly what we want to do as we have no more codes to enter at this time. Therefore, press END and a new menu appears.

### The View Code Sets Menu

SCREEN 3-21. The View Code Sets Henu

	VIEW CODE SETS NENU
1	- ALL CODE SETS
2	. THE LAST 4 CODE SETS
3	- ALL CODE SETS SINCE THE LAST EDIT
4	- A RANGE OF CODE SETS
н	- Enter MORE codes
S	<ul> <li>SWITCH Novice to Expert/Expert to Novice</li> </ul>
Ρ	- PRINT all Code Sets
٥.	- OPENING MENU

Because we have only entered two code sets, it makes no difference whether we select option 1 or 2. Had we been in and out of this file several times doing extensive code entry and editing, these alternative options would be very relevant.

### SEARCH FOR CODE WORDS

### Enter a File Name

SCREEN 3-26. Entering the Name of a file to be Searched

	MMES OF FILES TO BE SEATTHED eld Pollp-Prev Scrn Poln-Mext Scrn F1-Del F2-1 o Accept File Name List
1 045642	21
2_	22
3 -	23
4	*
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Type in your file name as shown above, press RETURN, and as you have no further files to search at this time, press END. Then type Y for YES in response to the prompt that appears at the bottom of the screen. The SEARCH OPTIONS menu now appears:

Select Search Options

SCREEN 3-27. Search Options

	SEARCH OPTIONS	
Locate segments by <s>ingle or <n>ultiple codes:</n></s>	Use Face Sheet Values in Search?	Send output to <s>creen or <p>rinter?</p></s>
(s/m):	(y/n):	(s/p):

For this exercise we will only search the file for the segment coded PROBLEM. Therefore, press S for Single, N for No Use of Face Sheet Values in this Search, P to Send output to the Printer, and Y for YES to these choices. The following form then appears: Type Y for YES because you will need the printed copy on which to do your code mapping. Again the cursor jumps to the right and the prompt changes to NUMBER for FIRST line of this (ile (range 1-9999):

### SCREEN 3-7. Determining the Number for the First Line of This File

UP-Prev Fiel NUMBER for F	d DN-Next Field A	pf FILES TO BE RUMBERED Agup-Prev Scrim PgDn-Next Scrim F1-Del F2-Ir File (nange 1-9999):
1 045542	— <del>,</del> —	21
2	-	22
3		3
ī		24
$\sim$	$\dots$	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

The prompt now asks you to assign any number between 1 and 9999 to the first line of your file. Type in 1. The cursor jumps down to the right of number 2 and the prompt line again changes to NAME OF FILE (Press END to Start Numbering)

### SCREEN 3-8. Entering Hone File Names

	pF FILES TO BE NUMBERED Agup-Prev Scrin: PgOn-Hext: Scrin: F1-Del: F2-Ins rc: Numbering)
1 CASE42 7 1	
2	22
3-	3
1	x

Although the prompt is in place for you to enter another file name to number (you can enter up to 80 files to be numbered at once), you do not want to enter any more file names at this time. As you can see, the prompt line also says: (Press END to Start Numbering). So, press END. When you do, a new prompt appears at the bottom of your screen:

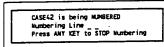
### Okay to NUMBER the files? (y/n):\_

This permits you to look at what you have typed and review its accuracy. If you've made some error, type N and the cursor will go back to your file name. If everything looks all right, make sure your printer is turned on and then type Y.

### The Numbering Process

As soon as you press Y, this advisory appears:

### SCREEN 3-9. Numbering Advisory



### - and the NUMBERED VERSION OF FILE CASE42.ETH will start coming out of your printer, and it will look like this:

FIGURE 3-17. Excerpt from Printout of Numbered Version of CASE42

RUNBERED VERSION OF FILE CASE42.ETH Mo/Day/1	fear	Hr:Min	Page	1
+PROGRESS STAFFING OF EARL MICHAELS	1			
HD: Okay. Earl Michaels. Okay, oh,	ż			
you staffed him last week. Okay	4			
Ckay, he's got some musculoskeletal	6			
problems. What are you doing in physical therapy?	8			
PT-1: Relaxation, muscle stretching	10			

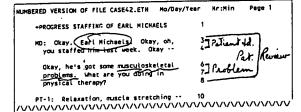
### Step 5. Code Mapping

Take the numbered printout in hand and reflect on it, doodle upon it, and mark it up as you record your noticings. For CASE42, we'll just give three examples.

- Suppose we circle "Earl Michaels" and underline "musculoskeletal problems," in the text. We need to give these noticings two things: text boundaries (called "segments") and code names. Suppose we decide that our first noticing, occurring on lines 3 and 4, stands for something like "PATIENT IDENTIFICATION." Because code words can have up to 10 characters, we shorten our name to PATIENT ID. Now, we sketch a square bracket to the right of lines 3 and 4 and write in PATIENT ID. We have defined the segment 3-4 as PATIENT ID.
- 2. Then we decide 6-7 is something we'll call PROBLEM.
- Finally, reflecting on the text, we decide that all of this is also part of something else we'll call PATIENT REVIEW (whoops, that's 14 letters and spaces, so: PAT REVIEW) from lines 3 through 8.

Our marked up copy now looks something like this:

FIGURE 3-18. A Code Mapped Version of the Printout of CASE42



### Enter Search Codewords

### SCREEN 3-28. Entering Cade Words for Search

	P-Prev Fle	s of code vord (d: DN-Next Fi ess END to Qui	ield F1-Dei	F2-ins
1 PROBLEM	17	33	49	65
	18	34	50	66

Type in PROBLEM as shown above. That's all we want to search for right now, so press END and then Y for YES to the query: Okay to SEARCH for Code Words? (y/n). (Be sure your printer is on). Press Y for YES to the subsequent query: Sort Code Words in ALPHABETICAL Order?

NOTE: An alphabetical sort makes no difference in our case. However, as you can see, we might be searching for up to 80 code words at a time. In large searches the alphabetizing feature can be very handy.

The search immediately begins and the result is printed.

### Results of the Search

Your Sorted Output looks like this:

FIGURE 3-19. CASE42 - Search Output

SORTED OUTPUT FOR FILE CASE42 4/1/1988 SORT CODE: PROBLEM	23:59	Page 1
CASEG MD +PROGRESS STAFFING OF EAR	L MICHAELS	
E: S-PAT REVIEW SC: PROBLEM		
#-PROBLEM : Okay, he's got some musculoskeletai : problems. What are you doing in	6-# 7-#	

### <u>APPENDIX V (iii)</u> DATA FROM THE INTERVIEWS WITH LOCAL AREA ADVISERS.

### Methodological note:

Interviews were carried out with the local area advisers in confidence. In order to maintain anonymity within such a small sample, it has been necessary to group responses together under the themes outlined in the summary of results (rather than to present the views of each adviser separately), and to remove the codes assigned to the interviewees.

### FACTORS AFFECTING ADOPTION.

The following quotes are illustrative of the factors highlighted by the advisers as being important to policy recipients' ESA adoption decision making.

### TENURESHIP

"There seems to have been a degree of pressure from the landlord, with the tenants' reactions that they don't have much choice in the matter. If tenants come to us directly, they are as keen to join as the owner-occupiers. Some tenants have initially said that they're not going to join, because they're annoyed at the way in which they fell they are being told what to do by their landlords. So, they will initially drag their feet, because they don't want people telling them what to do on their own farm. They may decide later to join".

"Tenants are interested in the short-term aspects of the scheme such as the dykes and fencing; whereas the landlords are more interested in the capital value of the estate land, the more long term capital investments. They've got different priorities ... it's to be expected really".

### FARM SIZE

"On larger farms, you can walk where you want, and they're happier for certain areas to be fenced off. On the smaller farms though (say 300 acres) they are much more concerned that you will want to fence off bits of the land, and they haven't got that much. They can be less flexible in their grazing than the larger farmer. If you have more ground, you can make more concessions to conservation".

"On the small farms, the May, June, July grazing restriction is hard because they are so intensive".

"On the larger farm, the £4,000 per year itemised payment is very restrictive. They're using all this on the woodland. We're now encouraging them to use the Woodland Grant Scheme in conjunction with the ESA".

### **NEIGHBOUR INFLUENCE**

"People in the new ESA area are keen to join because they know people in the existing ESA ... friends, relatives etc."

"The farmers seems to know a bit; but this time round they are having to do more than they expected ... It was rumoured (amongst the farmers) that quite a lot of money could be made on this ESA".

"The farmers in the new ESA, and those in the existing ESA, know that the ESA's been financially beneficial, so they were queuing up to join it".

### FARM OR ESTATE WORK

"Farms and estates ... the time that the ESA takes, for example, for woodland management, is a factor, and on farms, there's not necessarily the expertise there for woodland management. The farmer who is running things independently doesn't have time for ESA work; he doesn't have time to get away from farming".

### SAC INPUT

"SAC pushes the swithering ones and tells them they can make money out of it (the ESA). Their contact and knowledge of the farmers and farms can lead to the germ of the ESA idea being given to farmers. SAC is doing the final push. SAC can let the less educated ones know about conservation".

### CONSERVATION INPUT

"Some of the farmers are very worried about what conservation they might have to do. Some have even asked that the conservation plans and surveys aren't shown to SOAFD - SOAFD are given a list of habitats...".

### WIDER POLICY CONTEXT

"The Farm and Conservation Grant Scheme grants have been cut in half ... HLCAs are down ... If it's a good year, the government cuts the money; but if it's a bad year, the farmers get no extra support. The ESA is a con; it's the government just taking money from one part and giving it to another. The farmers know this ....".

"Post 1996 - farmers are well aware that future payments (subsidies) will be linked to environmental payments. People outwith designated areas are also worried..".

### AGRICULTURAL OFFICER

"As an agricultural officer, I have done their sheep subsidies with them, and have built up a trust with them".

### **REASONS FOR ESA ADOPTION.**

The following quotes illustrate the reasons cited by the advisers, for ESA adoption by policy recipients.

"ESA interest is financial, and some conservation interest. A lot of them do seem to like having wildlife (badgers and otters) and trees. The more visible things are those they like. They aren't so keen on the fenced off areas; farmers prefer trees to flowers".

"Most of the farmers in the ESA know that they are in a beautiful area, most of them are not anti conservation. It's in their boots somewhere. They have got it, and it is best for them to look after it. The sad thing is they do not have the resources to do the thing well".

### OTHER ISSUES.

The following quotes illustrate the issues raised by advisers during the interviews, in connection with the conservation component of the ESA, and the changes brought in under the second ESA; and the final quote gives an example of the types of policy recipients which advisers have cited as being keen to join the ESA.

### IMPORTANCE OF NEGOTIATION OF FARM CONSERVATION PLAN.

"Farmers are paying £300 for the plan and survey which is then sent to the Department (SOAFD). Farmers have to give in on certain issues ... If you can get the farmer to do two thirds of what the conservationists want, isn't that better than them deciding not to join because there are too many restrictions?"

### FWAG AND THE FARMER.

"Farmers who become FWAG members have a higher level of understanding of conservation, what the different species are ... Up until the ESA, FWAG have been working with farmers who are members of FWAG, those who've shown an interest in farm conservation and have joined the organisation. But with the ESA, FWAG is having to deal with farmers, some of whom have little extra time for conservation, but need the extra income".

"FWAG have differences in how they are seeing how the ESA fits in with the other subsidies and practicalities of farming. There has to be some compromise, and that's where SAC and the Department fit in".

"The ESA is almost putting FWAG into conflict with the farmer. There is so much money going into the ESA that farmers should go along with the conservation aspects ... I feel that farmers will think FWAG is interfering ... and they are!"

### THE NEW ESA SCHEME AND THE NEW APPLICANTS.

"The ESA scheme is completely revamped now. The main criticism of the first round ESA is that active management of the areas that were fenced off wasn't too defined. A lot of money was spent on dyking - a permanent job, and landscape effect.

With the new ESA, it's mandatory that farmers have a grazing plan for woodland, wetland and herb rich grassland; THEN they can have the optional itemised works .... We're selling it on the management payment, as compared with the last scheme when there was far too much money going to the dykers".

"Farmers' interest on his own farm management payments leads to more knowledge and awareness of what's there. For the annual claim, the farmer will have to write a wee report on what's happened in the fenced off areas .. They have 'Management' and a 'Comment', and this'll give more sense of involvement".

"Farmers are queuing up to come into the new ESA. a hundred percent of the first scheme ones will join this second round ESA. New applicants - after the first six months, we haven't actually dealt with a working farm. These are the first ones to join, and are the first ones of the last ESA. They have sporting interests and rights to manage grazing. There are some with a genuine conservation interest; Game Conservancy interest: those are at the head of the queue. The heavier stocked farms are apprehensive that they would be restricted. Or some have had a bad experience with an SSSI".

NFIDENTI	IAL	FAR	LM	2. <u>Det</u>	ails of cropping enterprises		
	DESIGNATED AND UNDES ENVIRONMENTALLY SENSIT	IGNATED IVE AREAS	<i>,</i> .		p	Physical_Inputs	£/ha
<u>Deta</u> a.	a <u>ils of farm business</u> Land occupied, including farm woodland		<u>cres x 0.405)</u>	See Fer Spr	tiliser		
	Land owned Land occupied on full agricultural ten Other tenanted land (eg grass lets) Rights on common land	ancy	haha ha ha ha	Con	ual labour tract er crop expenses	ţ	
b.	Current cropping Total tillage Improved grassland Unimproved permanent pasture Rough grazings Other land	:	ha ha ha ha	Dati Dry	cription of management practice: e of sowing		
с.	Current stocking Dairy cows Dairy followers Beef cows Other cattle Breeding ewes Other livestock Other livestock		<u>Number</u>				
	Labour Hi Full-time Part-time	red 	Family 		:		۱
. `	Casual Seasonal Buildings	_					
	Type         Size         Age         C	ondition Materials (1-9) (T or M) 	Current Use				

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APPENDIX VI (i)

### 3. Details of livestock enterprises

Species		
Breed	Physical Inputs	£/head
Concentrates		
Purchased hay		
Straw .		
Vet & med		
Marketing		
Other stock expenses		

- 3 -

### Output

Description of management practice

Number of breeding stock ...... Q £ ...... / head Number of non-breeding stock ...... Q £ ...... / head Housing Replacements Disposal

### Details of forestry or woodland enterprises

4.

### 

- 4 -

### Description of management practices

5. Details of other on-farm enterprises

### 6. Attitudes and expectations

•

a.	Why did you join an ESA scheme? Why might you join an ESA scheme if available?		7.	Busi	ness data	
	- interest in conservation and the environment			a.	Financial	
	- need for fencing and walls	<del></del>		•••	- rent	
	- additional source of income				- rent review due	
	- additional source of employment				- mortgages, loans, overdrafts - seasonalhigh	
	- other				- seasonal low	
	- other				- trend	<u></u>
b.	What disadvantages do you see in joining an ESA scheme?				<ul> <li>what proportion of <u>total family</u> income is generated by - on-farm agricultural activities</li> </ul>	
	- constraints on stocking rates				<ul> <li>on-farm non-agricultural activities</li> </ul>	
	- constraints on farming practice	<u></u>			- off-farm work	
	- constraints on fertiliser and spray use					
	- constraints on silage making	<u> </u>		b.	Objectives - is there a need to increase family income	
	- other				•	
	- other				<ul> <li>by how much a year</li> <li>are you hoping to expand your farm if the opportunity arises</li> </ul>	
_						
С.	How could the Breadalbane Scheme be made more attractive?			•	- are you interested in new farming enterprises	
	- higher flat rate payment				- are you interested in new farm forestry enterprises	
	- higher item payment				- are you interested in other farm-based enterprises	
	- less constraints				- are you interested in off-farm enterprises	
	- different forms of payment				- are you prepared to borrow to fund new enterprises	
	- other	·			~ if so, what source would you contemplate	
	- other				- family	
•	What impact do you/would you expect the scheme to have on your farming business?				- bank - other	
	Immediate	Long-term				3
	- change in sheep numbers				- what is the most you would borrow	
	- change in cattle numbers			c.	Do you have a management or other agreement with:	
	- change in cropping area			•••		,
	- change in grass conservation				- Nature Conservancy Council	
	- change in woodland				- Countryside Commission	
	- change in family employment				- DAFS - ESA	<u> </u>
	- change in non-family local employment				- DAFS - AIS	
	- change in non-family non-local employment				- other	
	- change in management requirement				- other	
	Are ESA payments likely to:			d.	Farmer's age	<u></u>
	- allow increased family expenditure				Farmer's education - up to P, S or H	
	- allow increased on-farm investment				Wife's education – up to P, S or H	
	- allow increased off-farm investment	—			Worker's education - up to P, S or H	
	- allow reduction in farm indebtedness	- 1			Worker's education - up to P, S or H	
	· · · · ·				When does he expect to retire	
					Does he have a successor	

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258

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Planned or hypothetical expenditure and payments 8. Annual flat rate payment £\_\_\_/yr Expenditure breakdown: 1. Dykes ..... sq m dykes to be rebuilt ..... sq m dykes to be partially rebuilt ..... m dykes to be renovated 11. Hedges °£\_\_\_\_ha ..... m hedge restoration iii. Farm woodland ha ..... ha woodland to be protected by \_ha ..... fence ..... m ..... fence ..... m ..... fence iv. Wetlands \_\_\_\_\_ marshes \_\_\_\_\_ wetlands \_\_\_\_\_ loch shores \_\_\_\_\_ loch shores ..... m ..... fence ..... fence \_\_\_\_\_ha £\_\_\_\_\_ *i*. Bracken eradication vi. Heather regeneration \_\_\_\_ha ..... fence di. Unimproved pasture \_\_\_\_\_ha \_\_\_\_\_ha £\_\_\_\_\_ no lime or fertiliser restricted grazing ..... m temporary fencing iii. Other conservation data dykes to be maintained hedges to be maintained number of archaeologic1 sites to be protected

- 7 -

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APPENDIX 7: Second Farmer Questionnaire

Farm No.\_\_\_\_\_

Hello. Can I speak to \_\_\_\_\_ please? Thank you.

Hello, my name is \_\_\_\_\_\_, from the East of Scotland College of Agriculture in Edinburgh. I'm phoning in connection with the letter I sent you recently. I am carrying out a Survey about the impact of Breadalbane Environmentally Sensitive Area, and other Government Schemes, as a follow-up to the Survey I did last year. We've decided to ask questions over the telephone - it will take around 10 to 1? minutes.

The answers you give will be totally confidential. I'll give your farm a code number so that what you say won't be linked with you or your farm.

.

2.

Farm No.\_\_\_\_

Are you willing to take part in the survey?

### Yes

Can we go through the questions now?

Yes	<u>N0</u>	Don't know
Question 1.	O.K. When would it be convenient to phone you back?	It'll only take 10 - 15 minutes
	Date:	
	Time:	
١	Any other details:	
<u> </u>	<u></u>	
<u> </u>		<u> </u>
<u>Nu</u> ,	Don't Know	Not Now
<u>_</u>		<u>Not Now</u> О.К.
O.K. Thank you very much for your	<u>Don't Know</u> It'll only take 10 - 15 minutes	
O.K. Thank you very much	It'll only take	O.K. When would it be convenient to
O.K. Thank you very much for your	It'll only take	O.K. When would it be convenient to phone you back?
O.K. Thank you very much for your	It'll only take	O.K. When would it be convenient to phone you back? Date:

						4.		
							Farm No.	
3.								
Farm No	I		PHYS	ICAL				
	1	•	Can 🗄	I just		igh your Cro		
( the questions Till be asking are about			(a)	i.	How mar	ny acres do	you have v	under CROPS?
In this survey, some of the Questions I'll be asking are about						a.	<u></u>	ha.
Breadalbane Environmentally Sensitive Area - what effect it's								
having, and what you think of it.				ii.	Has thi	is changed l	because of	the ESA Scheme?
					Y	N	DK	NA
Can you just tell me, then, whether you've joined the ESA								
Can you just tell me, then, whether jou to journ				iii.	Has the since v	ere been an we last spo	y change f ke to you?	or any reason,
					Y	N	DK	NA
Y N Not Yet Plan with NA DAFS	-				If Yes	, can you s	tate the p	rimary reason?
	-							
[This question asked for those for whom we don't yet have the information DIRECTLY]			(b)		How main have?	ny acres of	IMPROVED	GRASSLAND do you
						a.	- <u></u>	ha.
			•	ii.	Has th	is changed	because of	the ESA Scheme?
					Y	N	DK	NA
				iii.	Has th since	ere been an we last spo	y change f ke to you?	or any reason,
					Y	N	DK	NA
					lf Yes	s, can you s	tate the <b>p</b>	orimary reason?

			1	Farm No	<b>.</b>					1	Farm No	
(c)	ì.	How many a PASTURE do	acres of o you ha	UNIMPROVED	PERMANENT		(e)	ì.	How many	y acres of		do you have?
			_a.		ha.					a.		ha.
								ii.	Has this	s changed	because of	the ESA Scheme?
	ii.	Has this	changed	because of	the ESA Scheme?				Y	ท	DK	NA
		Y	ท	DK	NA							
		W these	been 20	w change fo	r any reason,			iii.	Has the since w	re been an e last spo	y change f ke to you?	or any reason,
	iii.	Has there since we	last spo	oke to you?	I any reason,				Y	N	DK	NA
		Y	N	DK	NA				If yes,	can you s	tate the p	rimary reason?
		If Yes, c	an you s	tate the pr	imary reason?							
(d)	i.	How many have?	acres of	ROUGH GRAZ	ING do you		(f)	i. '	How man		OTHER LAN	nD do you have? ha.
			a.	- <u></u>	ha.			ii.	Has thi	s changed	because of	the ESA Scheme
	ii.	Has this	changed	because of	the ESA Scheme?				Y	N	DK	NA
		Y	N	DK	NA			iii.	Has the	ere been an we last spo	ny change f bke to you?	for any reason,
	iii.	Has there since we	: been ar last spo	ny change fo oke to you?	er any reason,				Y	N	DK	NA
		Y	N	DK	NA							
			an you f	state the pr	imary reason?			iv. If	Yes, car	n you state	e the prima	ary reason?
		If Yes, o	-			:						

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262

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			η.				з.			
								Farm No		
			Farm No	(c)	i.	How many have?	BREEDING	EWES do	you -	
2.	I no	w have	some questions about your livestock.							
	(a)	ì	How many DAIRY COWS do you have ?			how many have?	OTHER SH	ЕЕЬ ОО АС		
			How many DAIRY FOLLOWERS do you have?		ii.	Have the	e numbers	changed t	ecause	of the ES
		ii.	Have the numbers changed because of the ESA Scheme?			Scheme?	N	DK		A
			Y N DK NA							
					iii.		e numbers e last spo			reason,
		iii.	Have the numbers changed for any reason, since we last spoke to you?			Y	N	DK	N	A
			Y N DK NA			If Yes,	can you s	tate the	primary	reason?
			If Yes, can you state the primary reason?	(d)	i.	Do'you i	nave any C	THER LIVE	2STOCK C	on your
	(b)	i.	How many BEEF COWS do you have?		•	farm? Y	N	DK	1	A
			How many OTHER CATTLE do you			lf Yes, are, and	please ca i numbers	n you tel of each?	ll me wi	nat they
						Livesto	<u>zk Type</u>		Numbe	<u>er</u>
		ii.	Have the numbers changed because of the ESA Scheme?		•					
·			y n dk Na							
		iii.	Have the numbers changed for any reason, since we last spoke to you?		ii.	Have the Scheme?	e numbers	changed 1	oecause	of the ES
			Y N DK NA			Livesto	ck Type		Respo	onse
			If Yes, can you state the primary reason?						Y N	DK NA
									Y N	DK NA

9		

If Yes, primary reason

Farm No.\_\_\_\_\_

iii. Have the numbers changed for any reason, since we last spoke to you?

Livestock Type	Response				
	Y	N	DK	NA	
	Y	N	DK	NA	
	Y	N	DK	NA	
	Y	N	DK	NA	

ιν.

Farm No.\_\_\_\_\_

3. As a direct result of the ESA Scheme, have there been any changes in the way the you run the farm?

Y N DK NA

If Yes, what is the most important change:

(a) at a day to day level

(b) in the longer term (say, 5-10 years).

- I now have some questions about labour on the farm. Some of them may not be relevant to your situation.
  - (a) i. Do you, the farmer, regard yourself as? full-time, 50% or what?

What shall I put down?

- ii. Would you say that this is more or less than last year?
- (b) i. Does your spouse, rigard him/herself as full-time, 50% or what?

What shall I put down?

ii. Would you say that this is more or less than last year?

11.	
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	Farm No			Farm No
(c) i.	Do your children regard themselve full-time, 50% or what? What shall I put down?	25 as	(e) i.	Which of these, if any, have changed as a direct result of the ESA Scheme?
ii.	- Would you say that this is more o than last year? 	or less	ii.	Which of these, if any, have changed for
	-			any reason since we last spoke to you?
(d) i.	۔ Do your workers regard themselves full-time, 50% or what? -	s as		
			iii.	Can you state the primary reason for the change(s)?
11.	Would you say that this is more of than last year.	or less		· · · · · · · · · · · · · · · · · · ·

13.

5.

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14.

Farm No. · Farm No.\_\_\_\_\_ (a) I am now going to ask you some questions about the Flat-Rate Payment. (b) I am now going to ask you some questions about the Itemised Payments. 5. Please could you tell me the level of your i. Flat-Rate Payment? Have they allowed for: - Increased family expenditure Y N DK NA ii. Has it allowed for: - Increased family expenditure Y N DK NA - Increased on-farm DK NA investment Y N . - Increased on-farm ١ Y N DK NA - Increased off-farm investment Y N DK NA investment - Increased off-farm investment Y N DK NA - Reduction in farm Y N DK NA indebtedness ٠ - Reduction in farm - Anything else \_\_\_\_\_ Y N DK NA indebtedness Y N DK NA - Anything else \_\_\_\_\_ Y N DK NA

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	1
15.	16.
Farm No	· Farm No
6. (a) Has the ESA work changed the value of your farm?	II. ADMINISTRATIVE
y n DK NA	
	7. In the next 3 short questions, I am wanting to find out whether the information & advice you've received concerning the ESA, has been adequate.
If Yes, please expand:	
	So, please will you answer either "completely adequate", "adequate", "inadequate" or "completely
Can you put a figure or percentage on it?	inadeguate".
(b) Has being in a designated area changed the value of your farm?	(a) When you were considering whether to join the Scheme, how adequate was the information?
or your farm?	C.Ad. Ad. Inad. C.Inad.
Y N DK NA	
	(b) How adeguate was the information when you were drawing up your Conservation Plan?
If Yes, has it: (Tick ↓)	C.Ad. Ad. Inad. C.Inad.
- Decreased a lot	,
- Decreased a little	(c) While you have been doing the work, how adequate has the information been?
	C. Ad. Ad. Inad. C.Inad.
- Increased a lot	
- Increased a little	(d) What would you regard as your primary source of information?

Farm No.\_\_\_\_\_

Now we	are	going	to	talk	about	the	Conservation	Plan
itself								

(a) i. Did the drawing-up of the Plan go alright?

Y N DK NA

ii. Is there any way the procedure could be improved?

Y N DK NA

If Yes, please expand:\_\_\_\_\_

(b) Have you been able to keep to the Schedule?

Y N DK NA

If No, please expand:\_\_\_\_\_

(c)

Y

.

8

Any other problems with the Plan?

N DK NA

If Yes, please expand:\_\_\_\_\_

18.

- Farm No.

9. (a) Can we now outline the sort of work you're doing within your ESA Conservation Plan. Could you just answer "yes" or "no" to the following:

(TICK / ) or (CROSS x )

Dyking

ACTIVITY

Hedge restoration

Tree planting

Fencing off woodland

Pencing off wetland

Fencing off unimproved pasture

Bracken control

Heather regeneration

Archaeological site protection

Other:

:

			19.										
				Farm No	»					20.			
											Farm No.		
(b)	We wil	l now r	un through ea	ch of the	se very briefly								
	i.	DYKING						iii.	TREE PI	LANTING			
		Did yo	u use any tra	ining fac	ilities?				Did you	use any tra	aining fac	cilities?	
		Y	N	DK	NA				Y	N	DK	NA	•
		Which	labour did ye	ou use?					Which	labour did y	ou use?		
		OWN	CONTRACT	BOTH	( PROMPT )				OWN	CONTRACT	BOTH	( PROMPT )	
		percen	H, please car tage of how m d to do yours	nuch of th	a rough e work you				percen	H, please ca tage of how d to do your	much of t	e a rough he work you	-
		Any pr	oblems with t	the supply	of materials?					oblems with			
		¥	N	DK	NA				Υ	N	DK	<b>NA</b> .	
	ii.	HEDGE	RESTORATION					,					
		Did yo	ou use any tra	aining fac	ilities?			iv.	FENCIN PASTUR		ND, WETLA	ND & UNIMPROVED	
		í	N .	DK	NA				Did yo	ou use any tr	aining fa	cilities?	
		Which	labour did y	ou use?					Y	N	DK	NA	
		OWN	CONTRACT	BOTH	[ PROMPT ]			•	Which	labour did y	vou use?		
		TE BO7	TH, please ca	n vou give	a rough		·		OWN	CONTRACT	BOTH	{ PROMPT }	
	percentage of how much of the work you managed to do yourself?					percer	TH, please cantage of how and to do your	much of t	ve a rough the work you				
		Any pi	oblems with	supply of	materials?							<u></u>	-
		Y	N	DK	NA				Any p	roblems with	supply of	f materials?	
									Y	И	DK	NA	
						I							

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	Farm	No.		
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vii OTHER

Did you use any training facilities?

Y N DK NA

Which labour did you use?

OWN CONTRACT BOTH [PROMPT]

If BOTH, please can you give a rough percentage of how much of the work you managed to do yourself?

Any problems with supply of materials?

Y N DK NA

Farm No.\_\_\_\_\_

v. BRACKEN CONTROL

Did you use any training facilities?

Y N DK NA

Which labour did you use?

OWN CONTRACT BOTH [PROMPT]

If BOTH, please can you give a rough percentage of how much of the work you managed to do yourself?

Any problems with supply of materials?

Y N DK NA

vi. HEATHER REGENERATION

Y

Did you use any training facilities?

Y N DK NA

Which labour did you use?

OWN CONTRACT BOTH (PROMPT)

If BOTH, please can you give a rough percentage of how much of the work you managed to do yourself?

Any problems with supply of materials?

NA

N DK

23.

24.

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Farm No.

Farm No.\_\_\_\_\_

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 (a) What do you see as the disadvantages of the ESA Scheme? 11. (a) What do you see as the advantages of the ESA Scheme?

(b) What do you see as the <u>main</u> disadvantage of the ESA Scheme

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- - (b) What do you see as the <u>main</u> advantage of the ESA Scheme?

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Farm No.\_\_\_\_\_

- III. POLICY
- 12. Now can I ask you some questions about the effects of the Scheme on your farm?
  - (a) Have you seen any difference in your permanent pasture as a result of the Scheme?

Y N DK NA

I E	Yes,	please	expand:	
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(b) Have you seen any change in the heather area as a result of the Scheme?

Y N DK NA

'I É	Yes,	please	expand:	
------	------	--------	---------	--

(c) Have you seen any change in the bracken area as a result of the Scheme?

Y N DK NA

1 I	Yes,	please	expand:	
-----	------	--------	---------	--

(d) Has natural regeneration begun to take place where your woodlands have been fenced off under the ESA Scheme?

Y N DK NA

If Yes, please expand:

26.

Farm	No		
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 Do you find that maintaining restricted grazing in connection with ESA-managed woods & wetlands: [PROMPT]

VERY EASY EASY DIFFICULT VERY DIFFICULT

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Please expand if possible: \_\_\_\_\_

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Farm No.\_\_\_\_\_

14. Do you feel that the landscape value of your farm has changed as a result of being involved in the Scheme?

γ N DK NA

If Yes, has it:

DECREASED	DECREASED	INCREASED	INCREASED
A LOT	A LITTLE	A LITTLE	A LOT

Please expand if possible:\_\_\_\_\_

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28.

Farm No.\_\_\_\_\_

### IV. CONSERVATION WORK

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- 15. Do you feel that the ESA has changed:
  - (a) i. Your interest in conservation?
    - Y N DK NA
    - ii. If Yes, could you say whether it has: DECREASED DECREASED INCREASED INCREASED A LOT A LITTLE A LITTLE A LOT
  - (b) i. Your understanding of conservation?

Y N DK NA

ii. If Yes, could you say whether it has:

DECREASED DECREASED INCREASED INCREASED A LOT A LITTLE A LITTLE A LOT

- (c) i. Your awareness of conservation practices on your farm?
  - Y N DK NA
  - ii. If Yes, could you say whether it has:

DECREASED DECREASED INCREASED INCREASED > LOT A LITTLE A LITTLE A LOT

Farm No.

Farm No.\_\_\_\_

16. After the Scheme finishes, do you think you will:

29.

- (a) Maintain the work which was carried out under the ESA funding?
  - Y N DK NA
- (b) Continue with similar work, without funding?
  - Y N DK NA
- (c) Continue with similar work only if you receive further financial incentives?
  - Y N DK NA

If Yes, please expand:

17. (a) Now you have had some experience of the Scheme, do you have any suggestions for improvement?

> (b) What would you say is your <u>main</u> suggestion for improvement?

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		31.			32.
		Farm No			Farm No
		last few questions are to do with any rvation work, or other Schemes, that you're ved with - excluding Breadalbane ESA.	19	. (a)	Are you involved in any other schemes relating to your farm?
					Y N DK NA
18.	(a)	Firstly, could we go through what conservation work (other than ESA) you are doing/hoping to do:		(b)	If Yes, which Schemes are you involved in?
					ii.
					iii.
					iv
				(c)	How does (i) affect the way the farm is managed?
		·			
	(b)	Which of these are/will be grant-aided?		(d)	What about (ii)?
		· · · · · · · · · · · · · · · · · · ·			
				(e)	What about (iii)?
	(c)	Which of these are you/will you be funding from your own resources?			
				(f)	And (iv)?

34.

Farm No.\_\_\_\_\_

20. Are you a member of any Group(s) or Organisation(s) related to Conservation or Agriculture? Y N DK NA

33.

Farm No.\_\_\_

If Yes, please state which:

That concludes the Survey. Thank you very much, \_\_\_\_\_\_\_, for participating; it's been very interesting talking with you and hearing what you had to say.

I will be using this Survey - together with the previous one to compile a Report, by the summer of next year. Please don't hesitate to get in touch with me between now and then if you have any other guestions or comments.

Thank you once again for your help.

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21. As a final question, is there anything further which you would like to say?

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### **APPENDIX VIII**

### ABSTRACT: SKERRATT, S.J. AND DENT, J.B. [FORTHCOMING].

### The challenge of agri-environmental subsidies: the case of Breadalbane Environmentally Sensitive Area, Scotland.

### Sarah Skerratt (1) and Barry Dent (2).

Farmers and landowners are having to respond increasingly to the shift in agricultural support towards grants for environmentally beneficial farming. One such example of this policy trend in the past decade is the introduction of Environmentally Sensitive Areas (ESAs), first implemented in Scotland in 1987. Within this Government-funded scheme, farmers receive financial incentives for managing their land in an environmentally friendly way, and for maintaining or improving the conservation features on the farm. Farmers and landowners are thus being encouraged to address goals and objectives other than those of production.

This paper examines the decision-making of farmers and landowners when faced with an option such as the ESA: the factors involved in ESA uptake; the trade-offs which have to be made; and the type of incentive that the ESA represents to landowners and farmers. The paper also discusses the views of such policy recipients towards the ESA in the total agricultural policy context, and specifically in the context of the uncertainties relating to the maintenance of subsidies.

Such a discussion provides insights into both current and future farm/estate level response to agri-environmental and land-use options.

(1) University of Edinburgh: Department of Social Anthropology and Institute of Ecology and Resource Management; (2) University of Edinburgh: Institute of Ecology and Resource Management