

Morgan, Owen (2023) *Belonging and connecting: the value of social and cultural capitals within the UK hill farming community*. Doctoral thesis, University of Cumbria.

Downloaded from: <http://insight.cumbria.ac.uk/id/eprint/7653/>

Usage of any items from the University of Cumbria's institutional repository 'Insight' must conform to the following fair usage guidelines.

Any item and its associated metadata held in the University of Cumbria's institutional repository Insight (unless stated otherwise on the metadata record) may be copied, displayed or performed, and stored in line with the JISC fair dealing guidelines (available [here](#)) for educational and not-for-profit activities

provided that

- the authors, title and full bibliographic details of the item are cited clearly when any part of the work is referred to verbally or in the written form
 - a hyperlink/URL to the original Insight record of that item is included in any citations of the work
- the content is not changed in any way
- all files required for usage of the item are kept together with the main item file.

You may not

- sell any part of an item
- refer to any part of an item without citation
- amend any item or contextualise it in a way that will impugn the creator's reputation
- remove or alter the copyright statement on an item.

The full policy can be found [here](#).

Alternatively contact the University of Cumbria Repository Editor by emailing insight@cumbria.ac.uk.

Belonging and Connecting:

The value of social and cultural capitals within
the UK hill farming community

by

Owen Morgan



Institute of Science and Environment

University of Cumbria

This thesis is submitted for the degree of Doctor of
Philosophy

December 2023

Abstract :

Belonging and Connecting: The value of social and cultural capital within the UK hill farming community.

Owen Morgan

The UK hill farming community has long faced challenges on physical, economic, and social fronts, which are expected to intensify due to post-Brexit changes in farming support. Despite these difficulties, the community generates a range of natural and cultural resources, including biodiversity, flood mitigation, and the cultural landscape of the uplands. Contemporary academia views the community through a multiple community capitals framework aligned with development economics, highlighting the significance of social and cultural capitals in its foundation. This study aims to investigate the value that social and cultural capitals contribute to the community.

Drawing upon existing literature, this study developed a conceptual framework exploring the non-monetary value of social and cultural capitals in the UK hill farming community. This framework was then tested by employing an ethnographic approach, data were collected through various observation activities, supplemented by 35 semi-structured interviews, with Cumbrian farmers. The study findings reveal that social and cultural capitals play a crucial role in establishing and sustaining a shared socio-cultural identity. This shared identity not only serves as the foundation of the community, but also enables key collaborative activities among its members. By utilising social and cultural capitals, farmers can define their

individual and group identities, thus determining those who are part of their community and those who are not.

These findings not only provide empirical evidence supporting the importance of social and cultural capitals within the hill farming community, but also shed light on the conflict between farmers and outsiders, stemming from a lack of shared cultural identity. These insights have implications for the future support of hill farming, including facilitating collaborative mechanisms and increasing participation in diversification, agri-environmental schemes and the public goods agenda. By recognising the value of social and cultural capitals, policymakers can develop effective strategies to address the challenges faced by the UK hill farming community.

Table of Contents

Abstract	ii
Table of Contents	iv
List of Tables.....	xvi
List of Figures.....	xvii
Acknowledgements.....	xxi
Authors Declaration.....	xxii
Glossary and Abbreviations.....	xxiii

Chapter 1: Introduction

1.1 Background.....	1
1.2 Key Terms.....	4
1.2.1 Hill farming	4
1.2.2 Social Capital.....	5
1.2.3 Cultural Capital	5
1.2.4 Value.....	6
1.3 Aims and Objectives	8
1.4 Chapter content	9

Chapter 2: Literature Review

2.1 Introduction	11
2.2 Physical Capital.....	12
2.2.1 Land.....	13
2.2.2 Livestock.....	16
2.2.3 Buildings and Machinery	19
2.3 Natural Capital	21
2.3.1 Biodiversity.....	21
2.3.2 Water	23
2.3.3 Grazing vegetation	25
2.3.3.1 Grasses	25
2.3.3.2 Hay and Silage.....	27
2.4 Financial Capital	30
2.4.1 Core Farm income.....	30
2.4.2 Subsidies and Grants.....	34
2.5 Human Capital	37
2.5.1 Knowledge and Skills.....	38
2.5.2 Family networks	40

2.5.3 Inheritance and Succession.....	41
2.6 Social Capital	44
2.6.1 Relationships of Trust.....	44
2.6.2 Co-operation	46
2.6.3 Common rules and norms.....	48
2.6.4 Networks and Groups.....	49
2.7 Cultural Capital	58
2.7.1 Tangible Cultural Capital	58
2.7.2 Intangible Cultural Capital	65
2.8 Meaning of value in relation to Social and Cultural Capital	70
2.8.1 Attempts at economic valuation of social and cultural capital	71
2.8.2. Non-monetary value of social and cultural capitals.....	74
2.8.3. Value formation	77
2.9 Capitals conclusion	81

Chapter 3 : Conceptual Framework

3.1 Introduction	84
3.2 Multiple Capitals Conceptual Frameworks (MCCF).....	85
3.2.1 Five Capitals Framework (FCF)	85
3.2.2 Community Capitals Framework (CCF)	88
3.2.3 Use In Social ecological Systems (SES).....	93
3.3 Hill Farming Community (HFC) as a Capitals Concept	96
3.4 Review of Multiple Capitals Conceptual Frameworks	101
3.5 Interactional and Interconnection Hill Farming Community Capitals.....	103
3.5.1 Interactional nature of capital with the hill farming community	104
3.5.2 Interconnecting capitals - An Example.....	109
3.5.3 Specific relationship of Social and Cultural Capitals	114
3.6 Socio-Cultural theory	117
3.6.1 Theory in farming studies	117
3.6.1.1 Alternative Socio-cultural theories	119
3.6.1.2 Assemblage thinking.....	119
3.6.1.3 Social Practice Theory (SP).....	121

3.6.2 Socio-cultural theory selection	122
3.6.3 Symbolic Interactionism	124
3.6.4 Symbolic Interactionism with farming studies	126
3.6.4.1 Cultural Scripting.....	127
3.6.4.2 Identity Theory	131
3.7 Conceptual Framework Diagram.....	135

Chapter 4: Methodology

4.1 Methodology rationale	139
4.2 Pilot study	140
4.3 Theoretical underpinning of method techniques	143
4.3.1 Interviews	143
4.3.2 Participant Observation	144
4.4 Data Collection.....	146
4.4.1 Sampling	146
4.4.2 Collection process	148

4.5 Ethical Considerations.....	152
4.5.1 Interviews	152
4.5.2 Participant Observation.....	153
4.6 Data Analysis	154
4.7 Method Conclusion.....	156

Chapter 5 : Case Study Areas Overview

5.1 Cumbrian Context	159
5.2 Three case study areas	161
5.2.1 Area 1: Farming in the Lake District National Park	161
5.2.2 Area 2: Farming in the North Pennines AONB	163
5.2.3 Area 3: Farming in the North West Region	165
5.3 Spatial layout of participants and activity sites	167
5.4 Hill Farming system operated by participants	171
5.4.1 Hill Proper	172
5.4.2 Inbye	173

5.4.4 Farming System Demographics	175
5.5 Ethnographic areas and activities	178
5.5.1 Ethnographic Activity Sites: Shows and Shepherds Meets	179
5.5.1.1 Small hill farm specific shows	180
5.5.1.2 Large general shows	182
5.5.2 Ethnographic Activity Sites: Livestock Auctions and Sales	184
5.5.2.1 Small hill breed specific auctions and sales	185
5.5.2.2 Small hill breed specific auctions and sales	187
5.3 Area Overview Conclusion	188

Chapter 6: Data Analysis

6.1 Introduction	190
6.1.1 Dataset and Data Preparation	190
6.2 Socio-cultural identity	193
6.2.1 Vocational lifestyle	193
6.2.2 Livestock person	196

6.2.3 Food producer	198
6.3 Intangible cultural capitals.....	202
6.3.1 Diplomacy/Humility	202
6.3.2 Rightness of system for place.....	205
6.3.3 Connection to/custodianship of the land.....	206
6.3.4 Individual/self reliance	209
6.3.5 Supporting others	212
6.3.6 Hard work	213
6.3.7 Intergenerational cultural knowledge transfer.....	217
6.3.8 Centrality of livestock	221
6.3.9 Intangibile Cultural Capital Conclusion	225
6.4 Social Capital	226
6.4.1 Relationships of Trust	226
6.4.2 Reciprocity and exchange	231
6.4.3 Common rules and Norms	235
6.4.4 Network & Groups	240
6.4.4.1 Groups	240
6.4.4.2 Networks	244
6.4.5 Social capitals conclusion.....	251
6.5 Cultural Communication	252

6.6 Interpretation and adjustment.....	255
6.7 Conclusion to socio-cultural formation.....	259
6.8 Shared cultural identity leading to Group Membership	260
6.9 Group Membership	265
6.9.1 Collaborative action	266
6.9.2 Resource sharing	271
6.9.3 Cultural belonging	274
6.9.4 Group status	280
6.10 Group Membership aiding access to other capitals	284
6.11 Other capitals	288
6.11.1 Physical Capitals.	289
6.11.2 Natural Capital	292
6.11.3 Human capital	295
6.11.4 Financial capital	299
6.11.5 Other Capitals Conclusion.....	303
6.12 Other Capitals Effects on Group Membership	304
6.13 Effects on identity	309
6.14 Data Analysis Conclusion	313

Chapter 7: Discussion

7.1 Introduction	315
7.2 Key points overview	315
7.2.1 Vocational Livestock Producer identity	316
7.2.2 Importance of CC and SC to Identity formation	318
7.2.3 Interaction SC and CC facilitated by cultural communication and adjustments	319
7.2.4 Access to the group	321
7.2.5 Benefits of group membership	322
7.2.6 Feed back loops	323
7.2.7 Key points conclusion	325
7.3 Data relationship to literature	327
7.3.1 Socio-cultural identity (SCid) formation	327
7.3.2 Cultural communication and adjustments	331
7.3.3 Socio-cultural identity and access to the cultural group ...	337
7.3.4 Benefits of Group Membership	340
7.3.5 Collaborative action and resource sharing	341
7.3.6 Cultural belonging	344
7.3.7 Cultural status	346
7.3.8 Access to other capitals	348

7.3.9 Cultural manifestation in other capitals	352
7.3.10 Conclusion	356
7.4 New concepts evolved from the data collection	359
7.4.1 Introduction	359
7.4.2 The ‘other’	360
7.4.2.1 Conservation and environment movements	361
7.4.2.2 Different background	364
7.4.2.3 Geographic ‘others’	367
7.4.2.4 Veganism	369
7.4.3 The ‘other’ in literature	372
7.4.3.1 Specific others	378
7.4.3.2 Known ‘others’	379
7.4.3.3 Abstract ‘other’	382
7.4.3.4 Breaking down of boundaries/adaptations	384
7.4.4 The ‘other’ conclusion	387
7.5 Revised/Adapted Framework	389
7.6 Discussion conclusion	392

Chapter 8: Conclusion

8.1 Achievement of Aims and Objectives.....	397
8.1.1 Aims	398
8.1.2 Objectives.....	399
8.1.3 Addressing objectives.....	399
8.2 Limitations	404
8.3 Significance of study findings	406
8.4 Recommendations	408
8.5 Further Research	410
8.6 Concluding comments	412

Appendices

Appendix 1 - Original Conceptual Framework

Appendix 2 - Revised Conceptual Framework

List of Tables

Table 1 : <i>Breakdown showing what elements of CF diagram will be explored by mixed methods</i>	140
Table 2 : <i>Data collection question menu</i>	149
Table 3 : <i>Participant observation general menu.....</i>	151
Table 4 : <i>Breakdown of NVivo themes and codes.....</i>	192
Table 5 : <i>Traditional versus adjustment values and beliefs</i>	335

List of Figures

Figure 1 : <i>Hill Farm Capitals</i>	11
Figure 2 : <i>Generalised view of a Hill farm</i>	13
Figure 3 : <i>Inbye</i>	14
Figure 4 : <i>Open Moorland</i>	14
Figure 5 : <i>Intake or Intack</i>	15
Figure 6 : <i>Native Breeds in the UK</i>	17
Figure 7 : <i>Mixed grazing of Suckler herd and crossed breed hill sheep</i> ...18	
Figure 8 : <i>Material difference in drystone wall construction</i>	20
Figure 9 : <i>Regional variation in drystone wall construction</i>	20
Figure 10 : <i>Habitats of the UK Uplands</i>	22
Figure 11 : <i>Traditional upland hay meadow</i>	28
Figure 12 : <i>Cutting of grass pasture for Silage</i>	29
Figure 13 : <i>Average Farm Business Income (£ per farm) for LFA Grazing Livestock farms</i>	32
Figure 14 : <i>Cost Centre breakdown for Farm Business Income by farm type, 2021/22</i>	33
Figure 15 : <i>Interactional relationship between capitals</i>	46
Figure 16 : <i>Upland Farming Knowledge System</i>	50

Figure 17 : <i>Sheep Stratification in the UK Livestock Industry</i>	51
Figure 18 : <i>A Heft within a North Pennines Common</i>	53
Figure 19 : <i>Shepherds during a gather on Ingleton Hill, Yorkshire</i>	55
Figure 20 : <i>Herdwick sheep in storing pens post gathering</i>	57
Figure 21 : <i>Traditional Layout of an English Lake District farm yard</i>	60
Figure 22 : <i>Cumbrian Bank Barn</i>	60
Figure 23 : <i>A Bee Bolt on the North York Moors</i>	61
Figure 24 : <i>Two images for the Wasdale Shepherd’s Meet</i>	62
Figure 25 : <i>Shepherd’s Crooks & Walking Sticks after judging at the Eskdale Show 2019</i>	64
Figure 26 : <i>Location of Relational Values in Values framework</i>	79
Figure 27 : <i>Assets, Livelihoods and poverty diagram</i>	86
Figure 28 : <i>Asset/Dimensions of Communities Capital Framework</i>	89
Figure 29 : <i>Communities capital Diagram</i>	90
Figure 30 : <i>The spiralling of Capital Assets</i>	91
Figure 31 : <i>Selman & Knight’s conceptual framework</i>	94
Figure 32 : <i>Add-on module to integrate social-cultural concepts into frameworks of interaction between social and natural systems</i>	95
Figure 33 : <i>Sustainable Livelihoods Framework</i>	97

Figure 34 : <i>Hill Farm Capitals</i>	100
Figure 35 : <i>SLA Farm Assets</i>	99
Figure 36 : <i>Upland Sheep as a mechanism for interactional capitals...</i>	110
Figure 37 : <i>Upland Sheep as a socio-cultural conduit to capital interaction.....</i>	112
Figure 38 : <i>Connecting relationship of social and cultural capitals within UK Hill farming.....</i>	114
Figure 39 : <i>Conceptual Framework Diagram for the formation of socio- cultural identity</i>	137
Figure 40 : <i>Mapping of three Cumbrian study sites</i>	159
Figure 41 : Demographic breakdown of Cumbrian Agriculture.....	160
Figure 42 : Traditional Lake District Farm	161
Figure 43 : Percentage of Agricultural land use in North Pennines.....	163
Figure 44 : Eden valley pastoral field system	165
Figure 45 : Howgill fells above Sedbergh	166
Figure 46 : Typical mixed land use in Borders landscape	166
Figure 47 : Lake District National Park participants details	168
Figure 48 : North Pennines ANOB participants details	169
Figure 49 : Cumbrian participants details	170

Figure 50 : Three parts of hill farming system in relation to altitude	171
Figure 51 : System Specifications of Hill Farming Proper	172
Figure 52 : System Specifications of Inbye	173
Figure 53 : System Specifications of Lowland	174
Figure 54 : System Demographics Area 1 participants (Lake District National Park).....	175
Figure 55 : System Demographics Area 2 participants (North Pennines ANOB)	176
Figure 56 : System Demographics Area 3 participants (Cumbria- Scottish Borders)	177
Figure 57 : Map of shows and shepherd meets	179
Figure 58 : Ennerdale Shows - Livestock competition 2022	180
Figure 59 : Hesketh Show - Livestock competition 2023	182
Figure 60 : Map of auction and sale sites	184
Figure 61 : St Johns Chapel Mule Sale	185
Figure 62 : Kirkby Steven Mules Sales	187
Figure 63 : Diagrammatic relationship of key points	316
Figure 64 Revised conceptual framework	389

Acknowledgements

I would like to acknowledge and give my warmest thanks to all my supervisors through out last 3 years, with a special thanks to my lead supervisor Professor Lois Mansfield. Her guidance, advice and support have been most appreciated

I would also like to give special thanks to my wife Namoi Morgan and whole family for their continuous support and understanding through the last few years. I would also like to mention my parents Christine and David Morgan who have been a constant source of support through this PhD journey.

Finally, I would like to thank all the research participants, and members of the hill farming community who have contributed to this study. They have been enormously generous with their time, knowledge and experience. This PhD would have been impossible without their support and acceptance.

Author's Declaration

I, Owen Morgan hereby declare that I am the sole author of this thesis.

To the best of my knowledge this thesis contains no material previously published by any other person except where due acknowledgement has been made. This thesis contains no material which has been accepted as part of the requirements of any other academic degree or non-degree program, in English or in any other language.

This is a true copy of the thesis, including final revisions.

Date: 28/11/23

Name (printed letters): Owen John David Morgan

Signature:

Glossary and Abbreviations

ELMS - Environmental Landscape Management Schemes

SCiD - Socio-cultural identity

HFC - Hill farming Community

SC - Social Capital

CC - Cultural Capital

TCC - Tangible Cultural Capital

ICC - Intangible Cultural Capital

CF - Conceptual Framework

Chapter 1 : Introduction

1.1 Background

The UK's hill farming communities have long served as stewards of a diverse range of natural and cultural resources, encompassing vital elements such as biodiversity, flood mitigation, and the preservation of the distinctive upland cultural landscape (Mansfield, 2011). Yet, the intricate tapestry of their existence is now being woven with challenges that cast a shadow over both their business endeavours and way of life. Historically, these communities have grappled with socio-economic marginalisation, prompting the necessity for financial support to sustain their traditional practices (Clark and Scanlon, 2019). However, this ongoing predicament has reached a critical juncture in the wake of post-Brexit transformations in agricultural subsidy frameworks and the emergence of new trade agreements stemming from the UK's departure from the European common market (DEFRA, 2020).

In response to these seismic shifts, a neoliberal paradigm for agricultural support has emerged, one rooted in the concept of trading public investment for ecological benefits. In essence, this represents an extension of historical efforts to imbue farming practices with environmental stewardship. The newly introduced Environmental Landscape Management (ELM) support mechanism is poised to provide backing exclusively to those farmers who willingly engage in agri-environmental initiatives within their operational landscapes. However, this poses an issue for the

sustainability of hill farming communities as these new drivers of agricultural policy do not necessarily align with the traditional drivers of the agricultural community (Mansfield, 2019a).

Throughout their history, hill farmers have exhibited a propensity for resistance when confronted with alterations to their established agricultural systems, whether arising from post-war calls for heightened production or the agri-environmental initiatives of the late 20th century (Burton, 2004). Their enduring model of operation, as delineated by Mansfield (2011), centres on the transformation of the upland's constrained vegetative resources into valuable animal products such as meat, milk, and fibre. However, this approach has often stood at odds with governmental and public agendas, leading to an impasse in adaptation and subsequently intensifying the community's marginalisation (Mansfield, 2015).

The current post-Brexit landscape presents a familiar narrative, with the prevailing economic drivers of this era in discord with the fundamental values and beliefs that underscore the identity of hill farmers and their way of life. This community's ethos, intricately intertwined with social and cultural foundations, has emerged as the bedrock of its endurance and historical evolution (Winchester, 2000). It is imperative, then, to engage in a nuanced examination and assessment of the socio-cultural underpinnings that define this community, as this holds the key to bolstering its resilience and shaping effective policies and support mechanisms.

Drawing upon the rich reservoir of contemporary academic discourse, this study endeavours to illuminate the invaluable contributions of social and

cultural capitals to the tapestry of the hill farming community. By constructing a robust conceptual framework, and subjecting it to empirical scrutiny through a qualitative research approach, which includes elements of ethnographic exploration, this research unveils the intricate mechanisms that animate the community's existence. In doing so, it sheds light on the ramifications of ongoing support transformations and the potential trajectories of success amid these changes.

In the ever-evolving landscape of hill farming, where tradition intersects with modernity, the intricate dance between socio-cultural values, economic imperatives, and environmental stewardship remains at the heart of a complex narrative. As this study delves into the depths of these intersecting realms, it unveils a nuanced understanding of the challenges and opportunities faced by hill farming communities. The resilience of these communities, rooted in their deep-seated social bonds and cultural heritage, stands as a testament to their enduring spirit. While the economic winds of change may necessitate adaptations, the findings underscore the importance of recognising and preserving the intangible wealth that defines these communities, fostering a harmonious coexistence between the old and the new.

The following sections will introduce several of the key factors to be considered before moving into the main body of the research. First, providing definition and additional information about key terms. Second, outlining the aims and objective of the thesis. Finally, providing a breakdown of the chapter and their contents.

1.2 Key Terms

1.2.1 Hill farming

The upland farming system is made up of three core farm types or variation on these, they are defined as:

1. Upland farms – typical of that shown in with a mix of all three types of farmland. Most farms in uplands can be classified this way and run sheep and beef cattle (known as suckler cows).

2. Hill farms – comprising of mainly open fell, none or only one field of inbye and some intake improved as best as possible and thus constraining operations to sheep enterprises only. These farms are confined to the higher upland areas, such as the heads of valleys or far up on valley sides just below the open fell.

3. Dairy farms – confined to the upland margins around the 200 to 300m altitude, where precipitation is enough to encourage high grass yields, but the environment is mild enough to allow dairy cows to flourish. These farms contain mainly inbye and intake and may be used for overwintering

(Mansfield 2015 : 7)

The combination of these farming units make up the hill farming community (HFC), which operates on both a micro local scale and a macro national scale (Mansfield, 2011). As discussed earlier, contemporary research views the community as being made up of an array of capitals,

with social and cultural seen as critical to underpinning the other and the system as a whole (Mansfield, 2019a). As these two capitals are the focus of this study, an initial definition will be provided here before an in depth interrogation in the subsequent chapter.

1.2.2 Social capitals

In the context of hill farming literature, social capital is often defined using Putnam's definition: "Features of social organisation, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated actions" (Putnam, 1993). In this section, we will once again refer to Mansfield (2019a) and explore four key aspects of social capital (SC): Relationships of Trust, Cooperation, Common Rules/Norms, and Networks/Groups. The discussion will draw upon descriptions of these aspects of social capital from broader literature and provide supporting examples from hill farming sources.

1.2.3 Cultural Capitals

Cultural capital is a term employed in both social theory and heterodox economic accounting (Bourdieu, 1986; Jenkins, 1992; Throsby, 2001). In current hill farming research, the economic concept is utilised, aligning it with other alternative capital-based assessments (Mansfield, 2019a; Constanza et al., 1997). The role of culture and its manifestations of capital has received limited attention, prompting recent initiatives to enhance knowledge in this area (DCMS, 2021). This section will adhere to the

definitions of Cultural Capital (CC) outlined in the most recent hill farming research which provides three broad areas for exploration: tangible, intangible, and cultural landscapes (Mansfield, 2019b).

Thus, social capital unveils a web of relationships, trust, cooperation, common norms, and interconnected networks, while the realm of cultural capital reveals the multifaceted dimensions of tangible and intangible resources, woven into the fabric of hill farming's rich heritage and evolving landscapes. Finally in this section on key terms, the concept of value for these capitals will be outlined.

1.2.4 Value

In the context of capitals, value seems to encompass two dimensions: an economic, monetary nature, and a non-monetary value (Throsby, 2003). Initially, these two meanings of value may appear as binary opposites, with some economists questioning the relevance and measurability of non-monetary value (Diamond and Hausman, 1994). Conversely, others argue that all value ultimately stems from socio-cultural sentiment and emotional choices (Sayer, 2011). This study contends that social and cultural capitals possess both monetary and non-monetary value, with both dimensions ultimately shaped and supported by socio-cultural values.

The concept of value can be examined both in monetary and non-monetary terms, even within economic studies. Monetary valuation of social and cultural capitals has focused on the production of objects or their effects on economic performance. On the other hand, non-monetary studies have

delved into their contributions to socio-cultural belonging and connection. While these capitals were traditionally studied in isolation, recent research is embracing their interconnected nature to examine socio-cultural value. Nevertheless, this approach comes with complexities, including the question of whether culture can or should be valued in a conventional economic sense.

This study looks to explore the non-monetary value of social and cultural capitals, as it sees this and the construct which underpins value formation with in the community. This will be explored in depth in section 1.8.

Before outlining the contents of all the following chapters, first the aims of objectives of this study are laid out below. These will provide the driver for this study and will be picked up again in review within the conclusion.

1.3 Aims and Objectives

Aims

Critically explore the hill farming community through its capitals and examine the value of social and cultural capitals

Based on the concept of multiple capital community frameworks, devise a testable conceptual framework diagram to explore the non-monetary value of social and cultural capitals to hill farming communities.

1. Critically evaluate the current position of hill farming within academic literature.
2. Develop and test the conceptual framework to explore the non-monetary value of Social and Cultural Capital to the hill farming community.
3. Collaborate with members of the hill farming community to examine the socio-cultural values.
4. Examine the role of social and cultural capital in the formation of farmer identity and the value this brings to community.
5. Explore the role of social and cultural capitals in underpinning the hill farming community.

1.4 Chapter contents

Chapter 1 Literature Review

Critically evaluates hill farming community through its six capitals as outlined by Mansfield 2019. This will explore the five capitals identified within sustainable development plus the additional of cultural, identifying its significance to the community and connection to social capitals. Finally this chapter will look at the value of SC and CC to farming communities, exploring the literature on both monetary and non-monetary value before laying out the case of the study's focus on non-monetary values.

Chapter 2 Conceptual framework

Develops a conceptual framework for the study, firstly looking at the concept of multi capitals communities and the variety of theoretical frameworks available. This will be followed by a segment devoted to identifying suitable multi-capital frameworks, which will serve as the foundation for the diagram employed in this study. Subsequently, the chapter will delve into socio-cultural theories, which will contribute to the theoretical foundation of the ultimate testable conceptual framework.

Chapter 3 Method

Outlines the methodological approach selected to test the conceptual framework. This chapter explores the initial methodology and follows its development through piloting and finally outlines the specifics of the data collection process.

Chapter 4 Site Overview

Provides an overview of the geographical areas of data collection, including spatial distribution of interview participants and ethnographic activities location. The chapter goes on to explore the demographic breakdown of the participants within the three selected data collection areas. This includes examination of the farming systems operated within

these regions. Whilst, the variation and initial findings from ethnographic activities are also explored.

Chapter 5 Data Analysis

A synthesis of the data is undertaken, exploring the themes developed through the transcription and coding of all data outputs. This evaluation looks to build evidential support from the data for the conceptual framework diagram and tests it against the data outputs of participants. This process produces a selection of key findings.

Chapter 6 Discussion

In this chapter the key findings from the analysis of data are explored. They are linked to existing literature to connect the study to the current academic landscape. The chapter also discusses additional findings from the data not considered within the initial framework, and looks to integrate these within the framework with the assistance of fresh literature.

Chapter 7 Conclusion

Finally, the conclusion chapter looks to connect the findings of this study to the original aims and objectives. This chapter will also explore any limitations identified within the study and its methodology. Followed by a set of recommendations locating the significance of the study within the contemporary agricultural environment. Finally, the chapter will conclude by identifying any further research opportunities.

Chapter 2 : Literature Review

2.1 Introduction

As discussed in the previous chapter, contemporary literature on the hill farming community sees it as made up of multiple capitals. The most recent development of this concept is Mansfield's (2019a), six capitals diagram for hill farming communities (Fig. 1).

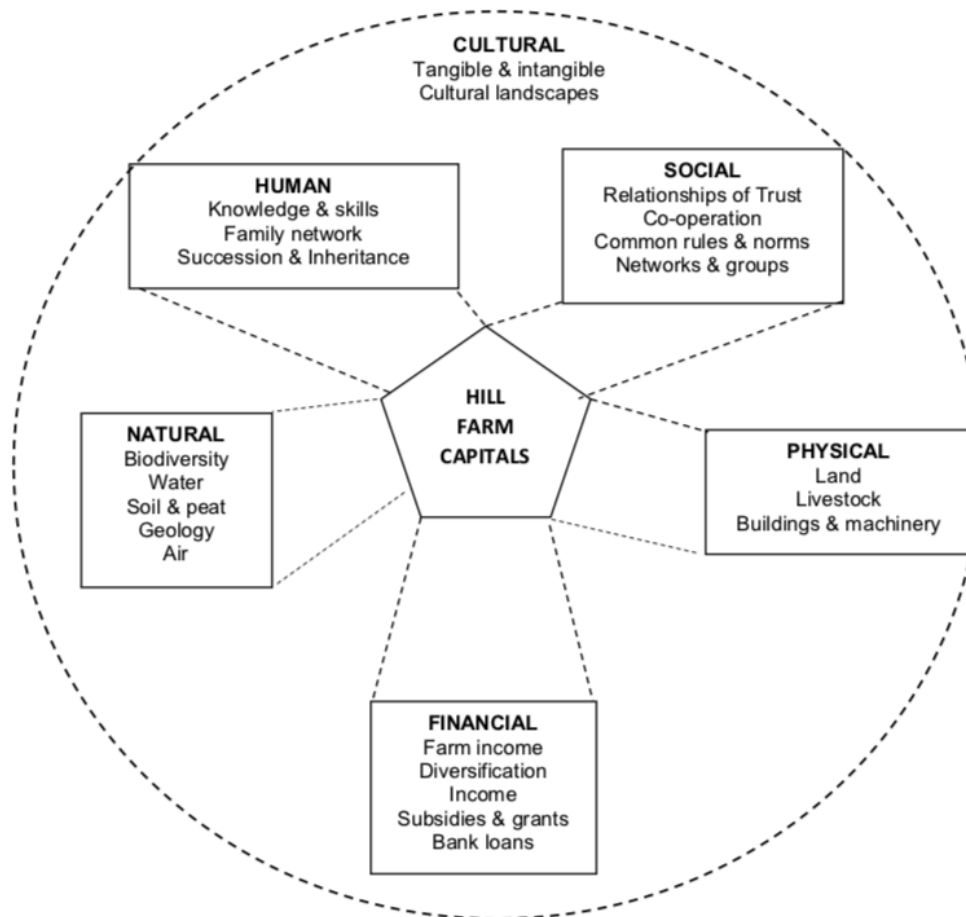


Figure 1 *Hill Farm Capitals* taken from (Mansfield 2019a:21)

This literature review will follow Figure 1 by critically examining the UK hill farming community through its capitals. The review will follow through the capitals systematically, starting with physical and finishing with cultural. Armed with this understanding of the HFC capitals the review will then investigate the value of social and cultural capitals. This will involve a review of what value means (section 2.8), monetary values (section 2.8.1), non-monetary value (section 2.8.2) and finally value formation (section 2.8.3). There will then be a concluding section (2.9).

2.2 Physical Capital (PC)

Physical capital *'is generally defined as an asset that is used in production and which is manufactured by humans. The latter characteristic means that it is reproducible. It may be for example machinery, buildings or vehicles.'* (Kataria, Curtiss and Balmann, 2012:2). In the context of hill farming literature, physical capital refers to the land, livestock, buildings, and machinery (Fig 1). This section will examine the physical capitals of the hill farming community by using these broad definitions. It is important to note that many forms of physical capital are closely interconnected with other types of capital, particularly natural and cultural capital. Therefore, certain forms of physical capital may also be mentioned in relation to other capital descriptions.

2.2.1 Land

Although, the British Uplands are diverse in character, the basic structure of an upland farm unit within the hill farming system is fairly universal. A generalised view of this unit can be seen in Fig 2, showing the characteristic land types and spatial arrangement of Inbye, Intake and Open Moorland.

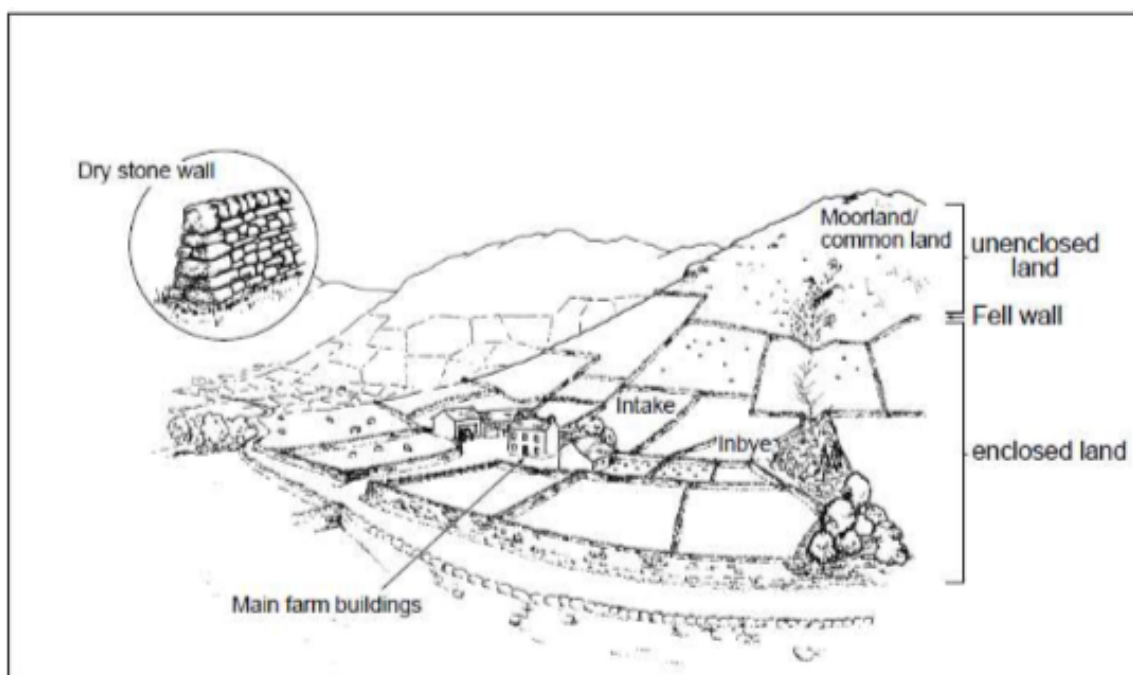


Figure 2 - Generalised view of a Hill farm (Mansfield 2011; 7)

The Inbyes refer to a collection of grass meadows or arable fields that are utilised for cultivating hay, silage, or fodder crops. These fields consist of the highest-quality land within the farm and are typically located near the farmstead. To enhance their productivity, these fields may undergo drainage improvements and, in certain cases, the application of fertilisers (Higgins *et al.*, 2019). Throughout the year, the Inbyes serve various purposes,

including grazing for essential livestock during the winter and early spring, as well as the cultivation of winter feed during the summer (see Figure 3).



Figure 3 *Inbye*

Image shows a large improved inbye in this case for a dairy operation.

Beyond the uppermost boundary wall, commonly referred to as the fell wall, lies the Open Moorland (Fig 4).



Figure 4 *Open Moorland*

Image of the complex mixture of grazing and topology within the open moorland.

This area consists of unenclosed, semi-natural habitats such as rough grassland, heather moors, and bogs (Bonn *et al.*, 2009). Typically, the ownership of these open moors rests with a single landlord, who either

grazes the land themselves or permits grazing by a collective group of individuals in a practice known as commoning. The management of the open moorland varies significantly across regions, with approximately 65% of the Lakeland fells embracing commoning, while the moors of the Peak District have no common land (Mansfield, 2011:8).

Intakes are parcels of land situated between the Inbye and open fells, both in terms of spatial location and land quality. Typically, these areas are created by enclosing sections of moorland with walls and implementing partial improvements, primarily through drainage. As a result, intakes exhibit a semi-improved nature characterised by the presence of rushes and some nutritious grasses. This land can be utilised for limited grazing, which helps alleviate pressure on the more valuable grazing areas during peak periods (Fig. 5).



Figure 5 *Intake or Intack*

https://www.pietsmulders.nl/engeland_uplands.html
retrieved 17/5/21

When considering land as an asset, it can be argued that all agricultural activities are influenced by the physical environment (van Orshoven *et al.*,

2012). This is particularly evident in upland farming, where the key elements are grazing vegetation and livestock, which rely on the physically constrained land for sustenance (Mansfield, 2011). The topography of the uplands plays a significant role in shaping their distinct climate (Barry *et al.*, 2003), characterised by generally cooler and wetter conditions compared to lowland areas (Chandler and Gregory, 1976). However, there is a pronounced west to east variation, with western uplands of the UK receiving approximately 2.5 times more rainfall than their eastern counterparts (Wright & Kempe, 2006). Moreover, at a macro level, regional-specific topography creates unique climatic effects, such as frost pockets (Harrison and Harrison, 1988).

The specific topologies of the uplands have a major impact on vegetative growth, which significantly limits farming opportunities in many upland areas, leading to the predominance of low-nutrient vegetation communities (Marrs *et al.*, 2020). As a result of the challenging conditions in upland areas, the development and selection of livestock breeds capable of thriving in such harsh environments have taken place. The upcoming section will delve into livestock as a form of physical capital.

2.2.2 Livestock

Livestock assets available to the HFC are generally ruminant species mainly sheep and cattle (Fraser *et al.*, 2013). These animals play a crucial role in the agricultural utilisation of upland areas due to their ability to

efficiently digest the limited vegetation present (Bazeley and Hayton, 2007). Hill breeds, which are native to or specifically adapted to upland environments, are preferred for their ability to thrive in challenging conditions (Evans and Yarwood, 2006). However, it is important to note that using these breeds has economic implications, as they are less commercially viable and yield less meat for sale (Grayson, 1997). While native species still exist in reasonable numbers in the uplands (Fig 6), there is evidence suggesting that these communities are vulnerable to genetic diseases due to their historically low population sizes (Carson *et al.*, 2009).

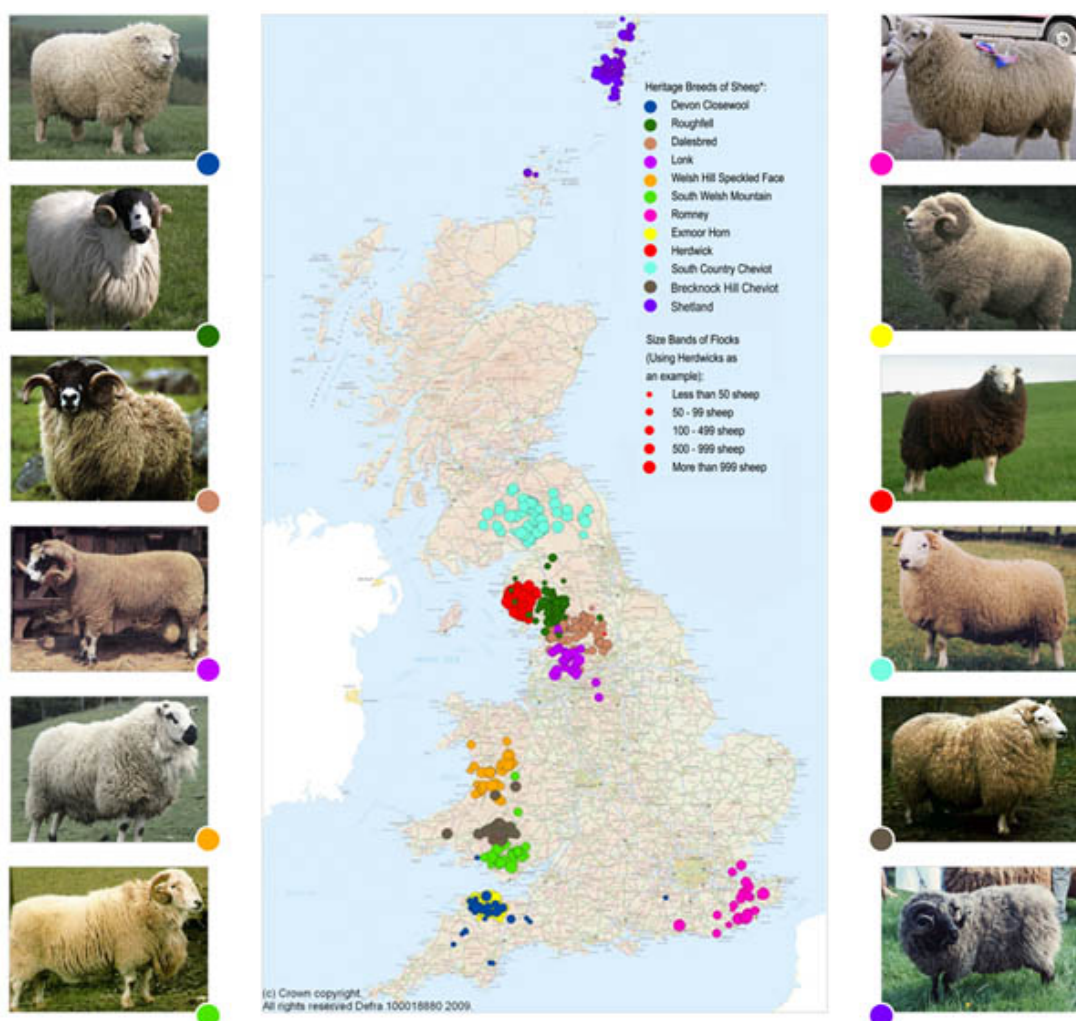


Figure 6 Native Breeds in the UK take from The Sheep Trust <https://www.york.ac.uk/org/cnap/tst/listofbreeds.html> based on data from (Carson *et al.*, 2009)

In upland suckler cattle operations, a similar scenario is observed, where smaller upland varieties tend to thrive better in harsh grazing conditions compared to standard commercial breeds (Lowman *et al.*, 1996).

Additionally, there is a growing trend of reintroducing native species in these operations due to their conservation value (Mansfield, 2015), with varieties such as Belted Galloways and Highland cattle have regained popularity (Fraser *et al.*, 2014).

Recent studies are refocusing attention on the potential benefits of mixed grazing systems (Fig. 7) (Fraser *et al.*, 2013). Although historically common, these systems fell out of favour during the intensified 'productionist' approaches of the mid-20th century (Fraser *et al.*, 2014).



Figure 7 Mixed grazing of Suckler herd and crossed breed hill sheep
retrieved from <https://www.farmersjournal.ie/farmer-writes-a-lot-of-cattlemen->

Mixed grazing systems promote a collaborative grazing approach, where the selective grazing habits of cattle do not negatively impact sheep grazing, particularly concerning lamb development (Fraser *et al.*, 2009). The cattle's selective grazing not only creates more diverse vegetation patches, which are beneficial for biodiversity, but also helps control invasive species such as purple moor grass and bracken (Critchley *et al.*, 2008).

2.2.3 Buildings and Machinery

The Farmstead serves as the central physical infrastructure of a farm, typically situated at the heart of the broader farm landscape (Fig. 1). Although configurations may differ, most farmsteads consist of essential elements such as a farmhouse, farmyard, sheep dipping area, and barns. Section 7.1 will provide a more detailed exploration of these farmstead features, particularly in relation to tangible cultural capital.

The task of enclosing land within the hill farming landscape is primarily accomplished through drystone walling, which is a prominent aesthetic characteristic of upland regions in Britain, although it is not limited exclusively to these areas (Woodcock, 2017). These walls are constructed using various types of rocks gathered from the surrounding landscape, and they are assembled without the use of mortar, resulting in loosely jointed structures (Collier, 2013). Due to their nature, drystone walls are highly specific to each region since they rely on the unique geological rock formations found locally, leading to considerable aesthetic variation

(Fig. 8). Additionally, the diverse characteristics of the source materials give rise to regionally specific construction styles that best suit the physical properties of the underlying rocks (Fig. 9).



Figure 8 Material difference in drystone wall construction

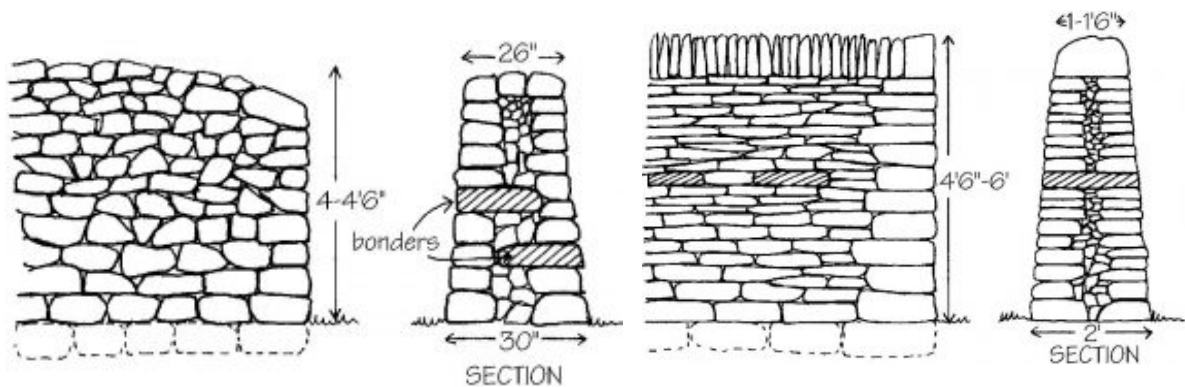


Figure 9 Regional variation in drystone wall construction (TCV 2021)

In conclusion, physical capital in the context of hill farming encompasses various assets such as land, livestock, buildings, and machinery. Native breeds are favoured for their suitability to the uplands, although they may have economic limitations compared to commercial breeds. Farmsteads and drystone walls are essential elements of the physical infrastructure, providing functional and aesthetic contributions to hill farming. The land

itself plays a crucial role, with distinct features including inbye, open moorland, and intakes, each serving different purposes and presenting unique challenges and opportunities. Overall, physical capital in hill farming is intricately connected to natural capital, forming a complex and interdependent system. These natural capitals which support the physical system will be explored in the next section.

2.3 Natural Capital

The concept of Natural capital (NC) has developed since its origins in the 1980s to be defined as the stock of natural resources, providing people with goods and services (Constanza, 1991). The hill farming community utilises a number of natural capital assets and ecosystem services, but is also responsible for the creation and maintenance of a great many too (Mansfield, 2019b). This section will look at these under three main categories Biodiversity, Water and Grazing vegetation.

2.3.1 Biodiversity

The floral and fauna of the UK uplands combine to create a landscape of High Natural Value (HNV), which is seen as worthy of conservation (Paracchini *et al.*, 2008). These uplands are home to over 50% of the UK's total environmental resources (Soliva *et al.*, 2008). The environment in these areas can be classified into distinct habitat types falling under the broad categories of Montane, Woodland, Moorland, and Mires (Haines-Young *et al.*, 2003). Each of these habitat types holds ecological

significance, either as large-scale ecosystems or as specific communities. Examples include the presence of various willow species in montane habitats, the ecological value of semi-ancient woodland complexes, the diverse fauna found in dwarf shrub heather, and the importance of blanket mires for water birds, among others (Haysom & Coulson, 2004; Newton, 2004; Weatherall *et al.*, 2012).

It is important to recognise that the natural capital asset in upland regions has not only emerged naturally but has developed through the interactions between human farmers and the physical environment (Bonn *et al.*, 2009). Many farms within the hill farming community encompass various unique habitat types associated with the uplands (Fig. 10). However, managing biodiversity in these areas poses a significant challenge, as there is no single strategy that can be universally applied (Backshall *et al.*, 2001).

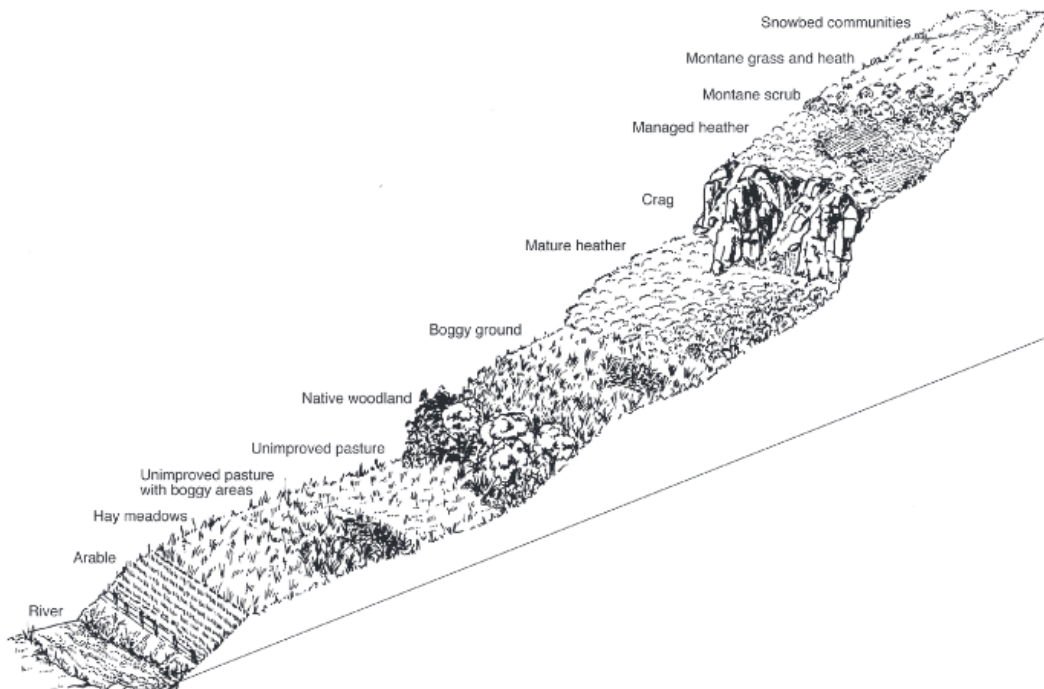


Figure 10 Habitats of the UK Uplands taken from (Mansfield, 2011:130)

Farmers play a crucial role not only in utilising the natural capital of the uplands but also in creating and maintaining it. This duality presents a complex situation, as the quality of biodiversity is both dependent on and vulnerable to agricultural practices, particularly intensification or abandonment (Queiroz *et al.*, 2014). This dynamic has resulted in tensions between farmers and conservationists, as the ecological sustainability of the land can be compromised before its agricultural viability (DePoe, 2011; Henle *et al.*, 2008; Mansfield, 2011). Overgrazing or undergrazing emerges as the most significant threat to upland biodiversity, placing farmers within the hill farming community at the forefront of conserving this natural capital asset (Britton *et al.*, 2005).

2.3.2 Water

As mentioned earlier, the UK uplands possess abundant water resources due to the physical topography and climatic conditions (Stott *et al.*, 2010). This water serves as a valuable asset for the hill farming community, playing a crucial role in the growth of key physical resources such as grazing vegetation and livestock (Fenichel *et al.*, 2016). Additionally, the hill farming community contributes to water as a natural capital asset for the broader community by engaging in various landscape management activities aimed at protecting, the flow of ecosystem services in the form of drinking water sources and mitigating floods (Wallace, 2021).

The significance of upland water reserves extends beyond their immediate importance. Current research emphasises their critical role in the

biogeochemical cycling of the entire water cycle (Raimi *et al.*, 2021). However, numerous studies have highlighted the vulnerability of these water resources to environmental changes, including acidification and eutrophication resulting from human activities and pollution (Batterbee *et al.*, 2014; Smith *et al.*, 2013). Safeguarding these upland water resources is of utmost importance, as they provide essential services, including the provision of 68% of the UK's drinking water (Hijnen *et al.*, 2011).

The HFC plays a crucial role in both providing and safeguarding these vital resources. Although historical issues such as excessive grazing and inadequate upland management did have an adverse effect on water quality (Bain *et al.*, 2011), reduced grazing intensity and use of mixed grazers has seen this reduced in recent years (Batterbee *et al.*, 2011). Upland grazing now produces a lower acidification impact on water than conifer plantations, one of the only other viable economic uses of the land (Jenkins *et al.*, 1990). Careful grazing has seen a reduction in acid deposition and excess nutrient inputs into upland water sources, particularly through the protection of bryophytes and lichens (Curtis *et al.*, 2005). This contribution to water provisioning is expected to become even more crucial as climate change is projected to significantly affect water quality in the future (Whitehead *et al.*, 2009).

Furthermore, the HFC's land management practices have a substantial impact on flood reduction. Sustainable grazing programs implemented by farmers in the uplands can result in a 50% reduction in peak river flow

during periods of heavy rainfall (Gao *et al.*, 2017). This impact can be amplified to a 300% reduction when farmers protect and restore blanket mires (Dadson *et al.*, 2016). These results are achieved by farmers managing vegetative burns and undertaking drainage gully blocking on degraded parts of catchments (Holden *et al.*, 2015; Parry *et al.*, 2014). Vegetative restoration projects being undertaken by members of the HFC could potentially lead to even greater reductions in peaks flows (Ballard *et al.*, 2012). However, it is important to note that poor land management and overgrazing by members of the HFC have had the opposite effect, increasing flood events downstream in lowland areas (Murphy *et al.*, 2021). This underscores the significance of grazing vegetation as a central natural capital asset for the community, which will be further explored in the following section.

2.3.3 Grazing vegetation

As mentioned previously, the primary goal of upland farmers is to generate livestock output within the challenging physical environment characterised by limited and variable grazing conditions. To meet the feeding requirements of their livestock, farmers have several options available, with the main three being semi-natural grass, hay/silage, and root crops.

2.3.3.1 Grasses

Grasses serve as the primary fodder option for upland farmers, given their wide availability, with approximately 160 species native to Britain (Hubbard, 1968). The upland environment, with its wetter climate and cool

seasons, is well-suited for grass growth (Chandler and Gregory, 1976). To maximise grass production, active management techniques are employed within the inbye and intake areas. These techniques include drainage, ploughing, and the application of fertilisers, manure, and lime (Pakeman *et al.*, 2011). These measures result in inbyes characterised by nutrient-rich grasses that are tolerant to grazing and highly palatable, making them ideal for ruminant grazing (Crofts and Jefferson, 1999).

Improving the open moorland, however, is challenging due to the prohibitive cost of enhancing poor soils and the logistical difficulties of machinery access. Consequently, open fells typically produce a maximum of 3t/ha of herbage dry matter (DMC), whereas the British standard for grazing land is closer to 10 t/ha (Schils *et al.*, 1999). Nevertheless, the open fells contrast the near monoculture environments of the inbyes by being extremely biodiverse (Littlewood *et al.*, 2006). They provide a sustainable source of edible biomass without requiring additional treatments and interventions for maintenance (Allen *et al.*, 2016).

While *in situ* grasses form the core grazing fodder for upland livestock during the warmer growing season, alternative options are needed to meet the winter forage demands. There are various grass-based solutions that farmers can utilise to fulfil these cold season requirements, which will be explored in the next section.

2.3.3.2 Hay and Silage

Both hay and silage, two forms of fodder, are produced in the inbye areas during periods when direct grazing is not taking place, such as when flocks are returned to the open moorland in spring/summer. The primary purpose of creating hay or silage is to provide a winter feed source when grass growth is limited (McCallum *et al.*, 2018). Traditionally, inbyes were used for hay production, which involves growing a single-cut fodder crop during the summer months after the livestock have been removed in spring and returned to the open fells (Riley, 2006).

Hay, in its definition, consists of a mixture of grasses and wildflowers that are cut and dried in the field (Critchley *et al.*, 2007). What sets hay apart from other cut grass fodders is the process of drying it down from 80% water content to 20% (Frame, 1992). Ensuring proper drying is crucial for its longevity in storage, as wet hay can rot and become inedible if it contains excessive moisture (Rebanks, 2015). Due to the long growing season and limited nutrient enrichment, hay meadows exhibit a high floristic diversity, indicating their high biodiversity value (Kirkham *et al.*, 2014).

In the past, hay was traditionally hand-cut and manually stored in barns close to the meadow for winter use (Fig. 11). Nowadays, if hay is produced, it is typically machine-cut and baled, which has had an impact on community connections, a topic that will be revisited later.



Figure 11 *Traditional upland hay meadow*
image retrieved from <https://where2walk.co.uk/walk/hay-meadows-at-muker/>
on 28/7/23

Silage has largely replaced hay production on hill farms (Brassley, 1996). It consists of high-nutrient grasses from improved grassland that are harvested, baled, and stored in an air-excluded environment, leading to fermentation and the release of more sugars from the grasses (Pickert *et al.*, 2019). Silage is typically cut more frequently, and the higher nutrient content in fertilised soil contributes to reduced levels of biodiversity in the grass sward (Kirkham *et al.*, 2008).

Whether a farm produces hay or silage, the purpose remains the same: to provide winter fodder for livestock during periods of limited grass growth. Farmers face the concern of ensuring they have grown and stored enough fodder, as it is a finite resource that may need to sustain their livestock for up to 130 days when grass growth is limited in upland Britain (McCallum *et al*, 2018). Insufficient fodder production or crop losses due to wet weather during harvest can necessitate the purchase of expensive supplementary feed (Rebanks, 2015). Silage has become a popular choice due to its ability to provide between two to four cuts compared to hay's single cut, resulting in a greater volume of winter fodder, albeit at an additional financial cost (fertiliser) and environmental cost (loss of diversity) (Fig. 12). However, the shift to silage production has led to an increased abandonment of traditional hay barns, causing them to deteriorate and consequently having a negative impact on the cultural landscape.



Figure 12 *Cutting of grass pasture for Silage*

image retrieved from <https://www.art.com/products/p13786296-sa-i2751619/mark-hamblin-tractor-cutting-grass-meadow-for-silage-farming-uk.htm> on 28/7/23

2.4 Financial Capital

Financial capital refers to monetary assets that generate income or can be utilised to generate future revenue (Van Horne and Wachowicz, 2008). These assets typically include funds and assets held by the farm itself, as well as external financial support from institutions in the form of loans or grants (Danes *et al.*, 2009). As previously discussed, the Hill Farming Community (HFC) faces an existing issue of economic marginalisation (Mansfield, 2019a). This section will explore the nature of this marginalisation, along with measures to address it, including core farm income, available subsidies and grants, and briefly touch upon diversification options.

2.4.1 Core Farm income

The primary objective of farms within the Hill Farming Community (HFC) is to convert the limited vegetative resources of the upland environment into animal outputs such as meat, milk, or fibre (Mansfield, 2011). This is primarily achieved through sheep or cattle farming, or a combination of both, with regional variations (Defra, 2009a). These two systems operate differently, with sheep enterprises relying on a core breeding flock of ewes (females) of varying ages and rams or tups (males) to produce lambs. The lambs are then used to replace breeding ewes, sold to lowland farms for fattening or sold as future rams to other farms (Mansfield, 2011). Upland sheep farming utilises a range of breeds specifically adapted to the

physically challenging upland environment, distinguishing it from lowland sheep farming (Evans and Yarwood, 2000).

Cattle enterprises in the HFC are typically simpler and often practiced in conjunction with sheep farming as part of a mixed approach (Fraser *et al.*, 2013), although the Peak District region has a significant number of cattle-only farms (Ponder and Hindley, 2009). These cattle operations mainly produce calves that are born and raised on the poorer upland grazing land before being sold to lowland farms for further fattening. These herds often consist of a single breed, with upland-specific breeds or less selective grazers such as Limousine, Aberdeen Angus, or Ruby Red Devons that can survive on low-nutrient semi-natural vegetation. The livestock assets serve as the core product of hill farms and are typically monetised through sales in the commodity sector of the food market (Clark *et al.*, 2019). However, this production system leaves farmers highly vulnerable to fluctuations in food market prices and supply-demand dynamics within those markets (Ilbery, 1985).

In recent years, the livestock markets have generally experienced increased demand and prices for the main products of the Hill Farming Community (HFC), such as sheep and cattle. However, there was a significant drop in value in 2018/19, particularly affecting the value of mutton and lamb, resulting in a decrease of £1.25 billion in that year alone (Defra, 2020). This decline in value has had a significant impact on the incomes of hill farmers, although there has been a subsequent increase in recent years,

especially for those involved in LFA (Less Favoured Area) Grazing Livestock (Fig. 13). It's important to note that this increase in income is accompanied by an inflation in agricultural input costs, driven by supply chain shocks caused by the COVID-19 pandemic and the war in Ukraine (Eardley, 2022). As a result, while incomes may have risen, profits have either remained stable or decreased (Moore and Smalley, 2022). Given that production costs on HFC farms are closely aligned with sales prices, any reductions in livestock market values or increases in inputs costs can have a significant impact on farm incomes (Arnott *et al.*, 2021). As a result, hill farmers continue to face financial challenges, particularly when compared to other sectors of the UK farming industry (DEFRA, 2023a).

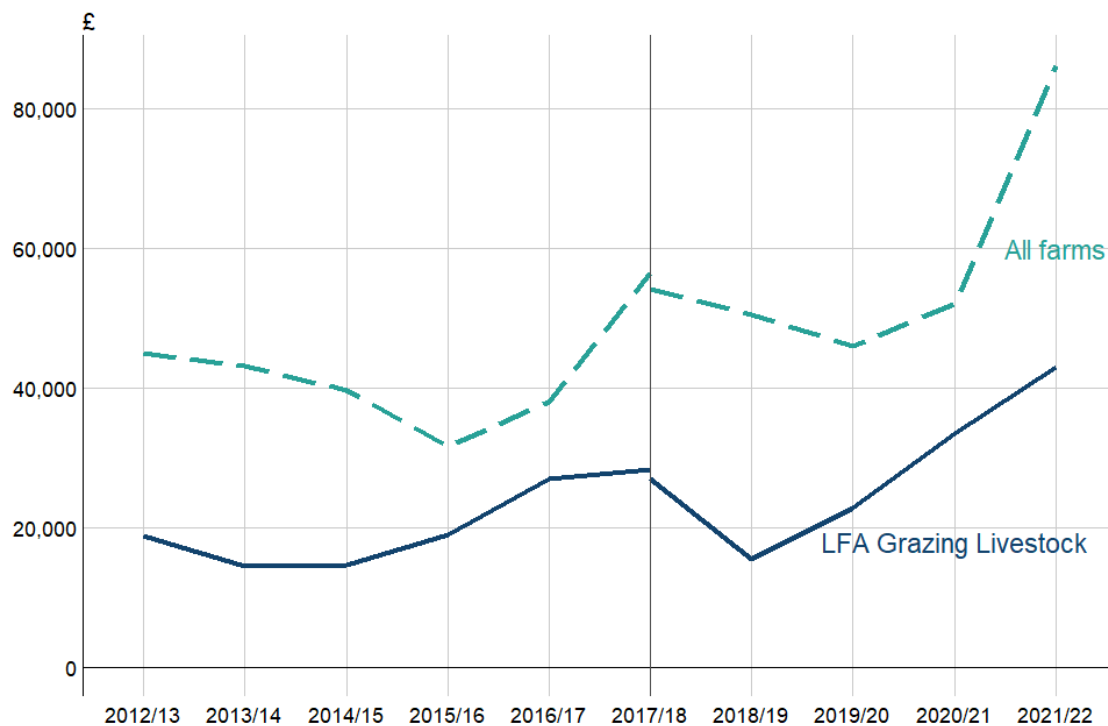


Figure 13 Average Farm Business Income (£ per farm) for LFA Grazing Livestock farms, England 2012/13 to 2021/22 (Taken from DEFRA, 2023a)

As highlighted at the beginning of this section these economic issues are not a new phenomena, with HFC farms having been supported financially through a number of systems (Mansfield, 2011:250-284). These financial support mechanisms will be examined in more detail in the subsection on subsidies and grants. However, it is worth briefly mentioning them in the context of the overall farm income.

On average, about 10% of the income for HFC farms comes from diversification activities (Clark *et al.*, 2019). The remaining approximately 90% mainly consists of support payments (Fig. 14). Up until recently, these supports were part of the EU's Common Agricultural Policy, but changes have been initiated post-Brexit (Bateman and Balmford, 2018). The new

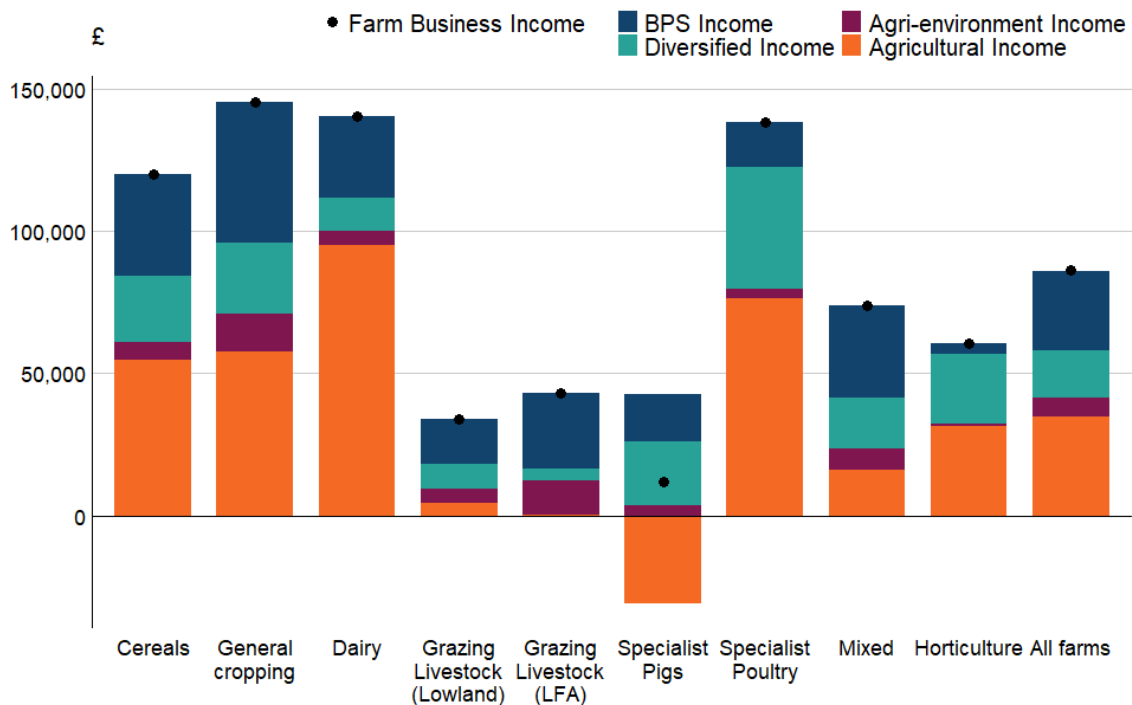


Figure 14 - Cost Centre breakdown for Farm Business Income by farm type, 2021/22. (DEFRA, 2023a)

support system will exert additional pressure on HFC financial resources as it eliminates the primary direct payment, shifting all support to be based on the provision of public goods (DEFRA, 2018). Even with the recent improvements to this offer (DEFRA, 2023), many HFC farms may face further reductions in their financial resources (Clark *et al.*, 2023).

With falling values for core financial assets and the future changes to economic support post Brexit, the HFC need to draw on alternative financial assets to support the sustainability of their businesses. The following sub section will explore alternative financial capital available to the HFC.

2.4.2 Subsidies and Grants

These support categories can be divided into three main areas: support for farming, environmental management, and community initiatives. A significant portion of hill farmers' income comes from grants and subsidies, either in the form of Basis payments or additional agri-environmental schemes (figure 14). However, this system is undergoing significant changes over the next seven years as the existing EU supports are gradually phased out and replaced by a new UK support system (Casalicchio, 2020). It is important to examine the current system and the proposed changes to understand the financial resources tied to them.

Historically, the system operated with a combination of basis payments, available to all farmers based on land ownership, an additional payment for

those in Less Favourable Areas, and optional Agri-environmental schemes (DEFRA, 2018). The basic payment, which constituted about half of this support, will be completely phased out by 2028, replaced by an Environmental Landscape Management Scheme (ELMs) (DEFRA, 2021). ELMs will merge the existing support streams into a combined system that provides financial assistance to farmers in exchange for the provision of 'public goods' (Bateman and Balmford, 2018). However, despite some clarity on the government's part regarding the details of this offer, many hill farmers remain uncertain about how these changes will work (DEFRA, 2023).

Regarding agri-environmental initiatives, farmers historically had the choice to participate in either the Environmental Stewardship scheme (ES) or the Countryside Stewardship schemes (CS). As ES schemes are now concluding, farmers will temporarily be required to switch to the CS scheme before the full implementation of ELMs in 2024 (RPA, 2021). During the transition to ELMs, hill farmers can apply for the Sustainable Farming Incentive and receive payments for environmental elements instead of the basic payment. There are additional activities available under the improved Countryside Stewardship schemes, and farmers on Higher Level Stewardships can extend their contracts for up to five years. Some options also involve Landscape Recovery funds, requiring communities of farmers to apply together to access them. Regardless of the chosen system, all opportunities allow farmers to utilise their natural capital assets alongside their physical capital assets to generate financial capital through payments for the creation or protection of natural capital.

The third aspect of support involves grants related to socio-economic development principles (Powell and Courtney, 2013). Within the EU system, this support was provided through the Rural Development Programme for England (RDPE), often distributed through its LEADER programs (DEFRA, 2015). This system is currently being replaced by the UK Shared Prosperity Fund, which includes pilot programs but lacks a specific category for agriculture (Brien, 2019). Further details about this will be explored in section 3.4.5 when discussing social capitals.

Many of the grant and subsidy schemes encourage farmers to diversify away from their core farming activities (Kirwan, 2006). Diversification enables farm incomes to stabilise, optimises the use of farm capitals, and creates new business opportunities, often involving the wider family network and leveraging other capitals (Robinson, 2004). However, diversification is not without challenges, particularly in upland regions with limited transport links (Ilbery *et al.*, 2004). Any on-farm diversification must be undertaken with consideration of existing constraints on physical and financial capitals (Mansfield, 2011: 200). Moreover, regional variations exist, with some farms better positioned to take advantage of diversification opportunities, such as tourism (Walford, 2001). Given the marginality of hill farmers' core business and the future changes to subsidy schemes, farm diversification is likely to become a crucial component of many farm incomes (DEFRA 2022; Mansfield, 2019b).

In conclusion, financial capital plays a crucial role in sustaining and fostering prosperity within the Hill Farming Community (HFC). HFC farmers rely heavily on their financial assets, encompassing funds, farm-held assets, and external financial support in the form of grants or loans, to generate income and sustain their agricultural activities. However, the HFC faces economic challenges due to fluctuations in livestock market prices, agricultural supply inflation and uncertainties related to post-Brexit changes in agricultural support.

Effectively addressing the economic challenges confronting the HFC necessitates a comprehensive grasp of financial capital management, exploring alternative financial assets, and supporting diversification endeavours. Both the potential new financial capital streams and the historical ones mentioned earlier all require hill farmers to leverage human capital, encompassing knowledge and skills. The following section will delve into these aspects in more detail.

2.5 Human Capital

Human capital is a broad concept encompassing an individual's knowledge, information, ideas, and skills (Pretty and Ward, 2001). In modern economics, human capital is considered more critical than both physical and financial capitals, particularly in the context of education (Becker, 1964). Indeed, resource-based theory underscores the importance of human capital in effective strategic resource management, which holds particular

relevance in hill farming systems (Connor and Prahalad, 1996). The unique challenges and demands of hill farming require the application of knowledge, skills, and expertise possessed by individuals within the community to make informed decisions and optimise the utilisation of available resources. By leveraging their human capital, hill farmers can enhance their ability to manage resources efficiently, adapt to changing conditions, and achieve long-term sustainability in their agricultural practices. In farming research, the tacit knowledge gained through hands-on experience has been recognised as a vital source of human capital (Hansen and Greve, 2015).

Building upon Mansfield's work (2019b) on hill farming capitals (Fig 35), this section will explore three key aspects related to human capital: Knowledge and Skills, Family Networks, and Succession and Inheritance. These areas play essential roles in shaping the human capital within the Hill Farming Community (HFC).

2.5.1 Knowledge and Skills

Members of the Hill Farming Community (HFC) possess a diverse range of knowledge and skills, although these capabilities are often undervalued or simply perceived as "just" farming (Ponder and Hindley, 2009). This assortment of skills represents a valuable asset to the community, as domain-specific knowledge is fundamental to achieving effective performance within farming systems (Hansen and Greve, 2015). However, there is a limiting factor that hinders the broader utilisation of these skills,

arising from a relatively low level of formal education among HFC members. The lack of formal education directly affects farming performance, as it hampers the ability of farming businesses to adapt and diversify (Wilson *et al.*, 2001).

The marginality of farming businesses contributes to the low level of formal education, as children are often required to work on the farm instead of accessing education, in an effort to save on external labor costs (Rebanks, 2015). This situation creates a challenge for the next generation of farmers, as they may not have access to work opportunities beyond their farm due to a lack of human capital (Burton *et al.*, 2005).

Despite the challenges, there are also positive aspects of human capital within the HFC. As mentioned earlier, community members possess a wide array of specialised and domain-specific skills, such as working with/training dogs, sheep/cattle breeding, drystone walling, drainage management, hay/silage making, tacit fell knowledge, and business skills (Burton *et al.*, 2005; Mansfield, 2011). These skills are primarily learned "on-farm" from relatives, leading to difficulties for new entrants or fresh blood to enter the industry (Mansfield, 2008). However, the opportunities for learning these skills are diminishing due to an ageing farmer population, with retirees often not passing on their knowledge, and a decline in institutions that teach these domain-specific skills (DEFRA, 2020; Laycock, 2021). Consequently, the HFC possesses a considerable amount of unique human capital in the form of knowledge and skills, but this capital is at risk of being lost or stagnated due to a lack of connectivity to wider capitals (Mansfield, 2011; 2019).

A way for these connections to be forged and maintained maybe in the form of Family Networks, which is explored next.

2.5.2 Family networks

Family networks are often the best conduit through which an individual farmer can connect to the wider community, both farming and general (Ponder and Hindley, 2009). This form of HC helps farmers in a number of ways, it can be the support of wider family in a ‘quid pro quo’ sharing of labour, machinery or skills (Sutherland and Burton, 2011). Also, it can extend out into the wider HFC in mutual support on diversification projects, for example supply of tourist accommodation (Burton *et al.*, 2005), or just in a simple ‘on farm’ way, with wife or other close family members helping out with administrative work (Rose Regeneration, 2012)

Given the often insular nature of the HFC, family networks play a critical role in facilitating engagement with the wider community. This engagement can take various forms, particularly involving younger family members who interact with the community through school, sports clubs, and national groups like Scouts or Young Farmers (CYFC, 2023)). These family connections also contribute to additional income, as family members may seek employment "off farm," bringing back new ideas and skills from the broader community, which can benefit the entire farm (Ponder and Hindley, 2009).

Family networks not only provide tangible support and opportunities for farmers but also foster a sense of social connectedness and belonging within the community. By strengthening ties with family members, neighbours, and other members of the HFC, farmers can access a wealth of resources, information, and shared experiences that contribute to their overall well-being and resilience. Despite the positive aspects of family networks as a form of human capital, the following sub-section will address a different aspect of human capital that presents significant challenges for farmers.

2.5.3 Inheritance and Succession

The complex issues of inheritance and succession are pervasive challenges faced by farming communities worldwide (Lobley *et al.*, 2010). These matters are crucial determinants of farming sustainability and are currently considered to have reached a critical level in contemporary Europe (Burton and Fisher, 2015). The Hill Farming Community (HFC) can undoubtedly be regarded as part of this broader European crisis, as succession is perceived as a significant obstacle to the ongoing success of farms (Burton *et al.*, 2005). The inherent marginality of hill farms exacerbates this problem, as the insufficient availability of financial capitals hinders the expansion or division of farming businesses (Clark and Scanlon, 2019).

While the literature on succession within hill farming is not extensive, it generally aligns with the wider research on farming succession. It underlines the importance of succession and inheritance as major factors

leading to stress and disagreements within farming families (Ponder and Hindley, 2019). However, it also emphasises that when planned and managed effectively, succession can offer an opportunity to introduce new ideas and vigour into the farms (Tasker, 2018).

To delve deeper into the complexities of succession and inheritance within the HFC, it is essential to understand the multifaceted nature of this issue. Farming families often grapple with questions about the transfer of ownership and control, passing on the farm's legacy to the next generation. These discussions are emotionally charged and can lead to conflicts among family members, jeopardising the farm's long-term viability and continuity (Collingborn, 2023). Frequently, traditional gender biases further complicate matters, with female heirs facing challenges in obtaining equal treatment during succession discussions, resulting in contentious power struggles within families (Glover, 2014).

The current situation is compounded by several factors specific to hill farming communities. One key aspect is the relative marginality of hill farms, where profit margins are often slim, and financial resources are limited (DEFRA, 2023b). This makes it challenging for the older generation to retire comfortably and pass on the farm to the next generation (Conway *et al.*, 2020). In many cases, there may be a strong desire to maintain the family's farming legacy, leading to a reluctance to sell or divest the farm (Leonard *et al.*, 2017). Simultaneously, the younger generation may face financial constraints that hinder their ability to buy the farm or expand the business (Suess-Reyes & Fuetsch, 2016).

In conclusion, the Hill Farming Community (HFC) possesses valuable human capital in the form of knowledge and skills, which play a crucial role in the sustainability and success of farming operations. However, these capabilities often face challenges due to the relatively low level of formal education among HFC members. The marginality of farming businesses and limited access to educational opportunities for younger generations can hinder farm performance and adaptation.

However, the HFC benefits from a diverse range of specialised skills learned "on-farm" from relatives, creating a unique pool of human capital. However, the ageing farmer population and the decline in institutions teaching domain-specific skills pose a risk of losing this valuable knowledge. To address these challenges, farmers must actively engage with a broader spectrum of their community to access various forms of human capital. This process necessitates leveraging different forms of social capitals, which will be explored in the following section.

2.6 Social Capital

In the context of hill farming literature, social capital is often defined using Putnam's definition: "Features of social organisation, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated actions" (Putnam, 1993). In this section, we will once again refer to Mansfield's diagram (Fig. 1) of hill farming capitals (Mansfield, 2019a) and explore four key aspects of social capital (SC): Relationships of Trust, Cooperation, Common Rules/Norms, and Networks/Groups. The discussion will draw upon descriptions of these aspects of social capital from broader literature and provide supporting examples from hill farming sources.

2.6.1 Relationships of Trust (RoT)

Trust plays a vital role in fostering cooperation, acting as a facilitator that reduces the costs associated with interactions between individuals (Pretty and Ward, 2001: 212). Establishing trust is a gradual process, yet it can be easily eroded or shattered (Fukuyama, 1996). Within sustainable communities, trust holds significant importance, as societies characterised by low levels of trust tend to exhibit restricted collaboration and shared assistance (Baland and Platteau, 1998).

In broader agricultural research, the notion of Relationships of Trust (RoT) is deemed essential for the exchange of resources, knowledge, and

assistance among farmers. Those who demonstrate a high degree of social capital through trust are more inclined to engage in cooperative endeavours (Sutherland and Burton, 2012). This concept is also evident in the concept of the "good farmer," where trust consistently emerges as a catalyst for cooperation and the establishment of esteemed positions within farming communities (Sutherland, 2013; Riley *et al.*, 2018).

Similarly, within the context of the Hill Farming Community (HFC), trust assumes a pivotal role in cooperation, particularly concerning ventures like diversification, such as tourist accommodations (Burton *et al.*, 2005: 39). Studies conducted in upland regions on the Isle of Skye highlight the indispensability of trust in fostering collaboration within the domain of tourism accommodations (Árnason *et al.*, 2004). Real-life anecdotes from the daily experiences of the HFC further underscore the significance of trust-based relationships. For example, farmers may find it imperative to establish the credibility of an unfamiliar collaborator prior to engaging in any form of interaction (Rebanks, 2015: 22). Moreover, even in cases where allegations of theft remain unsubstantiated, accusations can profoundly harm the trust vested in a farming family (Rebanks, 2015: 23), aligning closely with insights from social theory (Fukuyama, 1996).

Trust functions as a pivotal component of collaborative endeavours and cooperative interactions among members of a community. The subsequent section will delve deeper into this facet, offering a more intricate exploration.

6.2 Co-operation (Co-op)

Within broader social capital theory, co-operation can also be referred to as ‘reciprocity and exchanges’, and it is closely linked with trust, as discussed in the previous subsection (Pretty and Ward, 2001). Co-operation can take two different forms: single exchanges of roughly equal value or continuing relationships of exchange developed over time and supported by trust (Putnam, 1993; Coleman, 1988). These co-operations are seen to develop long-term connections and obligations between actors in a social field (Platteau, 1997), and they play a key role in fostering innovation and adaptability, particularly within farming communities (King *et al*, 2019).

In the context of the Hill Farming Community (HFC), co-operation is well understood, and a major study of social capital in hill farming extensively explores this aspect (Burton *et al.*, 2005; 36-48). Co-operation is central to interactions between other capitals and the delivery of desirable objectives (Fig. 15).

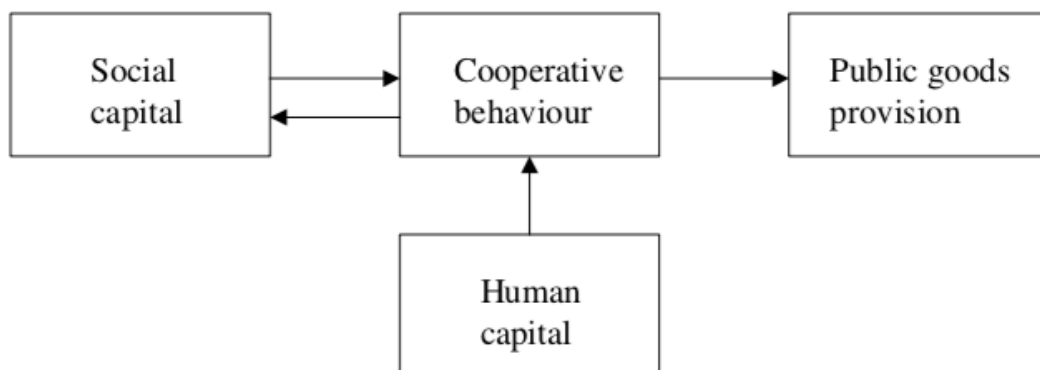


Figure 15 *Interactional relationship between capitals* taken from Burton *et al*, 2005: 6

The study identifies specific aspects of co-operation within the HFC that are either in decline or being maintained (Burton *et al.*, 2005: 40-3).

Traditional farming activities, such as haymaking and shearing, are in decline, largely due to mechanisation replacing these practices (Burton and Sutherland, 2011). More concerning is the reduced levels of participation of farmers in local life, which seems to be influenced by rural migration and rural gentrification (Woods, 1998; Sutherland, 2012). This process raises the risk of increased marginalisation of farmers from everyday local life, leading to real health and well-being implications (Lobley *et al.*, 2002).

On the other hand, aspects of co-operation that continue include forms of diversification, such as tourist accommodation, as discussed above (Burton *et al.*, 2005: 39). Contemporary studies also emphasise the importance of co-operation and connections within on-farm diversifications (Meert *et al.*, 2005). Traditional farming practices of gathering and neighbouring are also continuing forms of co-operation within the HFC (Burton *et al.*, 2005: 44-48). Gathering, reliance on co-operation will be explored in detail in the later section on network and groups (section 6.4). Neighbouring is a less clearly defined concept but revolves around the everyday support that community members provide to one another (Rebanks, 2015: 43; 185). These small everyday practices and the larger community wide practice of co-operation working are all seen to be governed by common rules and norms. These are known and understood within the social group and mediate these shared activities, these rules and norms will be explored further in the following section.

6.3 Common rules and norms

In various human societies, there exist sets of agreed-upon norms and behaviours that are specific to particular groups or communities (Bicchieri & Muldoon, 2014). These norms serve as the guiding principles for individual actions, providing a sense of order and cohesion within the group (Vollan, Prediger & Frölich, 2013). They define what is deemed acceptable and appropriate within that particular social context. Scholars like Coleman (1988) have highlighted the significance of these norms in shaping the conduct of individuals, as they offer a framework within which people can operate harmoniously and with mutual understanding.

These norms can also be considered as the "rules of the game" or core values that profoundly influence the belief systems of community members (Taylor, 1982; Colins and Chippendale, 1991). They serve as a common thread that binds people together, creating a shared identity and fostering a sense of belonging.

In the context of hill farming research, understanding these rules and norms becomes vital. However, it proves to be a challenging task, mainly because these norms are often implicit and deeply rooted in the cultural fabric of the community (Bourdieu, 1991). They may not be explicitly stated in written codes or laws, but they are nevertheless influential in shaping behaviour and decision-making processes (Cast and Burke, 2002).

Despite the difficulties in pinpointing and defining these cultural norms, there are glimpses of their existence within the literature. For instance,

Rebanks (2015:23) offers an anecdotal account of how the concept of fairness is an integral part of an 'unwritten code of honour' within the hill farming community. Similarly, Burton *et al.* (2005) shed light on the unwritten rules concerning the maintenance of boundaries and adherence to informal grazing practices. These unwritten rules are critical in maintaining social harmony and preserving the community's social capital.

The scarcity of extensive research on these rules and norms and their close association with cultural practices emphasise their potential as intriguing areas for further investigation in hill farming research. Unraveling these socio-cultural aspects of the hill farming community could shed light on their intricate social dynamics and provide valuable insights into the functioning of these societies.

In a later section of the study, a more comprehensive exploration of the gaps in knowledge concerning these socio-cultural aspects of the hill farming community will be conducted. However, before that an exploration of the fourth aspect of SC, that of networks and groups.

6.4 Networks and Groups

Networks and groups represent an extension of the broader concept of connectedness, which plays a crucial role in shaping social relationships (Pretty and Ward, 2001). Establishing these connections with other individuals and/or groups can occur at different scales, both at the macro and micro levels (Uphoff, 1993). These relationships manifest in various

forms, such as strong ties between individuals, vertical linkages between groups, or horizontal connections between community members and external actors (Grootaert, 1998; Woolcock, 1998; Rowley, 1999).

Within the upland farming system, several fundamental components heavily rely on networks and groups. These components include Stratification, Hefting, and Intercommoning (Fig. 16).

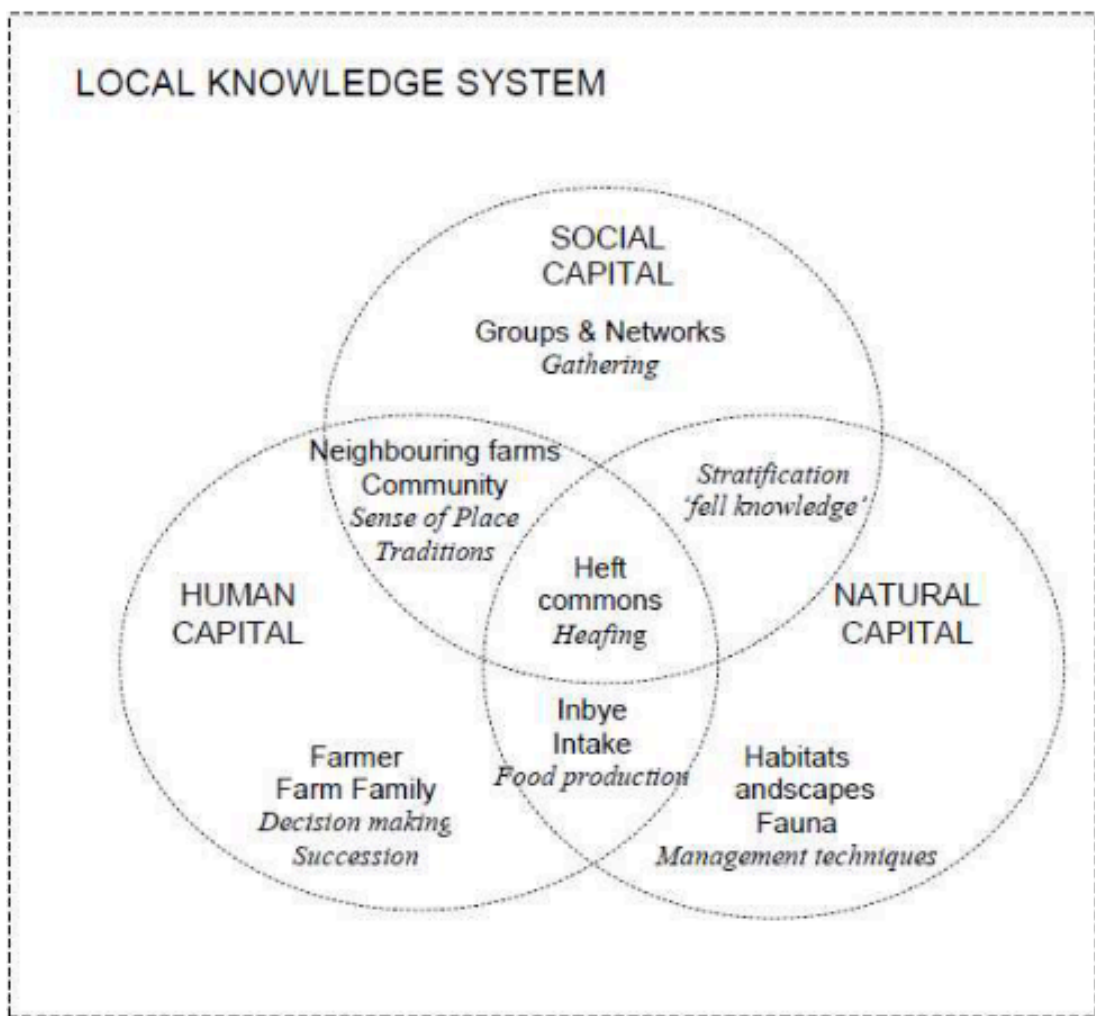


Figure 16 Upland Farming Knowledge System (taken from Mansfield, 2015 : 13)

Stratification is a well-established system of interconnections between Hill, Upland, and Lowland farmers, enabling them to leverage the specific strengths and weaknesses of their farmscapes (DEFRA 2010). The primary focus of this stratification process is the sale and movement of mainly sheep, and occasionally cattle, between the different types of farms (Fig. 17).

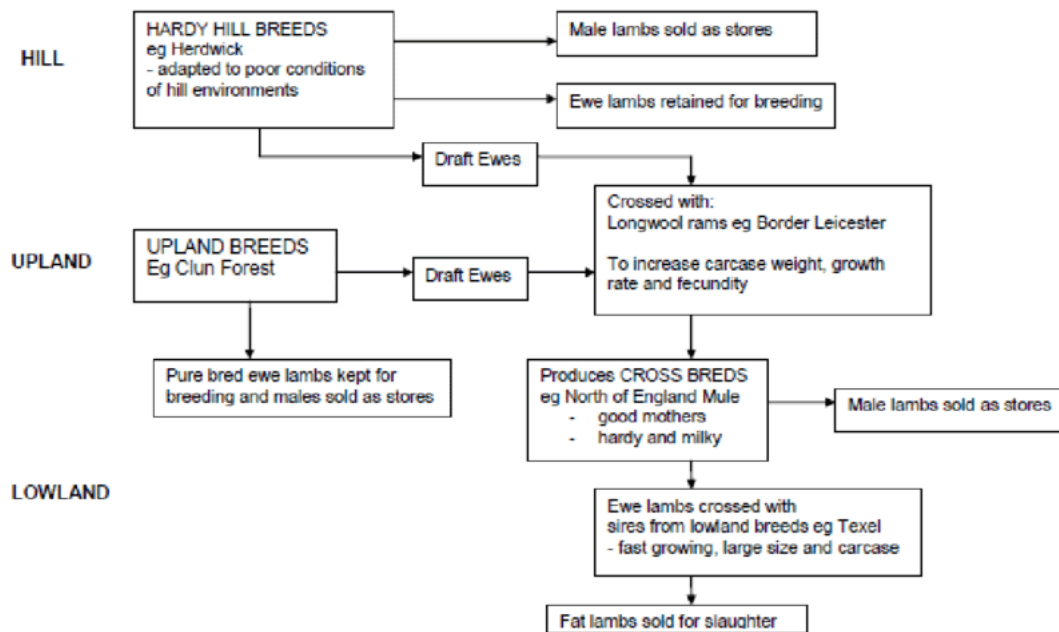


Figure 17 Sheep Stratification in the UK Livestock Industry taken from (Mansfield 2011: 24)

In the UK uplands, the stratification system is generally in line with the arrangement shown in Figure 17, although there may be regional exceptions, as observed in places like Exmoor (Miller *et al*, 1984). Over time, this system has evolved, enabling farmers to capitalise on the unique characteristics of their landscapes. Hill farms, with limited inbye land, often struggle to generate sufficient winter fodder to support a large herd. Consequently, they sell their surplus sheep to upland farmers who possess

the necessary space and resources to sustain and crossbreed additional ewes. This mutually beneficial relationship thrives as hill-raised lambs and ewes are highly valued for their hardiness and mothering skills, making them well-suited to less harsh landscapes (Mansfield 2010).

Lowland farmers also play a significant role in this stratification system, engaging in several ways. They purchase crossbred sheep from upland farmers, as these animals perform exceptionally well on the abundant grazing available in lowland farms and fatten quickly for market.

Additionally, lowland farmers often take in Hill flocks for overwintering, generating income from land that would otherwise remain vacant (TFF, 2015). However, it is worth noting that the entire stratification process is currently experiencing a decline. Factors such as a reduced sheep population in the hills and lowland farmers' preference for self-regulating flocks have contributed to this downturn (Priestley, 2017).

Hefting serves as a flock grazing management technique employed by sheep farmers in open moorlands and commons. Its significance lies in being a fundamental aspect of upland farm operations, given that sheep grazing constitutes the primary activity for the majority of upland farmers (Mansfield *et al.*, 2006). This practice involves the establishment of a designated heft within the common moorland or open fell, where the farmer holds grazing rights, known as a 'stint'.

Hefting is initially established by a shepherd and dog, who guide the flock to understand the invisible boundaries of their designated grazing area. As time passes, the sheep develop an innate sense of the extent of their heft

and will only graze within this specific territory (Fig. 18) (Brown, 2009). Once this instinct is formed, the ewes take on the responsibility of passing down hefting knowledge to their offspring, teaching the lambs to graze within the established boundaries (Gray, 2014).

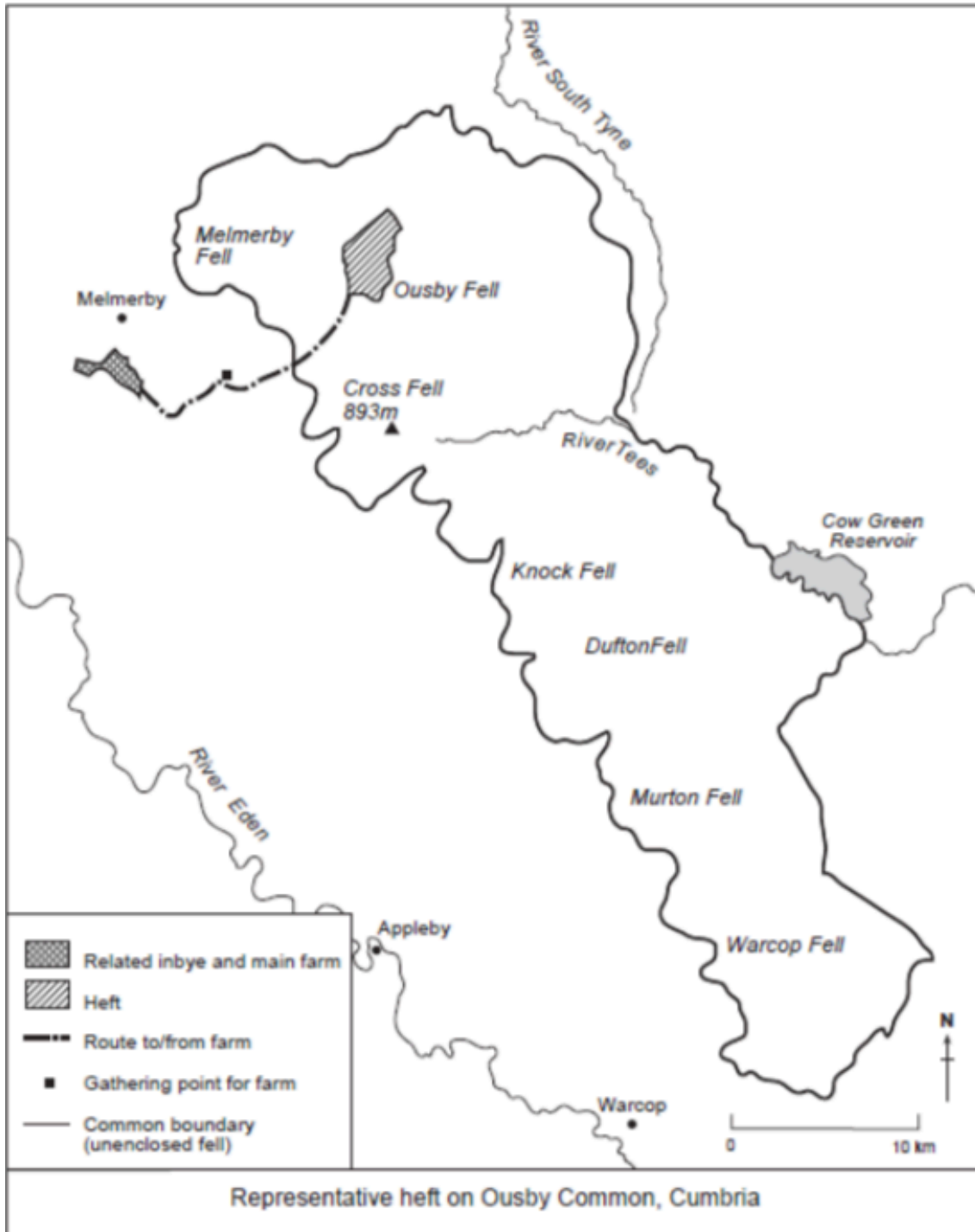


Figure 18 A Heft within a North Pennines Common (taken from Mansfield et al, 2006 : 239)

Preserving and protecting hill flocks and their hefting knowledge is of utmost importance because once lost, it becomes nearly impossible to recreate this specialised grazing behaviour (Hart, 2004). This concern became particularly evident following the Foot and Mouth outbreak in 2001, which resulted in the slaughter of many hill flocks (Convery *et al.*, 2005; DEFRA, 2007).

The successful practice of hefting is crucial for managing the semi-natural habitats of moors and fells. Overgrazing caused by overstocked hefts or breakdown of heft delineation can lead to habitat destruction (Britton *et al.*, 2005). On the other hand, under grazing due to the loss of hill flocks or farmers' retirement can result in the proliferation of invasive species like bracken and rushes (Ashby *et al.*, 2020). Thus, hefting requires careful attention and communication, as it involves multiple layers of knowledge and understanding (Fig. 16). The complexities of this process and its various components in farm management within the HFC (Hill Farming Community) will be further explored in-depth later in this study.

Intercommoning refers to the practice wherein multiple tenants graze a piece of common land owned by a separate landowner, and it is prevalent across most UK upland regions (Mansfield, 2005). While there are regional variations, notably higher occurrences in the North West, North Yorkshire, and Devon (Aitchison and Gadsden, 1992).

The concept of Common land dates back to medieval times and originally encompassed rights for various purposes, including extracting resources and using the land (Aitchison *et al.*, 2000). In modern times, these rights

have become primarily associated with grazing livestock (Shannon, 2012). In Northern England, these common rights are termed "stints," referring to specific areas of common land and the allowed number of animals a tenant can graze on that land (Winchester, 2000).

Within the Hill Farming Community (HFC), intercommoning plays a crucial role in organising grazing and flock management (Mansfield et al, 2006). Each common usually has an association or council responsible for organising, managing, and overseeing the use of the shared resource (DEFRA, 2015). One of the key responsibilities of this association is to arrange the management of grazing flocks through gatherings. A gather occurs when farmers/shepherds with grazing rights on a particular common come together to collect all the flocks grazing there (Burton *et al.*, 2005). These gatherings are typically conducted 3-4 times per year for various reasons, such as animal welfare and management tasks like shearing (Morgan, 2023). The gather involves the active participation of all common members, and each member usually contributes their sheepdogs to aid the process (Fig. 19).



Figure 19 Shepherds during a gather on Ingleton Hill, Yorkshire

retrieved from <https://yorkshiretimes.co.uk/article/Hill-Farming-In-A-Phone-Box-28/6/22>

The shepherds will work as a team with the help of their dogs to bring all the sheep down from the commonland. They will then be sorted based on identification mark into group belonging to the relevant stint holder and then can be returned to the home farm for process (Fig. 20). All these processes discussed above require hill farmers to utilise their social capitals and work in collaboration to achieve shared goals and objectives.



Figure 20 Herdwick sheep in storing pens post gathering

Retrieved from <https://www.theguardian.com/tv-and-radio/2020/apr/15/flockdown-tv-the-startling-beauty-of-the-great-mountain-sheep-gather>

In conclusion, social capitals, as conceptualised through the lens of hill farming literature, are a multifaceted and dynamic construct that underpins the functioning and resilience of hill farming communities. Drawing on Putnam's definition, social capital encompasses trust, norms, and networks that facilitate coordinated actions and contribute to the efficiency and sustainability of these societies.

In-depth exploration and understanding of these key aspects of social capital within hill farming communities are essential for promoting their preservation, sustainability, and resilience. However, to comprehensively examine the implications of social capital, it is crucial to consider its close association with cultural capital (Mansfield, 2019a). The upcoming section will delve into the cultural capitals of the hill farming community, setting the foundation for exploring the combined value that social and cultural capital offer to the HFC.

2.7 Cultural Capital

Cultural capital is a term employed in both social theory and unconventional economic accounting (Bourdieu, 1986; Jenkins, 1992; Throsby, 2001). In current hill farming research, the economic concept is utilised, aligning it with other alternative capital-based assessments (Mansfield, 2019a; Costanza *et al.*, 1997). The role of culture and its manifestations of capital has received limited attention, prompting recent initiatives to enhance knowledge in this area (DCMS, 2021). This section will adhere to the definitions of Cultural Capital (CC) outlined in the most recent hill farming research, which provides three broad areas for exploration: tangible, intangible, and cultural landscapes (Mansfield, 2019b).

2.7.1 Tangible Cultural Capital

Tangible forms of Cultural Capital (CC) were initially defined by Throsby (1999: 7) as:

"The stock of tangible cultural capital assets exists in buildings, structures, sites, and locations endowed with cultural significance (commonly called 'cultural heritage') and artworks and artefacts existing as private goods, such as paintings, sculptures, and other objects."

This definition has been adopted and adapted within hill farming research, with Mansfield (2019b: 30) defining tangible assets as:

"Physical manifestations created by the farming process, such as buildings, structures, sites, and locations (referred to as cultural property)."

Therefore, examples of tangible CC consist of features previously discussed within other capitals, particularly the physical capital (section 2). This highlights the complex and interlinking relationships that all capitals, especially CC, have with one another. In this section, some capital assets already examined will be revisited but through a cultural perspective.

The physical forms of cultural capital might commonly be referred to as physical cultural heritage, which includes traditional farm buildings, dry stone walls, and landscape features (Mansfield, 2019b). Traditional farm buildings in the Hill Farming Community (HFC), even in their contemporary form, are manifestations of the cultural activities of generations of farmers (Winchester, 2013). They are deeply rooted in their geographic and cultural location, with designs incorporating local geology and responding to the aspects, topography, and cultural needs of the farming communities that constructed them (Lake, 1989). Despite the changes in hill farming practices since the construction of many of these structures, they still retain many of their original features and layouts (Brunskill, 1987). Figure 21 and 22 on the next page provide some key examples of this phenomena.

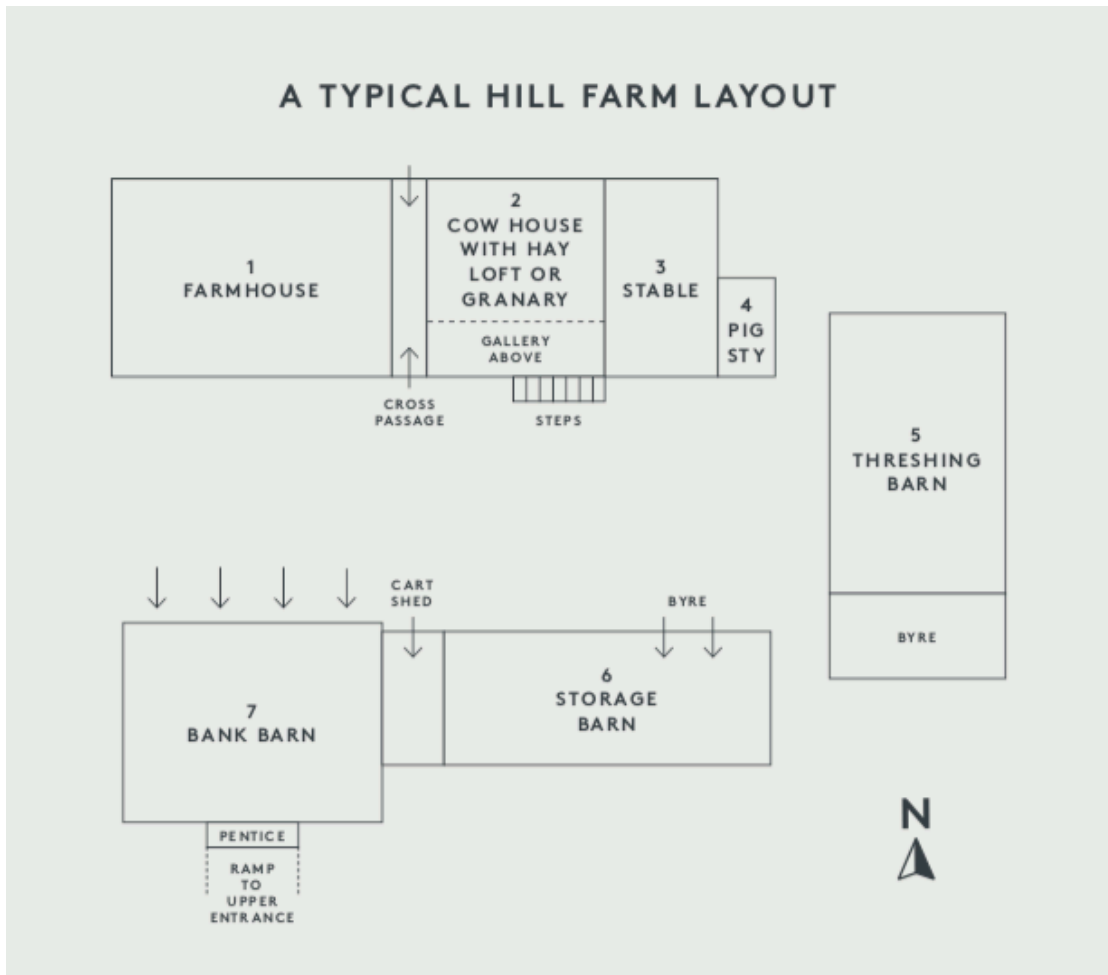


Figure 21 *Traditional Layout of an English Lake District farm yard taken from LDNPP, 2016:1010*



Figure 22 *Cumbrian Bank Barn* retrieved from https://en.wikipedia.org/wiki/Bank_barn#/media/File:Bank_Barn_lower_elevation.JPG

As discussed within physical capitals and the definitions of upland farming (sect 2), drystone walls are a key practical feature of the day to day running of hill farms. Their continued use is a testament to the effectiveness of this system, but they do retain features which although no longer utilised, provide physical manifestation of cultural heritage (Fig. 23). The maintenance and continued use of drystone walling, creates a physical cultural connection between farming generations, with walls built by a farmer's ancestors still an active part of their day to day farming life (Rebanks, 2015:42-3).



Figure 23 *A Bee Bolt on the North York Moors* taken from (Brown, 2013)

Despite not leaving a physical footprint on the landscape like buildings or walls, Shepherd's meets and shows still represent a tangible form of cultural capital. Originating from the practical act of farmers returning lost sheep to their neighbours after the main autumn gathers (Brown, 2009),

these gatherings evolved into social meetings and cultural celebrations (Palmer, 1925). Presently, these events remain significant expressions of hill farming culture, focusing on livestock, hill farming skills, and traditional crafts (HSBA, 2021). Remarkably, a modern-day shepherd's meet closely resembles those from the past, creating a cultural link to earlier generations through shared cultural values (Fig. 24).



Figure 24 *Two images for the Wasdale Shepherd's Meet taken 70 years apart* retrieved from <https://www.wasdaleheadshow.co.uk/gallery>

The centerpiece of shepherds meets is livestock, particularly sheep, which can also be explored as tangible forms of cultural capital. Within the Hill Farming Community (HFC), flocks and individual sheep hold significant cultural value for farmers (Gray, 1999). Bred, born, and raised for the uplands, these sheep are considered native to the area, as emphasised by a farmer in Burton *et al*, (2005:32) who stated,

"You can't just buy them in and put them onto the fells, you've really got to breed them up there so they're native and used to the area really."

The process of breeding these upland sheep makes them unique artifacts of the cultural life of the uplands, curated by their custodians, the farmers of the HFC. Rebanks (2015:109) beautifully links this aspect to the cultural history of the farming community, stating,

"A great flock has a particular style and character that reflects hundreds of judgments that went into creating it, sometimes going back decades and centuries."

Consequently, the flocks of the HFC form a tangible cultural link between modern farmers and their ancestors while simultaneously being central physical and financial capital assets.

Another aspect of farming culture, often not featured in classic definitions of tangible cultural capital, deserves inclusion following Throsby's (1999) definition. These are the crafts or cultural artefacts of the community, such as the shepherd's crook in this case. These crooks remain essential equipment used daily by most traditional hill farmers but also play the role of cultural crafts and signifiers of status (Rebanks, 2015; Grant and Hart,

1985). The crook serves as a cultural link between past and present hill farmers (Martindale, 1954). Evolving from a practical tool to a piece of art/craft that bestows social and cultural capital on the owner (Knappett, 2012) (Fig. 25).



Figure 25 *Shepherd's Crooks & Walking Sticks after judging at the Eskdale Show 2019.* Copyright Robin Oliver. <https://cumbriacrack.com/2019/10/02/robin-oliver-cumberland-beyond-the-art-of-farming/shepherds-crooks-walking-sticks-after>

In the Hill Farming Community (HFC), tangible cultural capital serves as a bridge between the past and present, forging enduring connections between farming generations, cultural values, and the physical assets that embody the community's rich heritage. These diverse manifestations of tangible CC contribute to the formation of the unique cultural landscape of upland Britain. However, the significance of this cultural capital goes beyond physical structures and artefacts.

In the upcoming sub-section, we will investigate the realm of intangible cultural capital, which encompasses the values, beliefs, and traditions that underpin the tangible assets. These intangible aspects play a crucial role in shaping the identity and practices of the HFC, providing a deeper understanding of the community's cultural dynamics.

2.7.2 Intangible Cultural Capital (ICC)

The concept of intangible cultural capital refers to the collection of ideas, practices, beliefs, traditions, and values that define and unite a specific group of people (Throsby, 1999:7). This definition extends directly into contemporary hill farming research (Mansfield, 2019b). It is suggested that these intangible cultural elements influence and shape the other capitals and their interconnectedness within the Hill Farming Community (HFC). However, they have not been extensively studied. Nevertheless, some of these beliefs and ideas can be identified and extracted from existing literature. Presented below is an attempt to identify some of these intangible elements, including beliefs, ideas, values, and traditions.

Farmers in the HFC strongly adhere to traditions and prioritise the continuation of conventional practices, reflected in their preference for small farm units, traditional sheep breeds, and traditional farming methods (Burton *et al.*, 2005:32), although, it has been argued that these traditions have become intertwined with a more contemporary "productionist" ideology (Walford, 2003). Nevertheless, this perspective has been challenged, with several authors suggesting that it might be more of an

economic necessity rather than an inherent belief (Burton, 2004; Egoz *et al*, 2001).

The "productionist" ideology has faced substantial criticism from conservationists (Meierová, 2020). Nevertheless, research indicates that hill farmers do not possess an anti-environmental stance and, in fact, strongly believe that traditional farming methods are beneficial for the environment (Burton *et al*, 2005:31). In the broader context, farmers consider themselves as creators of the cultural landscape in the uplands, with the responsibility for its continuous maintenance resting in their hands (Burton *et al.*, 2005:66). Furthermore, studies reveal that they take a keen interest in the wildlife and plants on their farms (Burton *et al.*, 2005:58-61). This especially holds true for a new generation of farmers who demonstrate a significant focus on wildlife protection and preservation (Laurie, 2021).

Hill farmers strongly emphasise the importance of maintaining an aesthetically pleasing farming landscape, showing a preference for neat farms and well-maintained physical structures (Burton *et al.*, 2005:63). This aligns with a broader agricultural landscape ideology, particularly centred around defining what constitutes a good or bad farmer (Sutherland and Burton, 2011; Riley *et al*, 2018). When a member of the Hill Farming Community (HFC) was asked about the characteristics of a bad farmer, the response carried a strong focus on aesthetics (Burton *et al.*, 2005:64):

"Anyone that has a mess, their walls are down and they are leaving a mess everywhere and muck and no respect to other people's thoughts and feelings..."

The mention of feelings in the previous quote sheds light on the deeply emotional connection farmers have with the landscape and farming way of life (Bailey *et al.*, 2006). This connection can be viewed as a culturally nurtured attachment or a sense of place. Rebanks (2015:37) explores this connection as a cultural one, closely tied to ancestors:

"I am walking in the footsteps of my ancestors, and living a life they lived."

This bond can also be seen as physically formed, linking back to earlier discussions about the phenomenological connection to the landscape.

Again, Rebanks (2015) offers an intriguing perspective on this, stating (p. 204):

"Sometimes I think our sense of belonging relates to how much weather we have endured - we belong here because the wind, rain, hail, snow, mud, and storms couldn't shift us."

The cultural lifestyle and labour of the community appear to bind them to the landscape, influencing and shaping the tangible manifestation of cultural capital discussed earlier. The interplay between these two forms of cultural capital, in interaction with the natural environment, contributes to the formation of the cultural landscape of the uplands (UNESCO, 2008) (LDNPP, 2016).

The text highlights the profound relationship between the cultural lifestyle and labour of the hill farming community and the landscape they inhabit. This connection seems to create a strong bond between the farmers and their surroundings, influencing and shaping the tangible aspects of their cultural capital, as mentioned earlier.

The "cultural lifestyle" refers to the way of life, traditions, and customs that are deeply ingrained in the daily activities of the hill farming community (Mansfield, 2019a). Their practices, beliefs, and values are closely intertwined with the natural environment they inhabit, shaping their interactions with the land and the resources it provides (Mansfield, 2011). The labour involved in farming, passed down through generations, plays a pivotal role in how they engage with and perceive the landscape (Burton *et al.*, 2005).

The interplay between these tangible and intangible forms of cultural capital, along with the natural environment, significantly contributes to the formation of the cultural landscape of the uplands (Whyte, 2006). The cultural landscape of the UK uplands, similar to many other comparable regions, is moulded and nurtured by the cultural practices of the hill farming community, reflecting and embodying their traditions, beliefs, and values (Longstreth, 2008). It is a living testament to their historical ties, customs, and the enduring relationship they have with the land (LDNPA, 2023).

In conclusion, the study of cultural capital in the context of hill farming unveils a fascinating interplay between tangible and intangible elements. Tangible cultural capital, defined as physical manifestations and heritage assets, is exemplified by traditional farm buildings, drystone walls, shepherd's meets, and the cultural significance of native sheep breeds. These structures and practices are not just functional but serve as embodiments of the hill farming community's rich heritage, connecting past

generations with the present. Moreover, intangible cultural capital, comprising beliefs, values, and traditions, plays a crucial role in shaping the farmers' relationship with the landscape and influencing their farming practices. The emotional attachment to the land and the sense of belonging to a cultural lineage are evident throughout the community, reinforcing their deep-rooted connection to the environment they inhabit. The interplay between tangible and intangible cultural capital, in harmony with the natural environment, contributes to the unique and enduring cultural landscape of the UK uplands. Appreciating these diverse aspects of cultural capital are essential to understanding the mechanism which undermine the HFC.

The previous section emphasised the importance of Social and Cultural capitals within the HFC, alongside their other capital resources. However, this study aims to explore the specific value brought about by SC and CC. Before investigating this concept in the next chapter, it is crucial to examine the idea of value concerning SC and CC as depicted in the existing literature. Therefore, this serves to offer a clear delineation of the contemporary academic concepts surrounding 'value' and provides a framework for utilising this term within the context of this study.

2.8 Meaning of value in relation to Social and Cultural Capital

So far the capitals of the hill farming community have been laid out, but the objective of this study is to explore the *value* of social and cultural capitals within the community. Before exploring this in more detail it is important to explore two key themes, first the meaning of *value* and second the interconnection of social and cultural in relation to value.

The term "value" is akin to "culture" in that it is challenging to define. In the context of capitals, value seems to encompass two dimensions: an economic, monetary nature, and a non-monetary value (Throsby, 2001). Initially, these two meanings of value may appear as binary opposites, with some economists questioning the relevance and measurability of non-monetary value (Diamond and Hausman, 1994). Conversely, others argue that all value ultimately stems from socio-cultural sentiment and emotional choices (Sayer, 2011). This study contends that social and cultural capitals possess both monetary and non-monetary value, with both dimensions ultimately shaped and supported by socio-cultural values.

Examining the interconnected relationship between social and cultural capitals in greater detail, various papers in the past two decades have highlighted their interactional and supportive nature. Fukuyama (2001) posits that cultural capital (CC) is a by-product of social norms, reinforcing cooperative behaviours in a society. This idea is further supported by authors who extend the argument, suggesting that social capital (SC) is, in

fact, an expression of cultural capital (CC) in practice (Robinson and Williams, 2001). Building on Putnam's social theory, Jeannotte (2003) introduces the notion that investment in CC generates significant gains in social cohesion and, consequently, SC (Putnam, 1993). Cultural sociologists firmly believe that cultural capital, especially in the form of cultural meaning, underpins all aspects of social organisation (Hall *et al*, 2010). Contemporary studies have explored this issue from various angles, with Agovino *et al*. (2017) developing the previous argument to expand the scope of CC into a vector of social emancipation. Similarly, Manterys (2019) builds on Bourdieu's work, viewing cultural practices as the key to accessing social networks.

The following sections will explore socio-cultural value, beginning with economists' attempts to isolate monetary value, followed by the blending of monetary and non-monetary value, and finally, the formation of value. It is worth noting that many of the studies discussed have examined SC and CC in isolation, not effectively capturing their interconnected relationship. However, this study aims to bridge that gap and shed light on the intricate dynamics between social and cultural capitals within the hill farming community.

2.8.1. Attempts at economic valuation of social and cultural capital

Social and cultural capital were originally conceived to establish measurable value or align with economic frameworks (Throsby, 1999). The economic valuation of cultural capital has yielded significant research in

the context of art and the creative industries (Throsby, 2001). While these economic approaches do not directly apply to farming, they have influenced the valuation of cultural heritage, which is relevant as the expression of social and cultural capitals within the hill farming community is often reflected as cultural heritage (Mansfield, 2019a).

Cultural heritage, as defined by Harvey (1977:2), encompasses a wide range of assets with historic, artistic, scientific, and cultural value, both privately owned and associated with public institutions, churches, and national assets. Various methods have been employed to economically value cultural heritage, such as choice modelling, travel cost methodologies, and contribution to economic output studies (Choi *et al.*, 2010; Bedate *et al.*, 2004; Bostedt and Lundgren, 2010). In the context of farming, particularly hill farming, the primary contribution to cultural heritage is the cultural landscape (Mansfield, 2011).

Cultural landscapes are considered the result of long-term interactions between communities and the landscape, encompassing local, traditional, and indigenous knowledge systems (Berkes, 2012; Molnar and Berkes, 2018). These landscapes are economically valuable, generating goods and services similar to any cultural item (Grefe, 2010). Their economic significance is particularly evident when the cultural landscape supports unique and geographically specific resources such as vegetation or livestock (Alfranca *et al.*, 2013). Recent studies have started focusing on the socio-cultural nature of cultural landscapes and the value that social and cultural capitals contribute to them (Wallace and Beel, 2018).

Monetary valuation of social capitals has largely centred around its contribution to economic productivity (Guiso *et al.*, 2004). Numerous studies explore the role of social capital in fostering cooperative actions and effective institutions related to economic performance (Diamond, 1994). In recent years, valuation of social capital has gained prominence in economic sustainability studies, emphasising the need for a deeper understanding of socio-cultural issues (Koning, 2001). While tensions persist, with some studies emphasising the non-measurable values of socio-cultural capitals (Markandya and Pedroso-Galinato, 2007), the general trend leans towards viewing sustainability as fundamentally socially oriented (Robinson, 2004). The preferred valuation approach in sustainable frameworks is one that embraces the interactive nature of both socio-cultural capitals and their connection to other capitals, such as cultural and natural resources (Akgün *et al.*, 2012).

Consequently, the monetary valuation of social and cultural capitals has primarily centred on the potential outputs of the broader cultural systems, often benefiting society as a whole. On the other hand, the non-monetary valuation has been more concerned with the value these capitals bring specifically to the communities themselves. The upcoming section, will delve deeper into the non-monetary value that these social and cultural capitals contribute to the community.

2.8.2. Non-monetary value of social and cultural capitals

Discussion of value in relation to both social and cultural capitals in combination are very limited (Zugravu-Soilita, *et al* 2021). There are a number of studies which look at one or the other but rarely are they conjoined, this may be because the concept of their total interconnection is relatively new. So in this section the value of SC to farming communities will be explored first, followed by cultural capital. The exploration of SC will be focused around three key examples of value: resilience, cooperation and collective action. Whilst the literature around cultural capitals will look at its value in the formation of shared perceptions and values.

Social capital's value to farming communities is often built around concepts of trust and social cohesion (Alló *et al.*, 2015). Although it is seen to have negative connotations, with issues of social isolation and high levels of gender imbalance (Meinzen-Dick *et al.*, 2014). In recent years SC has been viewed as one of the key components in building resilient societies (Lewis and County, 2012). No more true than in farming communities where its combination with cultural and natural capital is seen as critical to resilient farming futures (Kenny, 2017). Social capital is also viewed as central to farmers ability to deal with risk and adaptation to climate change (Smith, 2003). Again, it's important to not get carried away, as Berry *et al.* (2011) point out, social capital does not completely eliminate risk and can lead to issues of social disconnection.

These ideas of value through resilience building maybe be built out of the well researched concept of SC contribution to cooperation and collective action within farming communities. Willingness to cooperate is extremely valuable to farmers especially in relation to inter community trade (Robinson *et al.*, 2002). This effect is seen to increase within local to local trade, where strong networks of social capital have developed (Perry and Robinson, 2001). These effects are particularly noticeable when associated with land and livestock sales within a regionally specific farming community (Siles *et al.*, 2000).

Collective action (CA) is an extremely valuable contribution of SC to farming communities, especially when interacting with government (Westerink *et al.*, 2017). Collective action is ultimately an expression of the bonding and bridging effects of social capital (Putnam *et al.*, 2004). Social capital provides value to farming communities through its role in the formation of strong bonding ties within the community (Bodin and Crona, 2009). Although these can have a potentially negative manifestation in the creation of insular communities (Taylor, 2000). Where SC can also add value is by helping to form bridging ties, linking farming communities in weaker or loose connections with ‘outsiders’ (Granovetter, 1983). This combination of SC manifestations in bonding and bridging connections is seen as critical to farming communities’ effective collaboration when dealing with governmental policy (Mills *et al.*, 2011).

Exploration of the value of cultural capitals to farming communities has taken a slightly different theoretical position, utilising a Bourdieusian

interruption of capitals as a conceptual back drop (Burton *et al.*, 2021). This approach has been broadly described as the ‘good farmer construct’ (GFC), as many of the studies focus on how CC contributes to the formation of the socio-cultural identity of farmers (Burton *et al.*, 2008). The value of CC highlighted within these studies is generally related to its potential to build social position and engineered social cohesion within farming communities (Sutherland and Burton, 2011).

As a broad construct the studies cover a wide variety of themes including, the cultural sustainability of agri-environmental schemes, cultural importance of ‘tidiness’ in farmers landscape aesthetic and promotion of environmental behaviour in farming (Burton and Paragahawewa, 2011; Burton, 2012; Riley *et al.*, 2018). What they all hold in common is the value that cultural capital brings to these situations, it acts as the agent of social connection and keystone of social networks (Burton, 2008). Even though the studies focus of CC, social capital and the interconnection of the two capitals is central to the construct, as it is within the Bourdieusian conceptual inspiration (Bourdieu, 2014). Some studies dig a little deeper into the Bourdieusian ‘play book’ exploring CC as the instigator of symbolic values which build farmers’ social position or builds shared aesthetic tastes (Sutherland and Darnhofer, 2012). Again, these highlight the value of CC to farming communities through the ability to build shared socio-cultural perceptions which strengthen communities (Sutherland, 2013).

The use of Bourdieusian socio-cultural theory is not the only theoretical backdrop utilised with studies of CC in agriculture. A number of studies have explored the same subject matter through the prism of alternative conceptual frameworks to equal effect, for example symbolic interactionism (Silvasti 2003a; 2003b). A fact which is recognised by several of the key authors of the construct, who in recent publications have called for the integration of different theoretical ideas (Burton *et al.*, 2021). Although a large body of research outside of farming literature does support the general socio-cultural interactions discussed within the GFC (Holt, 2008). What might be beneficial is a study which looks to strengthen the ideas of this construct in relation to existing capital frameworks.

The construct is strong in its exploration of the formation of socio-cultural views which build community cohesion. This is a new area of research in a number of fields, where the measurement value is only half the picture. Moving forward many authors agree that understanding the formation of the values which create value is a critical missing link, particularly in human relationships to the landscape (Diaz *et al.*, 2015). The next section will explore the development of ideas around the formation of these values.

2.8.3. Value formation

Attempts to understand value formation through shared values, has developed out of the ecological economics concept of cultural ecosystem services (Chan *et al.*, 2011). Academics studying within this area became aware of the gap in knowledge relating to the the formation of values,

which ultimately create the value of capital (Milcu *et al.*, 2013). Although these studies are born out of the examination of natural capitals, their focus on culture and socio-cultural subject matter make them relevant to a study of value formation related to social and cultural capitals.

The need to grasp value formation stemmed from several years of research attempting to assess the contribution of 'intangible' cultural aspects to ecosystem services (Díaz *et al.*, 2011). Previous studies highlighted the necessity for valuation to reflect stakeholders' value systems, which were not well understood (Garmendia & Pascual, 2013). Therefore, a deeper understanding of shared cultural values and their formation through social interaction was sought (Kenter *et al.*, 2015). Of particular interest to farming was the examination of how these values emerged through the interaction of human society and the natural landscape (Fish, Church, and Winter, 2016). These values were thus recognised as complex, plural, and shaped through shared socio-cultural processes (Beckerman and Pasek, 1997; Kallis *et al.*, 2013; Irvine *et al.*, 2016).

The exploration of values has undergone various iterations, and currently, it has culminated in the concept of Relational Values (Chan *et al.*, 2018). This conceptualisation blends several philosophical perspectives, providing a theoretical framework to represent normative judgments in relation to nature and landscape (Brown, 1984; Muraca, 2011). Relational values are described by Chan *et al.* (2016;1462) as 'preferences, principles, and virtues associated with relationships, both interpersonal and as articulated by policies and social norms.' They have been proposed as a means to

transcend the historical dichotomy between intrinsic and instrumental values, bridging personal values and the world of economic valuation (O’Neill, 2002; Rolston, 2012). Figure 26 illustrates the current understanding of RV within a values framework. It serves as a connecting element, bridging the gap between assigned values, where value is attributed to objects, whether economic or otherwise, and the internal realm of personal values. Relational values exist within the socio-cultural sphere and can be developed as shared or plural values within a community (Irvine et al., 2016). Consequently, RV provides a valuable tool to analyse the reasons and locations of value attachments within a given socio-cultural community.

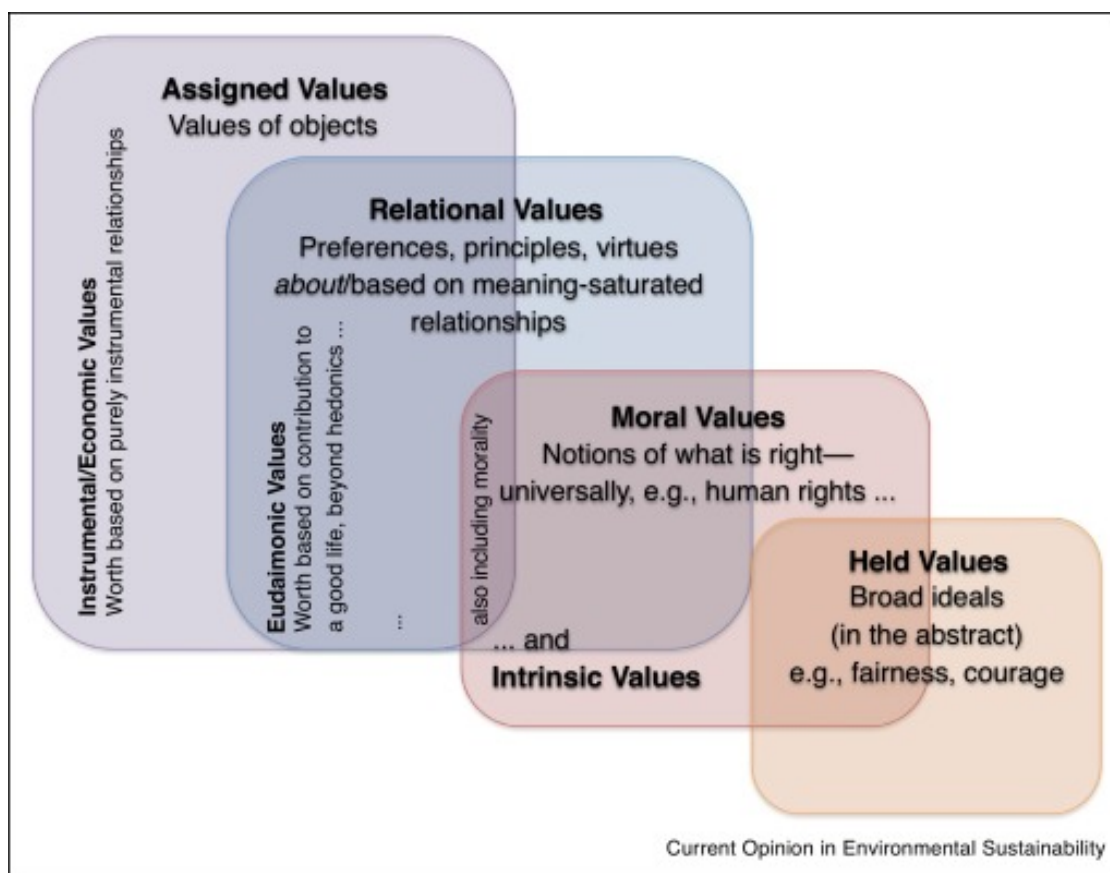


Figure 26 Location of Relational Values in Values framework taken from (Chan et al, 2018: Appendix 3)

The development of ideas around Relational Values has not been without criticism and misconceptions. Some have questioned whether RV represents a substantial development beyond existing concepts of instrumental and intrinsic values (Hahn *et al.*, 2015). Others argue that RV lacks sufficient analytical power, as all values and motives can be considered relational (Maier and Feast, 2016). Even among academics developing these ideas, confusion exists about the boundaries between RV and existing notions of intangible values (Arias-Arévalo *et al.*, 2017). Nevertheless, despite these considerations, RV appears to offer a useful language for exploring concepts of capital flows, especially those that do not conform to the conventional provider-receiver paradigm (Chan and Satterfield, 2016). This is particularly relevant in farming communities, where the provisioning of outputs is intricately intertwined with both the economic valuation of objects and deeper attachments to 'intangible' socio-cultural aspects of the profession (Gould *et al.*, 2015).

In conclusion, the exploration of the value of social and cultural capitals within the hill farming community is a complex and multifaceted endeavour. The concept of value itself is challenging to define, encompassing both economic, monetary aspects, and non-monetary dimensions shaped by socio-cultural sentiment. Despite some debates between economists regarding the relevance of non-monetary value, this study contends that both forms of value are present in social and cultural capitals within the community. However, monetary value is underpinned by

the socio-cultural non-monetary features of social cohesion, bonding, group membership. Whilst, understanding the interconnection between social and cultural capitals is crucial, as they mutually reinforce each other, contributing to resilient farming futures and fostering cooperation and collective action. Cultural capital, particularly in the form of cultural meaning, plays a significant role in forming the socio-cultural identity of farmers and building social connections within the community. By shedding light on the intricate formation of non-monetary value within the hill farming community, this study aims to enrich our understanding of the dynamics between social and cultural capitals within the hill farming community and their role in shaping sustainable and cohesive agricultural practices.

2.9 Capitals Conclusion

The hill farming community is made up of a wide variety of capital assets, which are interactional and overlapping in nature. Many of these capitals are under pressure due to the marginality of the core farming practices of the community. This pressure is only likely to increase with current changes to the agricultural subsidy environment and an ageing farmer population.

This literature review of hill farming capitals provides valuable insights into the intricate web of resources and relationships that sustain and shape these unique agricultural communities. Physical capital, encompassing

assets like land, livestock, and infrastructure, forms the foundation of hill farming operations, intricately linked with the natural capital of the landscape. The responsible management of natural capital assets, including biodiversity and water, is essential for ecological sustainability and the long-term viability of hill farming. Financial capital plays a vital role in supporting farmers' economic prosperity, but challenges in market fluctuations and changing agricultural policies require innovative financial strategies and diversified revenue streams.

Human capital, represented by the knowledge and skills of farmers, is crucial for adapting to evolving challenges and preserving valuable traditional practices. Emphasising education and skill development will be vital to ensure a sustainable future for hill farming. Social capital, based on trust, networks, and norms, provides the fabric that binds these tight-knit communities together, fostering cooperation, resilience, and collective action. The interplay between social and cultural capitals further enhances the community's cohesion and unique identity, contributing to a distinct cultural landscape. Social and cultural capitals are seen as playing a critical role in the communities' ability to adapt and diversify to meet the challenges of this new agricultural landscape. Within this shifting agricultural policy environment this study looks to explore the value of SC and CC to the community and wider society.

The concept of value can be examined both in monetary and non-monetary terms, even within economic studies. Monetary valuation of social and cultural capitals has focused on the production of objects or their effects on economic performance. On the other hand, non-monetary studies have

delved into their contributions to socio-cultural belonging and connection. While these capitals were traditionally studied in isolation, recent research is embracing their interconnected nature to examine socio-cultural value. Nevertheless, this approach comes with complexities, including the question of whether culture can or should be valued in a conventional economic sense.

A notable trend in recent studies has been the exploration of the values that generate value. This emerging field highlights the role of personal and socio-cultural values in the creation of economic value. Perceptions shaped by socio-cultural factors become integral to any valuation study.

In conclusion, this literature review underscores the significance of socio-cultural factors in any study of community and economics. Social and cultural capitals are pivotal to community sustainability and successful economic performance. Valuation is fundamentally a socio-cultural practice, where an object or aspect gains value when it aligns with society and culture's values and perceptions. As such, understanding and appreciating the socio-cultural foundations of value are vital for comprehending the dynamics of hill farming communities and their economic endeavours.

The key themes uncovered in this literature review will be further investigated in the subsequent chapter. This exploration will involve delving into conceptual frameworks and socio-cultural theories that can aid in the development of a diagram conceptualising the value of social and cultural capitals to the hill farming community.

Chapter 3 : Conceptual Framework

3.1 Introduction

The Literature Review chapter, has highlighted a number of important issues around the value of social and cultural capitals in UK hill farming community. Namely, the community is made up of multiple interactional capitals, social and cultural capitals are important in the sustainability of these capitals and that value is a socio-cultural phenomena. This chapter will look to build on these findings with the support of conceptual frameworks and theories.

Firstly, the nature of multiple capitals conceptual frameworks will be explored in detail, building a picture of the most current ideas around the formation of the HFC (section 2.1). This will then be supported by an examination of the specific interactions of capitals within the hill farming community (section 2.2). A combination of these concepts will allow for a position to be taken on the interconnection of social and cultural capitals in section 2.3. A route to evidencing this preposed position will be further supported through an exploration of socio-cultural theory in section 2.4. Finally, all these components will be combined to form a conceptual framework diagram exploring the value of social and cultural capitals in UK hill farming communities in section 2.5.

3.2 Multiple Capitals Conceptual Frameworks (MCCF)

There are a number of frameworks which utilise capitals and their interactions as a theoretical approach to looking at human systems (Coulson *et al.*, 2014). The following sub sections will briefly explore the three key examples of these, firstly the Five Capitals Framework (3.2.1), secondly Community Capitals Framework (3.2.2) and finally, their use in Social Ecological Systems (3.2.3).

3.2.1 Five Capitals Framework (FCF)

Bebbington (1999) is widely acknowledged as the pioneer of the capitals approach, which focused on rural livelihoods and addressed the issue of oversimplification in achieving sustainable development. While the concept was not entirely new, it expanded on previous research on sustainable development by Leach *et al.* (1998) and Scoones (1998). Bebbington was the first to advocate for a broader perspective on community resources and assets, known as capitals, aiming to avoid oversimplifying or misunderstanding the functioning of communities (Zommers, 1998).

By adopting this "wider lens" approach, Bebbington's work delved into various community resources, defining them as produced, human, natural, social, and cultural capital (Bebbington, 1997). This incorporation of capitals was broadly aligned with the research of other contemporary theorists and directly referred to Putnam and his social capital theories (Putnam, 1993). It is worth noting that the use of Putnam's theories was

expected given their popularity at the time (Ponthieux, 2004). However, this limited exploration of social capital theory missed the opportunity to engage with alternative contemporary theorists (Woolcock, 1998; Holt, 2008).

Similarly, concerning the concept of natural capital, the FCF (Framework for Community Forestry) linked itself to the developing research area of Ecological economics. However, it did not deeply engage with the concepts of valuing natural resources (Grootaert, 2001; Costanza *et al.*, 1997).

Bebbington's significant contribution lies in placing the capitals framework at the core of sustainable development thinking, evident especially through his seminal framework diagram (Fig. 27).

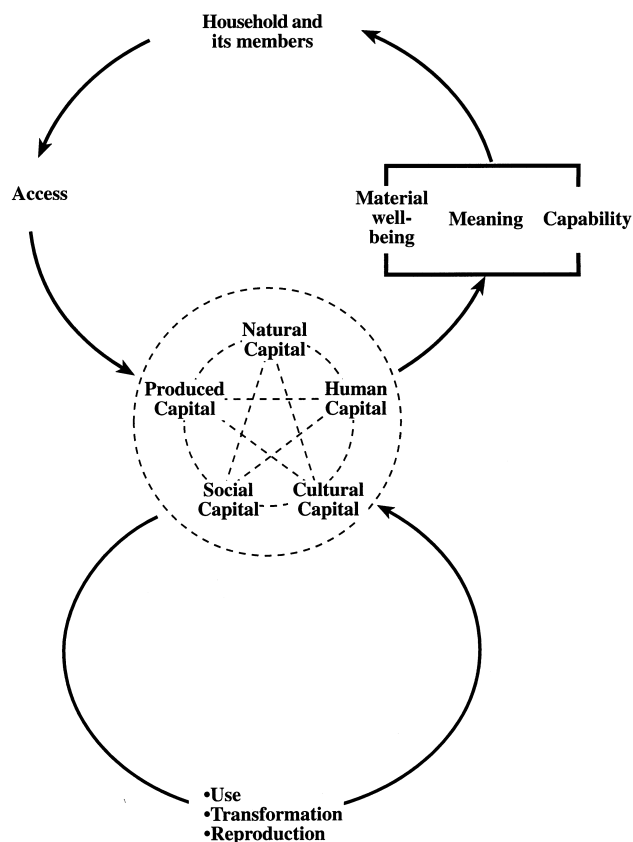


Figure 27 Assets, Livelihoods and poverty diagram taken from (Bebbington,1999 :2029)

However, a notable drawback of the diagram is its failure to effectively illustrate the interconnected and intertwined nature of these capitals, which was later addressed more explicitly by Emery and Flora (2006:21). The diagram's visual language might have contributed to criticisms of siloing or separating capitals into isolated categories. Despite these limitations, the concept found widespread use in exploring community capabilities to address both local and global environmental challenges (Sayer *et al.*, 2007; Nelson *et al.*, 2007; Brown *et al.*, 2010).

It's worth noting that although the FCF served as a valuable tool for researchers to analyse communities, it seemed to be primarily used for this purpose rather than being an openly accessible resource for communities to understand and take charge of their own issues (Dhakal, 2011). However, it is essential to refrain from overly criticising the FCF since it represented an initial step in the conceptualisation of community capital frameworks. In the subsequent section, we will delve into a more nuanced development of the concept, which takes into account further refinements and advancements.

3.2.2 Community Capitals Framework (CCF)

The Community Capitals Framework (CCF) represents a development of the capitals concept, aiming to promote community development and poverty reduction by striking a balance between social equity and natural capital management (Flora, 2004). Building upon the FCF discussed earlier, the CCF introduces several specific additions, as highlighted by Guttierrez-Montes *et al* (2009a):

1. Increased number of capitals.
2. A broader focus on the wider community.
3. Provision of an analytical tool for communities to diagnose their current situation and assess the value of their assets.
4. Emphasis on the significance of social capital in community sustainability and development.

The concept of the CCF emerged from research examining the social aspects of natural resources management (Flora, 2000) and was consolidated in the seminal publication by Flora *et al* (1992). One of its most valuable contributions, particularly for the purpose of this discussion, is the idea that capitals can interact with each other and have the potential to "enhance the productivity of the other" (Flora, 2004:6). This notion aligns with contemporary work on social capital as proposed by Schneider (2009). However, the CCF seeks to establish connections among all

potential capitals. As a result, the CCF introduces a revised set of capitals, expanding from the traditional 5 to 7 (see Fig 28).

FACTORS	CAPITAL	Assets/Dimensions
HUMAN (intangible)	Cultural	The legacy people pass on in terms of values, symbols, art, language, customs, stories, rituals, world view
	Human	Education, training, medical care, skills, labour force, interpersonal skills, leadership capacities, types of job, health & poverty.
	Political	Government agencies State institutions Laws, by laws and regulations
	Social	How people interact with each other Bonding: individual & groups of same background Bridging: connecting diverse groups
MATERIAL (tangible)	Built	Physical structures: private goods eg building toll goods ie pay to use eg Broadband common-pool goods eg land providing habitat collective goods eg Public RoW
	Financial	Organisations providing money Personal income and wealth
	Natural	Land, water, biodiversity

Figure 28 Asset/Dimensions of Communities Capital Framework taken from (Flora and Flora, 2006)

Where the CCF capitals framework is very strong is in its linking of capitals to other research and theory in a way that other frameworks do not (Emery and Flora, 2006). To expand this point just a little Emery and Flora provide these theoretical links for some of their capitals:

Natural capitals - associated with Ecological economic and ecosystem service (Pretty, 1998) (Costanza et al, 1997)

Cultural Capital - to a broader range of theorists (Putnam, 1993; Bourdieu, 1986)

Social capital - ideas of bonding and bridging (Narayan, 1999)

Political capitals - community voice and action (Aigner *et al.*, 2001)

Financial capital - wealth in community development (Lorenz, 1999)

The expanded exploration of capitals, compared to the previous limited connections to alternative theorists and frameworks (Bebbington, 1999; DFID, 1999), offers a more comprehensive understanding. The key to this enhanced appreciation of capitals lies in the conceptualisation presented by the Community Capitals Framework (CCF), which highlights their interlinked and overlapping nature (as depicted in Fig 29). This diagram successfully portrays the dynamic interactions among capitals, illustrating how they not only overlap and interact but also blend and merge with one another in intricate and unique interrelationships within specific communities (Fernando and Goreham, 2018).

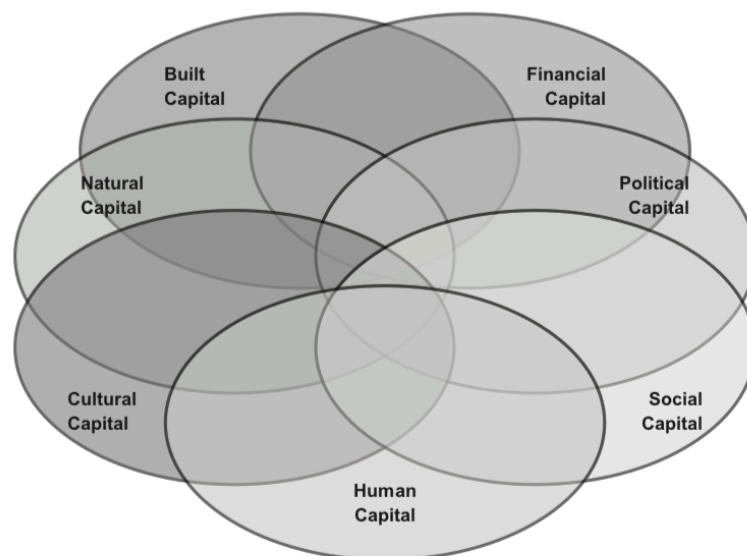


Figure 29 *Communities capital diagram* taken from (Emery and Flora 2006:21)

The CCF extends the capitals conceptualisation by incorporating it into a spiralling model (Fig. 30), which draws on Gunnar Myrdal's cumulative causation theory (Fujita, 2007). The spiralling theory, introduced by Emery and Flora (2006), presents two intriguing aspects for consideration.

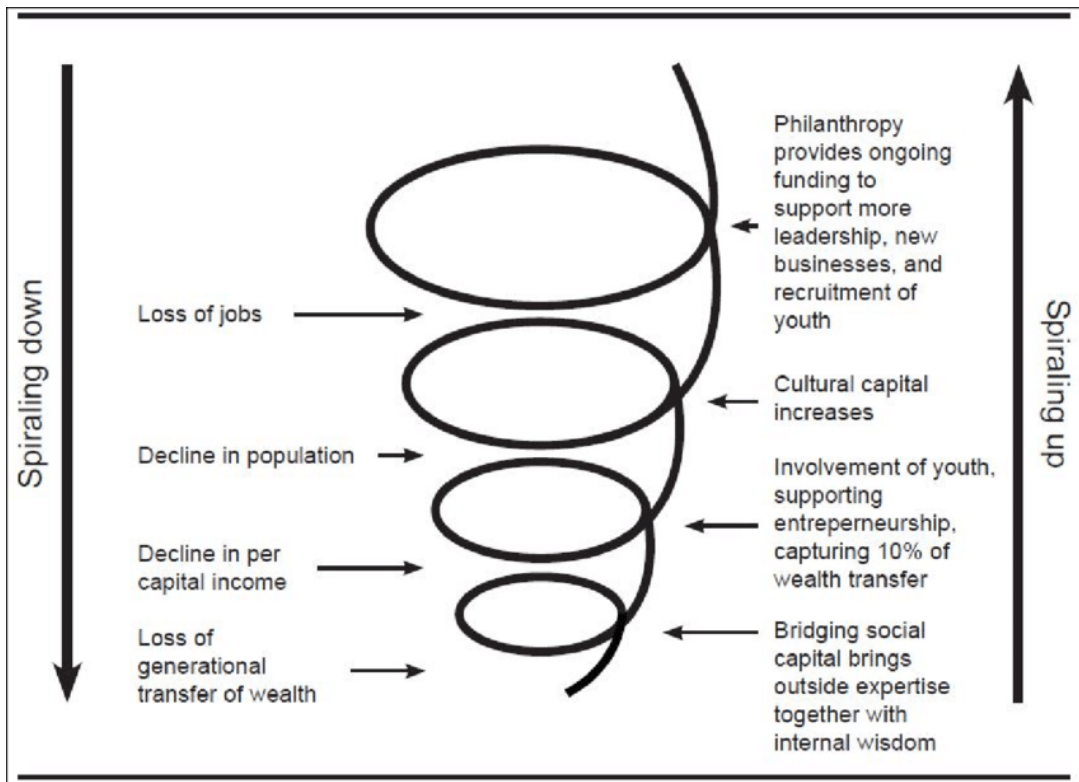


Figure 30 - *The spiralling of Capital Assets* (Emery and Flora 2006:24)

Firstly, the theory proposes that every community is in a constant state of motion, either moving upward or downward along the spiral. This movement is closely linked to the relative condition of the capitals within the community (Emery and Flora, 2006:23; Guitierrez-Montez, 2005). The inclusion of the spiralling model in the CCF provides a dynamic framework for understanding the continuous evolution and dynamics of communities. It emphasises that the interactions and relationships among the various capitals continually influence the community's developmental trajectory. As different capitals strengthen or weaken, they can propel the community

upwards on the spiral, indicating positive development, or downwards, signifying challenges and decline.

A second intriguing aspect relevant to this study is the observation that social capital plays a pivotal role as the primary building block for the upward spiral. This assumption finds support in numerous studies conducted in the US, Latin America, and Africa (Stofferahn, 2012; Duffy *et al.*, 2017; Stone and Nyaupane, 2018). However, some researchers have questioned the validity of this model. For instance, Pigg *et al.* (2013) discovered that the spiralling effect was not fully substantiated by quantitative data assessment, suggesting that the relative importance and impact of capitals are influenced by community and project context. This viewpoint is reinforced by Fernando and Goreham (2018), who advocate for a holistic analysis of all the capitals' roles and effects within a specific community.

The CFF continues to be employed in various project settings, particularly in Latin America, where it is applied in complex social-environmental community projects (Cotés-Urquijo, 2020). Often, it is combined with other community and people-centric research frameworks and methods, such as Participatory Action Research (Gutierrez-Montes *et al.*, 2009b). In the US, it has also been incorporated into quantitative assessment models designed to aid the evaluation of community interventions on a macro scale, such as county-wide assessments, which could have potential implications for agri-environmental strategy rollout in the UK (Mueller *et al.*, 2020).

Community Capital Frameworks have built upon the foundational concepts of multiple capitals and applied them within the context of rural development. These frameworks have been instrumental in understanding and promoting sustainable development in rural communities. Similarly, the core ideas of multiple capitals have been embraced and adapted in a slightly different manner by the research on social-ecological systems (SES) in the field of environmental resource management. Of relevance to this study, this adoption of the capitals approach within SES research has a stronger socio-cultural influence, which will be further examined and explored in the upcoming section.

3.2.3 Use In Social ecological Systems (SES)

SES, as a conceptual framework, goes beyond being solely capital-based and instead considers social, economic, and natural capitals as interrelated components within any functioning environmental system (Folke *et al.*, 2003; Olsson *et al.*, 2004). As the framework has developed, it has explored capitals as sub-systems within the broader environmental context (Matthews & Selman, 2006). However, it is worth noting that SES employs a slightly different set of capitals and definitions compared to other frameworks discussed earlier (Selman and Knight, 2006:297).

Matthews & Selman further expand on the concept of capitals as sub-systems by presenting a diagram, illustrating the potential links and interconnected nature of these capitals. This diagram depicts the capitals in a continuous state of looping and feedback interactions, leaving little room

for interpreting capitals as separate entities (Fig. 31). This particular study proves to be highly valuable when examining the dimension of human capital (social/cultural) and its role in the management of natural capital (landscape).

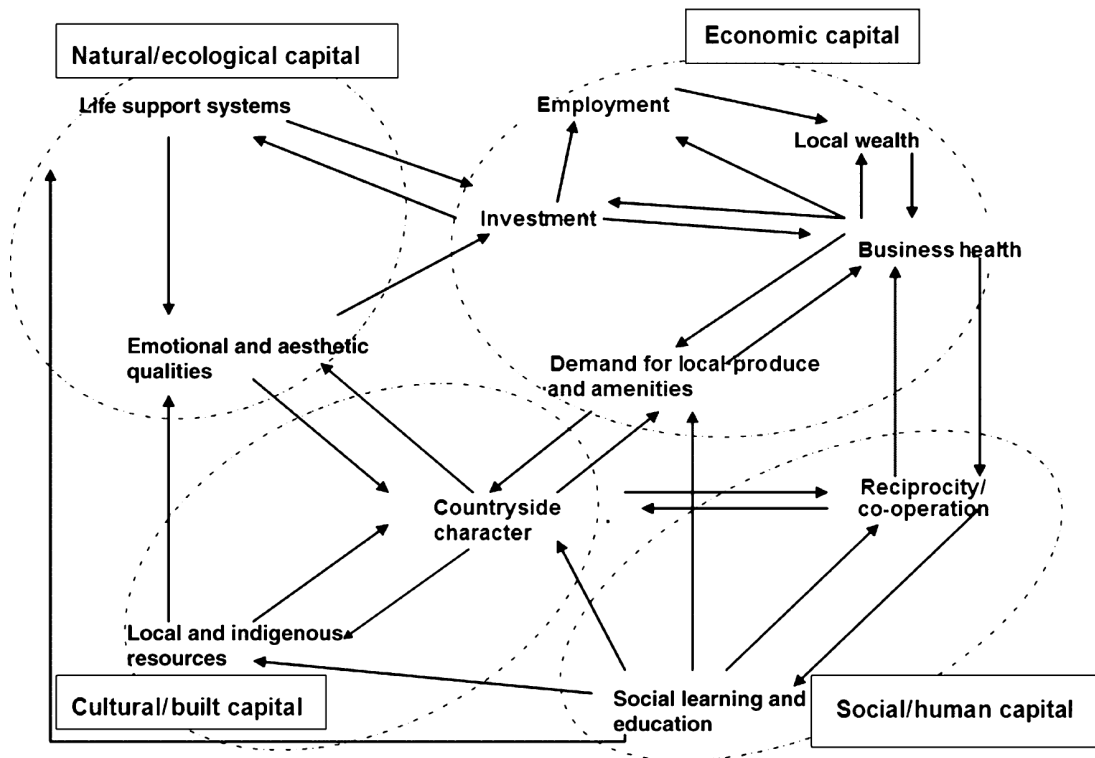


Figure 31 Selman & Knight's conceptual framework adapted by (Matthews & Selman 2006:205)

The idea of interacting sub-systems within social-ecological systems has been extensively explored in various studies within the SES literature, further reinforcing the conceptualisation of capitals in the context of environmental systems (Ostrom and Cox, 2010; Wu & Tsai, 2014). Notably, a recent and particularly intriguing study by Muhar *et al.* (2018) presented a model framework that examined the interface between social/

cultural and natural capitals through the concept of human-nature interaction. This work resulted in a captivating diagram (Fig. 32) illustrating the feedback loops between socio-cultural concepts, human behaviour, and bio-physical systems (nature).

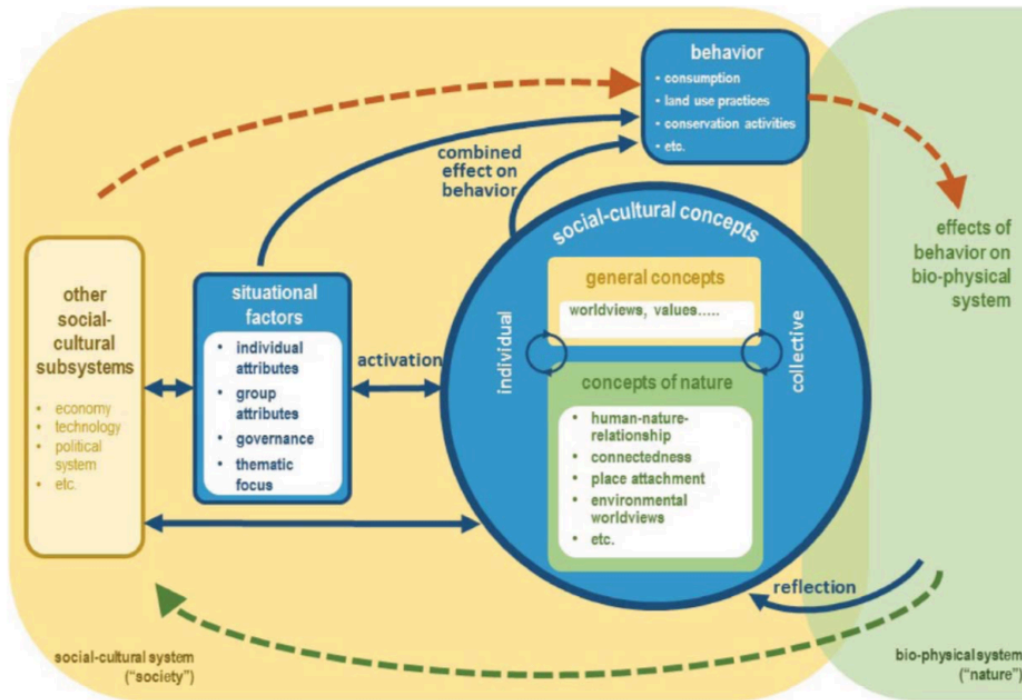


Figure 32 Add-on module to integrate social-cultural concepts into frameworks of interaction between social and natural systems (Muhar *et al.*, 2018 :765)

The model offered by Muhar *et al* (2018) provides a valuable tool for exploring the potential micro-interactions between capitals, and it serves as a conceptual framework through which interventions can be supported by evidence. By visualising the intricate relationships between human actions, socio-cultural factors, and the bio-physical environment, this model contributes to a deeper understanding of how these capitals interact and influence each other within social-ecological systems.

The preceding subsections have introduced the concept of Multiple Capitals Community Frameworks (MCCF) and highlighted how capitals are viewed as interactional within these frameworks. In the following section, we will delve into the frameworks that are most commonly utilised in studies associated with UK farming and hill farming. These frameworks play a crucial role in understanding the complexities of rural communities and the various forms of capital that contribute to their sustainable development and well-being.

3.3 Hill Farming Community (HFC) as a Capitals Concept

Section 3.1 offers an informative introduction to the concept of MCCFs, but there is another framework commonly utilised in studies related to hill farming communities that hasn't been covered yet. This framework is known as the Sustainable Livelihoods Framework or Approach (SLF), which originated from the field of international development with the primary aim of serving as a tool for poverty alleviation (DFID, 1999). The SLF has been widely applied across the globe in various contexts and is recognised for its effectiveness in assisting communities and individuals facing poverty (Adato and Meinzen-Dick, 2002).

In the SLF, a systems diagram and a set of core principles are used to guide individuals in assessing their livelihoods' assets, vulnerabilities, and processes. The framework's focus is on understanding and enhancing the resources and strategies that influence people's livelihoods, with the

ultimate goal of promoting sustainable and resilient livelihoods in impoverished areas (Fig 33).

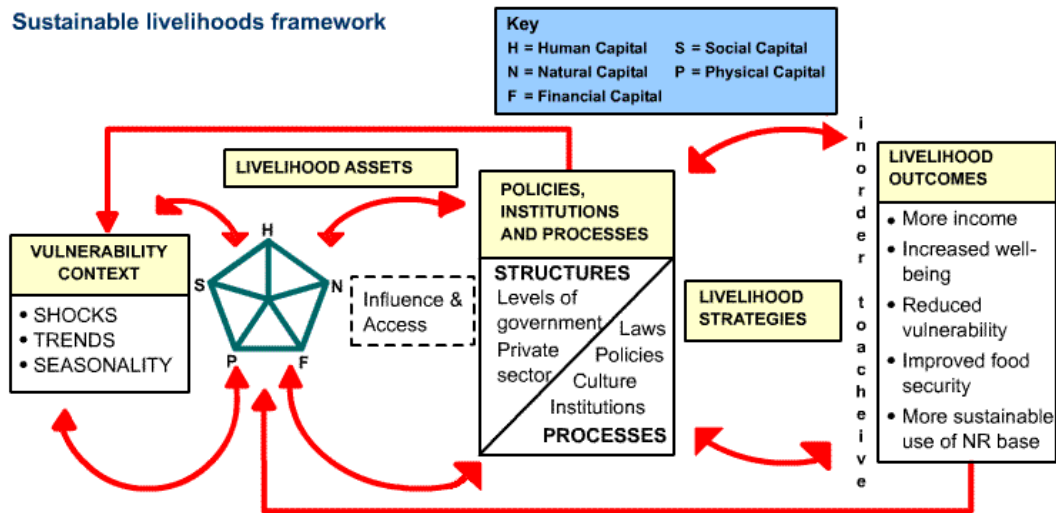


Figure 33 Sustainable Livelihoods Framework taken from (Erenstein et al., 2010:6)

While primarily used as a tool in developing economies, the Sustainable Livelihoods Framework (SLF) has also found application in the UK, particularly in marginalised farming communities. Ponder and Hindley (2009) conducted a study on livelihoods support in the Peak District, employing the SLF and effectively utilising the capitals pentagon to prompt farmers to consider the diverse capitals involved in their farming businesses and lives (Ponder and Hindley, 2009:20-27). Additionally, they adapted the livelihoods Ladder from Orr et al. (2006) to help participants assess their livelihood strategies based on various criteria.

The findings from the livelihood ladder were highly informative, particularly in revealing how social capitals played a central role in determining the relative success or failure of the farms (Ponder and Hindley, 2009:28-29). Building on the understanding of social capital's

significance at a farm level, Rose Regeneration (2013) conducted a study for Oxfam, exploring poverty within the hill farming communities of Teesdale, County Durham. This report adopted a community-level approach, examining the causes of poverty and potential solutions, with social capital being identified as an important factor (Rose Regeneration, 2013:41). Interestingly, the report also supports the concepts of Community Conceptual Frameworks, positing that social capital serves as a gateway through which other capitals are accessed (Rose Regeneration, 2013:38). While the study offers different supporting mechanisms for this process, it emphasises the association with community capacity (see Craig, 2007:22).

Both studies demonstrate the effectiveness of the SLA as a tool for communities to assess their position and make adaptations to strengthen sustainability. The SLF achieves many objectives of CCF, but potentially in a more direct manner.

In a farming study conducted by Mansfield (2010), the Sustainable Livelihoods Framework (SLF) was utilised with a unique focus on exploring Ecosystem Services (ES) on farms, as defined by the Millennium Ecosystem Assessment (MEA, 2005). The report offers a comprehensive description of ES on upland farms and effectively links these services to the capitals within the SLF. One particularly valuable aspect is the SLF Farm Assets diagram, which vividly illustrates the potential assets present on an upland farm categorised within the five capitals of SLF. This diagram serves as a highly useful resource, especially as a tool to engage farmers, aiding in explaining how the capitals approach is directly applicable to their farming practices and lives (Fig. 34 see following page).

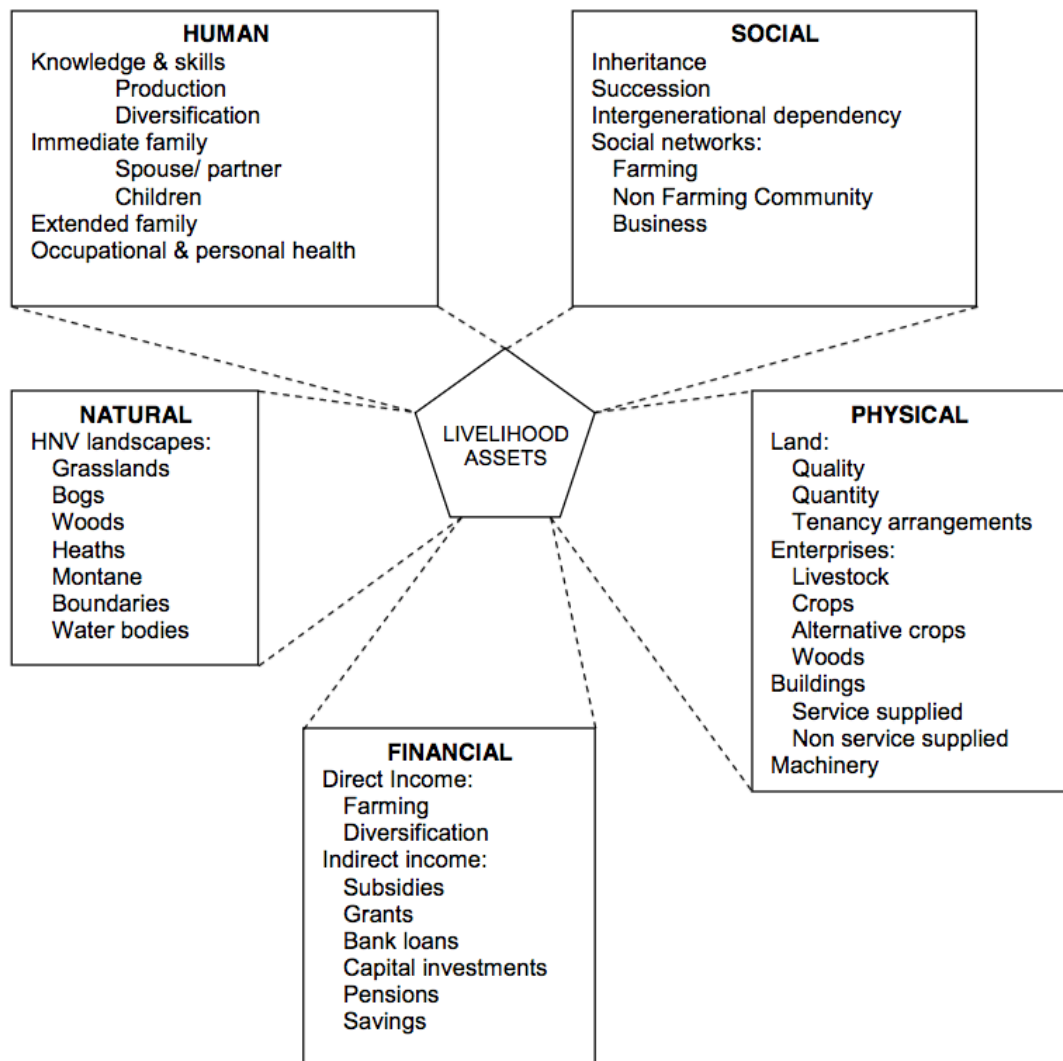


Figure 34 SLA Farm Assets taken from (Mansfield, 2010 :9)

The early criticisms of the capitals framework within the SLF have been addressed to some extent by more recent research. In a recent study, Mansfield has further developed her earlier capitals model for Hill farming (Fig. 34) by introducing cultural capitals as a linking element that interacts with all other aspects (Fig. 35). The inclusion of cultural capital as an

overarching category represents an interesting departure from other frameworks. It emphasises the role of cultural capital as both distinct and deeply embedded within all aspects of a community's activities and assets.

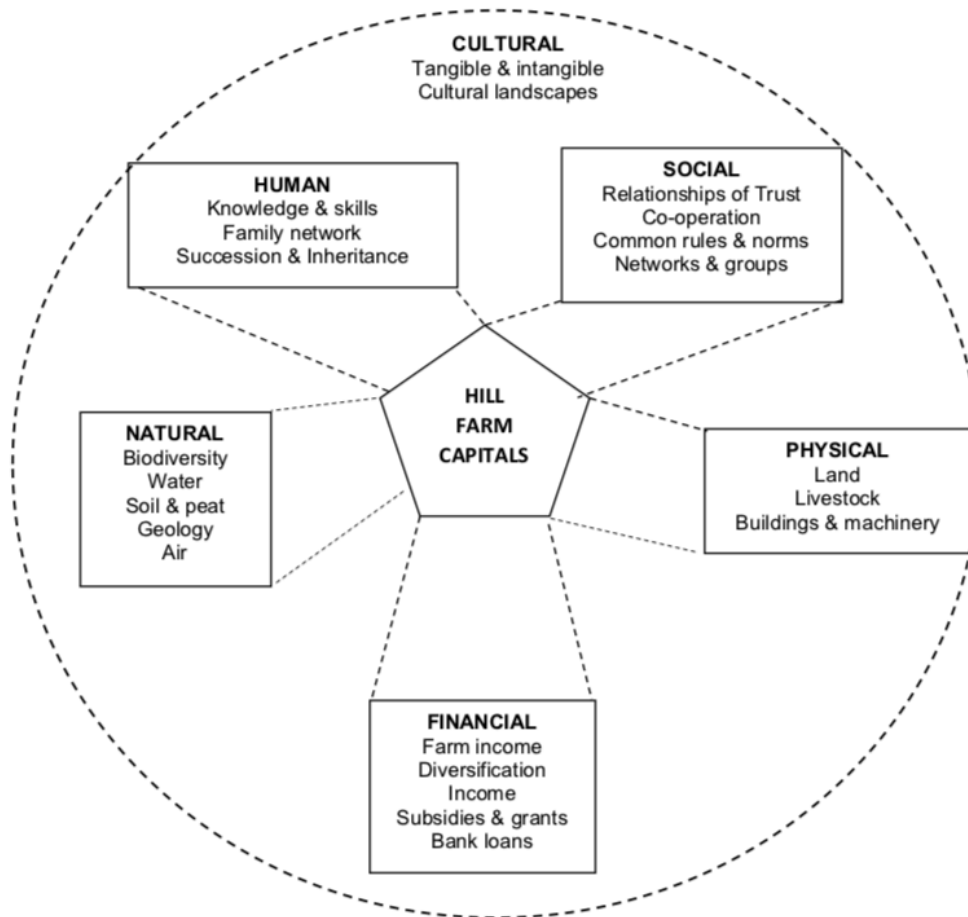


Figure 35 *Hill Farm Capitals* taken from (Mansfield 2019a:21)

However, while this diagram recognises the significance of cultural capital, it does not delve into the specifics of how cultural capitals interrelate with other forms of capital. Nonetheless, it serves as a valuable starting point from which further exploration of these relationships can be undertaken.

In the upcoming section, we will review all the frameworks outlined above to determine which one would serve as the most suitable underlying framework for constructing the conceptual framework of this study. The goal is to select a framework that aligns well with the specific research questions and provides a robust foundation for examining the complex interplay between different capitals in the context of sustainable livelihoods and community development in hill farming areas.

3.4 Review of Multiple Capitals Conceptual Frameworks

The Five Capitals Framework introduced the idea of capitals and their connection, but it did not delve deeply into the intricacies of this relationship (Bebbington, 1999). Recent studies using this framework have tended to adopt top-down research methodologies, which may not adequately guide projects seeking community engagement and collaboration in content and methodology development (Dhakal, 2011). In contrast, the Sustainable Livelihoods Framework (SLF) and Community Capitals Frameworks (CCF) hold more promise.

The SLF offers practical resources and techniques for direct engagement with communities (DFID, 1999). It has proven effective in researching UK farming communities, as evidenced in studies conducted by Ponder and Hindley (2009) and Mansfield (2010). Nonetheless, some researchers have pointed out that the SLF may lack depth in exploring the links between different capitals, which could be addressed by incorporating the concept of

cultural capital (Mansfield, 2019). The inclusion of cultural capital in the framework provides a more comprehensive understanding of how cultural aspects shape and influence the other capitals within hill farming communities. By emphasising the integrative role of cultural capital, this framework recognises the significance of traditions, knowledge, and social norms in shaping sustainable livelihoods.

Similarly, CCF, with its richer theoretical foundation and the incorporation of the spiralling model of development (Emery and Flora, 2006), allows for a more thorough analysis of the interconnecting nature of capitals.

Although some attempts have been made to quantitatively assess these interconnections (Pigg *et al.*, 2013), there remains a need for further exploration of the sociological mechanisms that connect different capitals.

Furthermore, insights from the socio-ecological system, while not explicitly a capitals framework, offer valuable understanding of the interconnected nature of capitals, particularly in the realms of social, economic, and natural capitals (Selman and Knight, 2006). There is also potential to integrate cultural capital into this framework, as demonstrated in the work of Muhar *et al.* (2018).

Mansfield's (2019) recent addition of cultural capitals represents the most current and closely associated model with hill farming communities. This updated framework contributes to a more holistic view of how cultural aspects interact with and influence other capitals within these communities. The exploration of the role of cultural capital opens up new avenues for

research to delve into the intricate interplay between different capitals and the dynamics underlying the functioning of hill farming communities.

The present study aims to build upon Mansfield's (2019) comprehensive capitals framework, with a specific focus on examining the interactions of cultural capitals within the overall model. By doing so, this research seeks to contribute to a deeper understanding of the interconnecting nature of capitals in the context of hill farming communities, with particular emphasis on the roles of social and cultural capital.

3.5 Interactional and Interconnection Hill Farming Community Capitals

The literature review has outlined how hill farming communities are currently viewed as multiple capital frameworks, which are made up of capital assets (Chapter 1). This conceptual framework section has so far developed this idea, introducing and exploring a number of MCCF (section 2). Throughout both these examinations the concept of capitals being interactional and interconnected has been raised on a number of occasions. In the following section, specific interactions within hill farming community capitals will be explored (section 3.2). This examination will follow the order in which capitals were explored within the literature review, building towards social and cultural capitals, which remain the key focus of this study. Following this examination of the interconnections of capitals within the HFC, a specific example will be explored both from a

functional and cultural perspective (section 3.3). Finally, the posited relationship between social and cultural capitals to be explored within this study will be outlined (section 3.4), in preparation for a later examination of the socio-cultural theories which might help support this position.

3.5.1 Interactional nature of capital with the hill farming community

Connections between the physical and natural capitals of the HFC have been made informally within the above sections, however it is worth highlighting these in review here. The natural capital (NC) assets of soil/peats and biodiverse vegetation, combine to create the core elements of the land (physical capital) (van Orshoven *et al.*, 2012). These NC resources also serve as vital nutrient sources for the key physical capital of the HFC, which is livestock (Marrs *et al.*, 2020). The relationship is not unidirectional, as the grazing of livestock and land management are crucial for the creation and preservation of key NC assets, such as hay meadow communities and peatland habitats (Haines-Young *et al.*, 2003; Haysom & Coulson, 2004). Additionally, physical capitals also play a significant role in safeguarding the water resources of the uplands (Pla-Rabes *et al.*, 2011). Strong connections exist between the NC assets of geological rocks within the uplands and the physical capital of the built environment (TCV 2021). The vast majority of traditional construction within the uplands is achieved through the exploitation of the locally occurring geology, e.g drystone walls (Collier, 2013). There is again a feed back loop in this relationship, as

drystone walls provide natural capital, both in the form of biodiversity through their support of lichens and mosses, plus their role as wildlife transport corridors (IALE 2017; Powell *et al.*, 2018).

Financial capital is interconnected with natural capitals in several ways. Firstly, through the exploitation of vegetative biodiversity, water, and soils to produce the core product of the HFC, which is livestock (Mansfield, 2010). This core activity relies on the natural capital resources of vegetation, water, and soils to raise livestock for sale in commodity markets or directly to consumers (Ilbery, 1985; Kirwan, 2006).

Furthermore, the HFC acquires financial capital assets through the protection of natural capital, facilitated by support and payment systems for public goods like ELS, HLS, and the forthcoming ELMs system (DEFRA, 2018). These agri-environmental schemes provide financial capital to farmers, who, in turn, contribute to the creation, management, and protection of natural capital (Kay *et al.*, 2012; Murphy *et al.*, 2011). However, questions regarding the effectiveness of these systems have been raised since their inception (Wilson and Hart, 2001; Burton and Schwarz, 2013).

The attainment of any financial capitals, especially in the context of farming, is contingent on the presence of human capital, particularly in the form of skills and knowledge (Becker, 1964; Hansen and Greve, 2015). These skills and knowledge are crucial for the effective execution of farming practices. Even within economically marginalised farming systems like the HFC, this core farming activity contributes significantly to farm

income, comprising around 30-40% (DEFRA, 2020). Therefore, the absence of this essential human capital component, i.e. knowledge, would lead to the failure of farming businesses. Conversely, limited knowledge or restricted access to education hampers farmers' opportunities to enhance their human capital and gain access to new potential financial capitals (Wilson *et al.*, 2001). This limitation becomes particularly critical when considering the proposed changes to subsidy payments, as farmers who lack adaptability might miss out on accessing forthcoming ELMs agreements, potentially leading to the need to sell their farms (DEFRA, 2021).

The new subsidy arrangements will place increased emphasis on farm diversification, which already plays a significant role in generating financial capital within the HFC (Clark and Scanlon, 2019). Access to these diversification opportunities often occurs through family networks, making human capital in this form act as a gatekeeper to potential financial gains (Ponder and Hindley, 2009). However, the downside of this connection is the potential negative impact that succession can have on farming businesses, with a real risk of financial losses, due to family conflict and requirements to sell farms or land (Lobley *et al.*, 2010).

Human capitals, especially those related to the family, are very closely associated with social capitals (Hansen and Greve, 2015). Within the literature, connections between social and human capital are well established, especially in relation to learning and knowledge transfer (Coleman, 1988; Greve, 2010). Participatory networks of social connection allow farmers to access broader knowledge systems, by gaining from the

experiences of others (Kilpatrick, 2007). An important factor within these networks of exchange, is the levels of human capital the individual participants process (Blåka & Filstad, 2007). Equal or comparable levels of human capitals, especially in the form of knowledge will lead to better sharing within these networks (Hansen and Greve, 2015).

The examination of social capitals above has emphasised its significance in farmers' ability to adapt, diversify, and share. Human capital has been identified as a crucial factor in this process, particularly in establishing trust and acting as a "gatekeeper" to cooperation (Burton and Sutherland, 2011). Cooperation, which involves bridging social capital, allows individuals to access financial and human capital opportunities through friends, colleagues, and general contacts (Burt, 1992). In the HFC, farmers with higher levels of human capital, in the form of knowledge, are more likely to receive cooperation and support from other community members (Burton *et al.*, 2005). The reverse also holds true, where farmers with strong social capital and extensive familial networks gain access to human capital or the potential to develop skills and knowledge off-farm (Ponder and Hindley, 2009).

Trust plays a significant role in fostering cooperation, representing a form of bonding social capital (Oh *et al.*, 2006). In broader farming studies, trust as a form of bonding social capital is considered critical for sharing resources, knowledge, and support, with farmers displaying high levels of trust being more likely to cooperate (Burton and Sutherland, 2012). These findings are consistent with studies in the HFC, where trust is pivotal in cooperative efforts related to diversification activities such as tourist

accommodations (Burton *et al.*, 2005: 39). Anecdotal stories of day-to-day operations in the HFC also frequently highlight the importance of trust. For example, Rebanks (2015: 22) presents several instances where farmers prioritise establishing the "trustworthiness" of potential collaborators before engaging in dealings with them.

The shared cultural roots of farmers play a significant role in their ability to establish both bridging and bonding social connections (Mansfield, 2019a). Culture plays a vital role in shaping mutual views, values, and beliefs, which form the foundation of common norms and practices that foster social cohesion (Blumer, 1969). In the context of hill farming, this cultural expression is evident in the form of cultural capital. Mansfield (2019a) highlights the close relationship between social and cultural capital, where collaborative efforts facilitated by these capitals are essential for delivering landscape-based public goods and maintenance of the broader cultural landscape of upland Britain. While earlier discussions of cultural capital may have attempted to separate it from social capital, such an approach only provides a partial understanding. For instance, in the case of shepherd meets, these events are not only expressions of culture but also equal parts social gatherings (Palmer, 1925), where shared culture forms the fundamental basis of social relations.

In addition to the tangible aspects of capitals discussed above, such as livestock and shepherds' crooks, these objects are not merely physical assets but also culturally shaped symbols of social status (Rebanks, 2015). According to socio-cultural theory, possessing cultural capital, whether in tangible forms like livestock or intangible forms like shared beliefs, is

crucial in shaping an individual's social capital within a community (Bourdieu, 1986; 1991). Thus, while this discussion has attempted to consider cultural and social capitals separately for clarity, in reality, they are intricately interconnected and give each other meaning through their interactions.

In essence, cultural symbols and practices, along with shared beliefs, contribute significantly to the formation of social capital within a community. These tangible and intangible aspects of capitals work together to shape individuals' social standing and relationships within their cultural context. It is essential to recognise the interplay between cultural and social capitals to gain a more comprehensive understanding of their significance and impact on individuals and communities.

This section has explored the interplay of capitals within the HFC, revealing their intricate and interdependent nature. Notably, social and cultural capitals exhibit a complex dynamic relationship, mutually reinforcing each other and serving as gatekeepers to access other capitals. To underscore this interconnectedness among all capitals, the next section will examine a specific asset, livestock, to illustrate how it links various capitals within the framework.

3.5.2 Interconnecting capitals - An Example

Upland Sheep breeds are a key physical capital of the hill farming community (section 2.2). This section will examine how sheep as an asset connect all the capitals of the community, providing an example of their inter-connective nature (Emery and Flora, 2009).

Figure 36 provides an example of how the capital asset of livestock connects through the whole capitals system. As already discussed, upland sheep are a key physical capital of the HFC, which through their grazing of vegetation create the characteristic natural landscape of the uplands (Mansfield, 2011). Thus, the grazing actions of sheep fundamentally affects natural capital, with correct grazing intensities producing and protecting key upland habitats (Evans and Yarwood, 2006). These grazing regimes are then critical in financial capital creation, as they allow farmers to meet the requirements of agri-environmental schemes, which can make up a significant percentage of hill farmers income (Clark and Scanlon, 2019).

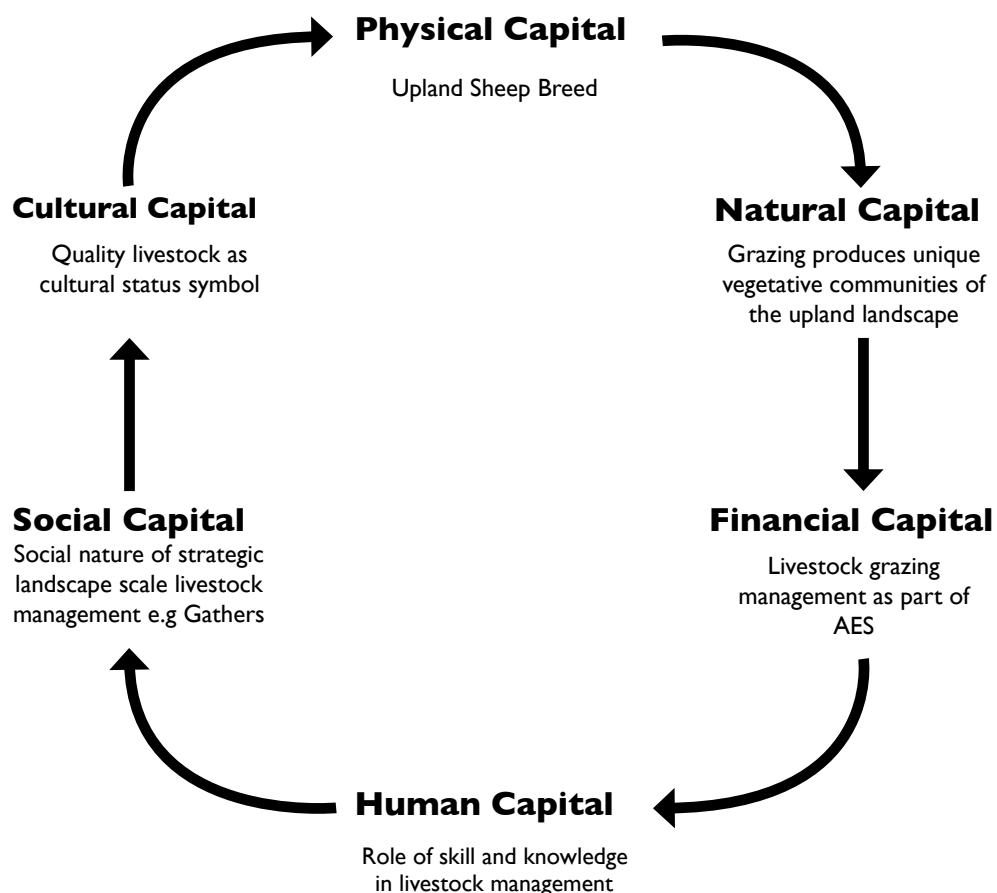


Figure 36 Upland Sheep as a mechanism for interactional capitals

These public good provisions will become even more critical for hill farmer's financial capitals in a post Brexit agricultural environment (Bateman and Balmford, 2018). The provision of good grazing regimes, and compliance with agri-environmental schemes which generate financial capital are only possible due to human capitals (Mansfield, 2015). Farmers' human capital in the form of skills and knowledge, through the handling and management of livestock allow for capital creation (Burton *et al.*, 2005). Individual human capital is not sufficient to strategically manage the upland farming system, the management of livestock within the system is reliant on social capital in the form of gathers, stratification etc (Mansfield *et al.*, 2006). Thus, farmers have to draw on multiple social capitals including relationships of trust, social networks and norms to manage their key capital of livestock (Burton *et al.*, 2005). Finally, livestock like many physical capitals of the HFC take on a cultural significance, with good quality livestock becoming significant cultural capital within the HFC, bestowing cultural status on the owner (Brown, 2009). This is achieved through formal institutional means e.g awards at Shepherds meet or informally through recognition from peers (HSBA, 2021). This systems based examination of sheep in HFC is shown in a simplified form in Figure 36.

Interestingly, this connecting relationship can be reversed and run back from cultural capitals to physical capitals (Fig. 37), aligning with another aspect of Community Capital Framework, the spiralling effect of capitals starting from the socio-cultural (Emery and Flora, 2006). As highlighted

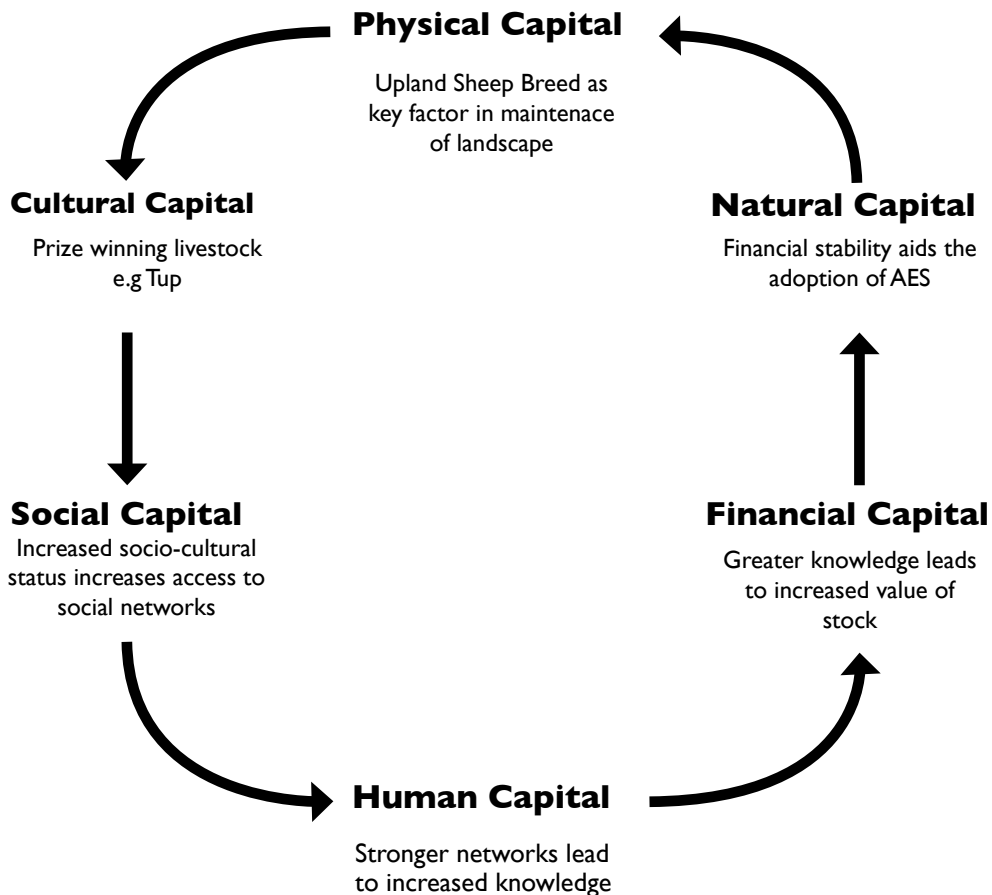


Figure 37 Upland Sheep as a socio-cultural conduit to capital interaction

above, possession of an object of significant cultural capital like a prize winning tup (breeding ram), imbues a farmer with increased cultural status (Rebanks, 2015). Cultural capital has been shown to increase farmers access to social capital, in the form of increased social networks, willingness to co-operate etc (Sutherland and Burton, 2011). Increased social capital, granted through possession of cultural capital (Tup) eases the

farmers access to human capital, particularly through knowledge sharing (Hanson and Greve, 2015). Greater levels of human capital, can then produce increased financial capital, through increased knowledge and skills, producing higher quality livestock which sells for a premium, especially breeding rams which are highly prized (Brown, 2009). Greater levels of financial capital ultimately created by this chain of capital connections, created by increased cultural capitals reduces economic marginality. Farmers who are less economically marginalised, are more resilient and able in collaboration with increased HC to diversify and take up AES, which increases their stock of natural capitals. These natural capitals increases are generally aided by the possession of correct upland grazing livestock, which brings the argument back full circle to key physical capitals of upland sheep breeds.

Although, only a simple example based on a single component of hill farm community assets, this highlights the interconnecting relationship of capital. Also, particularly the reverse argument shows the important role social and cultural capitals play in the creation and flow of capital assets through the system as a whole. A key factor only alluded to so far, is the role of socio-cultural theory in explaining the importance of social and cultural capital. Some reference has been made to theorists and their ideas but the next section will look to explore in more depth. This next section will examine the potential socio-cultural theories which could help to explain and increase understanding of the value social and cultural capitals bring to the community. Although, before making this next step, it is

important to make clear the specific relationship of social to cultural capitals being taken forward by this study.

3.4.3 Specific relationship of Social and Cultural Capitals

As alluded to earlier, this study is developing the multiple capitals framework of hill farming communities put forward by Mansfield (2019). This framework provides a clear definition of capitals, with cultural capitals forming a floating capital which permeates all aspects of the community. However, the specific relationship between cultural and other capitals is not explored in detail. This study is looking at cultural and social capitals, with the specific relationship between these an important part of the conceptual framework. Before moving forward to examine potential socio-cultural theory to support this study, the proposed relationship of social to cultural capitals must be outlined. Figure 38 shows this proposed relationship,

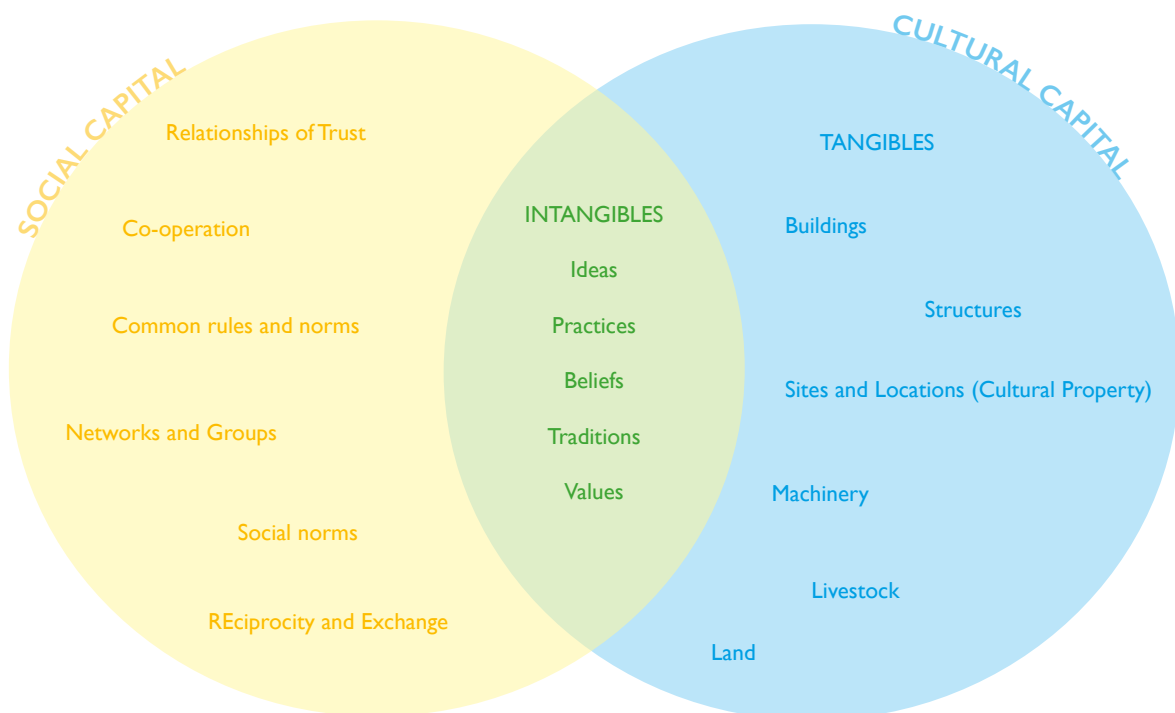


Figure 38 - Connecting relationship of social and cultural capitals within UK Hill farming

focusing on the role of intangible capitals as the bridging point between the two capitals.

This conceptualisation has social and cultural capitals inextricably linked through intangible cultural capitals (ICC). ICC is where they overlap, both capitals are responsible for the creation of ICC but also formed and maintained through the prism of ICC's ideas, practices, beliefs.

The relationship between intangible and tangible CC is strongly evidenced (section 1.7). Tangible CC in the form of traditional farm buildings, even in their contemporary use, are manifestations of the cultural activities, beliefs and practices of generations of hill farmers (Winchester, 2013). They are borne from their location both geographically and culturally, with designs utilising the local geology and reacting to the aspects, topology and cultural traditions of the farming communities which built them (Lake, 1989). The maintenance and continued use of drystone walling, creates a physical-cultural connection between farming generations, with walls built by a farmer's ancestors still an active part of their day to day farming life (Rebanks, 2015:42-3). This cultural lifestyle and work of the community create a strong bond between them and the landscape, shaping and giving rise to the tangible manifestations of cultural capital as discussed earlier. The interplay between these two forms of capital, along with their interaction with the natural environment, culminate in the formation of the cultural landscape of the uplands (UNESCO, 2008; LDNPP, 2016).

Central to the management of this cultural landscape is the collaborative working of the community, which relies significantly on social capitals. Access to or the ability to build these social capitals appears highly influenced by Intangible CC but the relationship is currently insufficiently supported by the literature. Burton *et al.* (2005), identified that farmers who share similar socio-cultural beliefs are better placed to co-operate, trust one another etc (Burton *et al.*, 2005). While various studies highlight the role of different forms of cultural capital in social relations, none specifically support the role of intangible cultural capital as defined in this study (Burton, 2004; Sutherland and Burton, 2011). Thus, while the relationship between social capitals and cultural capitals in Figure 38 may seem plausible, it currently lacks empirical evidence for the specific connection between social capitals and intangible cultural capitals.

This study aims to bridge this knowledge gap and identify a socio-cultural theory that can provide support in exploring the relationships of capitals depicted in Figure 38. The chosen theory should support the idea that intangible cultural capital in the form of ideas, beliefs, practices, and traditions is interconnected with social capitals, such as networks, trust, and cooperative action. Additionally, it should embrace an interactional model that views social and cultural aspects as overlapping and interlinked. Specifically, the selected socio-cultural theory should aid in examining the micro relationship between intangible cultural capital and social capitals, providing evidence to validate the model of these relations outlined in Figure 38. The following section aims to achieve this objective by exploring existing socio-cultural theories, especially those related to

farming studies, that can contribute to the development of a conceptual framework for exploring the value of social and cultural capital within the hill farming community.

3.6 Socio-Cultural theory

Socio-cultural theory encompasses a wide range of ideas and theorists (Elliot, 2016). However, this study has narrowed its focus to the theories utilised in existing socio-cultural research within the field of agriculture. This section will begin with a concise overview of the explored theories, along with the rationale for selecting a specific theory. Subsequently, it will provide a more in-depth analysis of the chosen theory, emphasising its relevance to farming studies and its applicability to the subject of this research.

3.6.1 Theory in farming studies

The most frequently employed socio-cultural theory (SCT) in farming studies is Bourdieu's theory of capital. Bourdieu's framework proves useful for exploring farming communities, as many studies have effectively used it to understand the interactions between different capitals (Riley, 2016). Moreover, Bourdieu's approach is well-suited for investigating how cultural capitals contribute to the development of social capital, and how this combination enables access to other forms of capital (Bourdieu, 1984; 1991).

However, a major drawback of the Bourdieusian approach is its limited flexibility in providing voice to participants, particularly in small-scale qualitative studies (Sutherland, 2013). This becomes a significant concern when exploring culturally formed ideas unique to a hill farming community. Therefore, it becomes necessary to find ways to address these issues if Bourdieu's framework is to be used effectively. Another challenge arises from Bourdieu's distinct definitions and meanings of social and cultural capital, which differ from those used in existing literature on hill farming communities. This disparity has the potential to create a complex and confusing model if both approaches are integrated into this study.

The second most frequently used SCT in farming studies is Symbolic Interactionism, a socio-cultural theory that emphasises the formation of individuals and society through social interactions (Quist-Adade, 2019). In the context of farming studies, Symbolic Interactionism has been employed to explore micro-level processes of shared communication within farming communities (Silvasti, 2003a) and to investigate ideas related to shared socio-cultural identity (Burton and Wilson, 2008). While Bourdieu's framework has been utilised to develop a "practice-based development of cultural significance," Symbolic Interactionism has been applied to study the "cultural transmission" of socio-culturally formed ideas of self (Burton *et al*, 2021: 81). Critics of Symbolic Interactionism often point to its narrow focus on micro-level interactions of social transmission (Reynolds, 1993). However, this limitation does not pose a problem for this study, as its central aspect is to better understand the micro interactions between social and cultural capitals.

In recent debates surrounding the study of socio-cultural factors in farming, both Bourdieu's theory and Symbolic Interactionism have been criticised for only offering partial perspectives (Burton *et al*, 2021). Consequently, there have been calls for alternative theories that can provide a more comprehensive analysis. The following section will explore these alternative theories before reaching a conclusion on the most suitable SCT for this study.

3.6.1.1 Alternative Socio-cultural theories.

The previously discussed socio-cultural theories offer specific tools to examine the interactions of social and cultural aspects within communities, however, they may not fully encompass the wide range of community capitals. In recent years, some farming studies have started to adopt non-representational research, which brings together a diverse range of theoretical perspectives (Vannini, 2015). Two notable non-representational frameworks that have emerged are Social Practice Theory (SPT) and Assemblage thinking (Burton *et al.*, 2021). This section will briefly explore the application and potential benefits of these "new" theoretical approaches in the context of farming studies.

3.6.1.2 Assemblage thinking

Drawing inspiration from the influential work of Deleuze and Guattari (1988), assemblage thinking has gained prominence as a valuable

analytical tool across various disciplines, particularly in geography (Allen, 2011; McFarlane and Anderson, 2011). Assemblages are inherently complex but can be described, in their simplest form, as a collection of relations between diverse entities working together (Müller and Schurr, 2016: 218). However, this simplicity is challenged by terms like 'contagions', 'epidemics', 'sympathy', and 'symbiosis', which permeate the theory, adding to its complexity (Muller, 2015).

In agricultural research, there is a growing interest in assemblage ideas, particularly among scholars exploring non-human actors in farming and the intricate interactions within global food systems (Lewis *et al.*, 2016; Le Heron *et al.*, 2016). Similarly, assemblage thinking is being used to reframe discussions about rural places in an increasingly globalised world (Jones *et al.*, 2019; Woods, 2015). Woods (2015) builds on De Land's work on Assemblage to consider rural restructuring as a process of reassembling places through the substitution of material and expressive components, accompanied by reterritorialisation and recoding (Woods, 2015: 34–35). Whilst, Forney *et al.* (2018) have utilised assemblage to envision agri-environmental governance as an interactional process involving diverse human and non-human actors.

Current uses of assemblage thinking indicate its potential as a valuable tool for analysing large, complex interactional systems within a rapidly changing world (Jones *et al.*, 2019), a description that broadly fits the context of hill farming communities (Mansfield, 2019). However, assemblage thinking might lack the micro-analytical tools necessary to research the specific actions of social and cultural capitals required for this

study. Nevertheless, this approach could offer valuable insights into the complex webs of modern food and public good agenda changes within the context of hill farming (DEFRA, 2018; 2021). Alternatively, Social Practice Theory, which will be discussed next, may provide a more focused research tool with a socio-cultural emphasis.

3.6.1.3 Social Practice Theory (SPT)

While less commonly utilised in agricultural studies, Social Practice Theory (SPT) has been integrated into a study of farming fertilisation practices (Huttunen and Oosterveer, 2017). SPT shifts the focus of sociological studies from individual decision-making moments to the actual "doing" of social practices (Shove and Warde, 2002). Individuals are no longer seen as central to social production but rather as carriers of social practices (Reckwitz, 2002). Consequently, engaging with practices allows individuals to understand the world and develop a sense of self (Warde, 2005). Although SPT shares some similarities with Symbolic Interactionism, its philosophical background differs significantly.

Similar to SI, SPT lacks a unified approach (Schatzki, 2001: 2), leading to debates about the specific elements and components that constitute a practice (Shove and Pantzar, 2005). The broadest consensus suggests that the main theoretical backbone of the concept draws from the ideas of Bourdieu, Giddens, Foucault, Garfinkel, Butler, and Latour (Reckwitz, 2002). These ideas encompass Bourdieu's "praxelogy" developed in his *Outline of a Theory of Practice* (1972), Giddens' practice theory within his

Theory of Structuration framework (Giddens, 1999), and Foucault's analytical framework on the relations of bodies, agency, and knowledge considered as "praxeological" (Foucault, 1984). All of these align with the broader objective of cultural theories, seeking to explain and understand actions based on the symbolic structure of meaning (Reckwitz, 2002). However, in this idealised model of practice theory, the individual peculiarities of these authors are ignored in favour of a uniform programmatic character.

In a study of the specific nature of socio-cultural relations within a community, this homogenisation of the above authors' ideas can be considered a disadvantage. While SPT could be a useful tool to explore socio-cultural practices, without the specific analytical elements of a theorist like Bourdieu, it would lack some valuable techniques for directly exploring social and cultural capitals. Social Practice Theory is intriguing for various socio-cultural studies, but it may not be the most suitable approach for this particular study, which seeks to align with the specific nature of social and cultural capitals.

3.6.2 Socio-cultural theory selection

In conclusion, the above sections have delved into various socio-cultural theories to find the most suitable framework for exploring the value of social and cultural capital within hill farming communities. The commonly used theories of Bourdieu's theory of capital and Symbolic Interactionism have been assessed for their strengths and limitations. Bourdieu's

framework proves effective in understanding the interactions between different capitals and their role in accessing other forms of capital. However, it falls short in providing a voice to participants and reconciling the definitions of social and cultural capital with existing literature on hill farming communities. On the other hand, Symbolic Interactionism's focus on micro-level interactions aligns well with the research's objective of understanding the interplay between social and cultural capitals.

Furthermore, the study has explored alternative non-representational theories, such as Assemblage thinking and Social Practice Theory, which offer broader perspectives and have been applied in various agricultural studies. Assemblage thinking shows promise for analysing complex interactional systems, particularly within rapidly changing global food systems. However, it may lack the micro-analytical tools required to investigate the specific actions of social and cultural capitals in this study. Conversely, Social Practice Theory, while less commonly used in agricultural studies, presents a focus on the "doing" of social practices and aligns with the researches aim to understand socio-cultural relations within the community.

Moving forward, this study will adopt Symbolic Interactionism as its chosen socio-cultural theory (SCT). In comparison to the other theories discussed, Symbolic Interactionism offers a unique combination of robust ideas that specifically focus on the micro interactions involved in cultural transmission. This aspect makes SI a more suitable approach to explore the interactions of capital within the hill farming community compared to Bourdieu's framework of practice, which could potentially lead to

confusion over capital definitions. While Assemblage thinking and Social Practice Theory provide intriguing analyses of large and complex interactional systems, they lack the specific analytical power of SI to examine interactions in intricate detail. Consequently, SI is better equipped to address the research objectives and will be further explored in the following section, along with its application in existing studies of socio-cultural aspects within farming.

3.6.3 Symbolic Interactionism

Symbolic Interactionism (SI) is a form of socio-cultural theory which focuses on the formation of the individual self, and society at large through social interaction (Quist-Adade, 2019). Its philosophical origins lie in pragmatic philosophy, particularly influenced by Mead's ideas on social action (Powell, 2013). The framework encompasses various theorists who draw inspiration from Mead, and the term "Symbolic Interactionism" was coined by Blumer, whose concepts greatly influence modern thinking in this area (Charmaz, 2017).

Mead's approach integrated individuals' subjective states into the ongoing flow of social action (Powell, 2013: 5). This led to the understanding that an individual's inner consciousness or self is intrinsically connected to social interactions within society (Reck, 1964). In essence, Mead proposed that the self is constructed through genuine social interactions with others rather than being a mere response to internal stimuli. Thus, an individual's self or identity is shaped through communication with both oneself and

others, a process that can only be accomplished through meaningful communication. For such communication to occur, individuals and others must engage in social interactions using meaningful words, gestures, and actions that are mutually understood (Joas, 1993). As a result, specific communities or subcultures develop distinct shared symbolic meanings, facilitating effective communication and mutual comprehension (Cast and Burke, 2002).

Blumer's interpretation and expansion of Mead's ideas on culture and society are highly relevant to this study, as they provide definitions of cultural and social capitals that align with those used in Hill farming literature (Mansfield, 2019). According to Blumer (1969:6), his socio-cultural theory views:

"Culture as a conception, whether defined as custom, tradition, norm, value, rules, or such like, is clearly derived from what people do. Similarly, social structure in any of its aspects, as represented by such terms as social position, status, role, authority, and prestige, refers to relationships derived from how people act toward each other."

This position closely aligns with the definitions of social and cultural capitals outlined in the literature review and utilised in existing HFC literature (Mansfield, 2015; 2019). Moreover, Blumer's work provides a clear understanding of 'objects' and their role in socio-cultural community formation and group action. He categorises objects into three types: a) Physical objects (e.g., trees, houses), b) social objects (e.g., farmers, friends), and c) abstract objects (e.g., principles, ideas, norms) (Blumer

1969: 10). The meaning of these objects arises from the way people define them during interactions, creating a mutual connection. Such connections are particularly strong among communities with close spatial relationships or unique lifestyles; for these social groups to understand the actions of individuals within them, it is essential to identify their world of objects and meanings (Moon and Blackman, 2014). Blumer (1969: 12) emphasises:

"Human group life on the level of symbolic interaction is a vast process in which people are forming, sustaining, and transforming the objects of their world as they come to give meaning to objects."

In a community where individuals share a unified socio-culturally formed meaning of objects, they not only communicate effectively but also align their actions to function as a cohesive group (Blumer 1969: 17). By understanding how meaning and actions are interpreted by other group members, individuals can engage in behaviours that position them within the group and grant access to group action (Cast and Burke, 2002). The micro processes of forming object meaning and mechanisms for group action have been developed by several theorists and applied in various agricultural studies, this will be explored in the following section.

3.6.4 Symbolic Interactionism with farming studies

The examination of two crucial components of Symbolic Interactionism (SI), namely shared meanings of objects and their influence on identity development, has been undertaken in the context of farming studies using

the perspectives of two SI theorists. One of these theorists is Goffman, whose dramaturgical concepts, particularly cultural scripting, have been employed to investigate the intricate processes of shared communication within farming communities (Silvasti, 2003). Additionally, Stryker's identity theory has been utilised to delve into the concepts surrounding shared socio-cultural identity within these farming communities (Burton and Wilson, 2008). This section will delve into both these theories and their application in the context of farming studies.

3.6.4.1 Cultural Scripting

Cultural scripting is defined within SI as a process through which individuals *'are subconsciously and consciously conditioned to follow rules and adapt values and behavioural patterns determined by society, its sub cultures or ethnic/socio economic group'* (Simon and Gagnon, 1984:2). A good example would be the parent-child relationship, a parent provides an example of behaviour which contributes to the child's formation of cultural meaning and position within a sub culture. Thus, meanings become internalised as cultural scripts which influence future values and behaviour (Silvasti, 2003a). Scripts are a form of mental map, they organises behaviour along culturally and socially defined lines of appropriate action (Money, 1993). Goffman argues that even though much everyday interpersonal communication feels improvised, many elements are actually a script, meaning people lean on socio-culturally curated or learned responses to particular situations (Goffman, 1971).

The first use of cultural scripting was Silvesti's (2003a) study of Finnish farmers cultural relations to the environment. This study explored the connectedness of culture to social structures and models of production (Allardt, 1990). The selection of an SI approach was born out of a need to "*describe various components of the commonly shared behavioural patterns and cultural models that are distinctive to farmers*" (Silvesti, 2003:144). The findings of this study were that Finnish farmers cultural scripts were traditional in nature and the continuity of the family farmers was a central script within farmers communication (Vanclay *et al.*, 2007). Although, a new technique to farming studies the results aligned with many existing sociological studies on the subject (Segalan,1983; Salamon 1995). Cultural scripting however provided a mechanism through which to understand how these core cultural ideas are communicated and re-enforced through day to day relations (Vanclay *et al.*, 2007).

Following on from this initial exploration a number of studies built on the work, looking to clarify and expand the concept of scripting in farming. Definitions of the nature of scripting were refined:

"Scripts are cultural models combining cultural, ideological and social factors at the level of society, and are reinforced by personal experience, knowledge and belief at the individual level."

(Vanclay *et al.*, 2007:9)

Whilst the value of scripting was aligned with existing ideas on the use of stories and parables within cultural communication:

“Together, they explain the powerful normative dimensions that govern farming. The strength of this socio-cultural basis of farming has major implications for conceptualising the process of change in farming”

(Vanclay *et al*, 2007:4)

Further refinement of these ideas has built a clearer conception of the role and nature of scripts in farming communities. To paraphrase Vanclay and Enticott (2011), a script is a culturally shared expression, story or shared line of argument which is used in an appropriate or expected way within a particular social context. The authors of the study also suggest four types of scripts commonly utilised by farmers :

1. a socially perceived routine or expected sequence of events;
2. a catch-phrase, metaphor or allegory that is frequently recited in response to a particular issue or situation
3. a mini-story, narrative or parable;
4. a commonly used line of argument that is widely invoked in response to a particular issue or situation

An additional element to this refinement of the understanding of scripting has been the recognition of regionality, *‘Scripts respond to local environmental constraints and to other contextual and sociocultural factors and are therefore likely to be locally specific’* (Vanclay and Enticott, 2011:260). They are also noted to have an important role in farmer identity

formation, '*The existence and use of scripts are important aspects in establishing identity and belonging at individual and group levels*' (Vanclay and Enticott, 2011:260). Although, this study highlights the regional nature of scripting in farmers' communication and connections activities in Australia and UK, alternative studies have found very similar results in various farming communities within other regions of the developed world (Mooney, 1988; Bell, 2010).

The use of cultural scripting within farming studies may only be limited but the results are intriguing. Cultural scripts and other forms of socio-cultural narrative communication provide the researcher with a measurable mechanism of observing the direct sharing of cultural understanding within farming communities (Vanclay *et al*, 2007; Silvesti, 2003). Of particular interest within this PhD study, is the role scripts play within the formation and support of individual and group identity amongst regional farming communities (Vanclay and Enticott, 2011). Thus, by reciting scripts, group members can communicate on a specific cultural level with other group members, showing they are part of 'the club' (Becker, 1963). Although, not couched in these specific terms, numerous examples of this 'cultural communication' can be seen within the hill farming literature (Burton *et al*, 2004). The next subsection will look at another SI variation which explores this aspect of socio-cultural communication, namely identity theory and its use in farming studies.

3.6.4.2 Identity Theory

Identity theory was born out of Stryker's more structured reading of SI, where focus still remains on the individual but recognises that individuals exist within social structures (Burke, 2009). Although, in reality identity theory is only a 'partial theory' designed to build on traditional SI making a more precise tool to guide research in social psychology (Stryker, 1987). It followed a number of other conceptualisations of the late 20th century in viewing society as a construct of the actions of individuals (Coleman, 1990), believing individuals relationships to the group or social network depended of their observation of particular socio-cultural shared views and meanings (Stryker and Serpe, 1982). Through this shared display of significant symbolic understanding, the individual can expect to receive social affirmation and group belonging (Cast and Burke, 2002).

The first use of identity theory in farming was in Burton's (2004) studies of the social symbolic values of farmer behaviour. This study leaned strongly on both Meads and Stryker, arguing that farmer behaviour was directly linked to self and group identity (Burton, 2004; Stryker, 1980). Whilst also following Meads concepts of symbolic meaning, "*Membership of the group in the eyes of others is developed and maintained through displaying commitment to the same symbolic meanings through, for example, financial investment in significant symbols or the display of socially appropriate behaviour*" (Burton, 2004:197). Chiming with other studies, which argue the advantage of group membership lies in a stable framework, within which to understand the world through shared meanings. interpretation and understanding of objects (Douglas, 1995).

Burton's (2004) main findings were the strong role of the land and farm in the formation of farming families identities, linking this to ideas of 'self-referent' labels through which to display self-image and direct social action (Stryker, 1980). This was seen with farmers use of their farm's name or specific regional location as a form of identification within the community (Burton, 2004: 207). These findings appear to be supported in other farming studies, which found the landscape or specific practice of farming, provided a rich focus for the creation of shared cultural meaning (Dalby and Mackenzie, 1997; Gray, 1999). The secondary finding of the study, suggests that identity would be critical in the adaptation of farming communities to change, arguing that if symbolic meaning behind preferred behaviour could be adapted then community action would follow (Burton, 2004).

A second major study using Identity theory, builds on the contribution of social structure to identity with the introduction of Giddens's theory of structuration (Giddens, 1986; Burton and Wilson, 2006). This study develops previous work, relating the construction of rural identities to shared symbols and how identities are multiple and negotiable (Ray, 1999; Little & Panelli, 2003). With the integration of Giddens the authors argue that the traditional image of agricultural identities, as static or homogenous were incorrect, and in fact are set within a dynamic interactive dialect, between the individual and society (Giddens, 1999), for example, changes to farmers 'productionist' identity after taking part in agri-environmental schemes (Cusworth, 2020).

An additional argument raised within this study was the role of the 'other' in identity theory (Saugeres, 2002). This theorisation brings in a element of Goffman, as it sees 'role' as critical in identity relation to the 'other', the role played by self doesn't do this in isolation but generates meaning through its reduction to the counter role of the 'other' (Burke and Tully, 1977). As such, Goffman theorises that the bridge between society and the individual is the playing out of a ritual role (Manning, 1992). This 'role' is defined as the activities an individual engages in, to act out the the normative demands made upon their position in relation to socio-culturally formed ideals (Goffman, 1971:75). Thus, roles are '*the typical response of individuals in particular position*', with these positions being formed in relation to the specific situation (Goffman 1971: 82). The inference of this concept is that an individual, for example, a farmer will 'play out' the role of a farmer as prescribed by their socio-cultural community, but will adapt this dependant on the 'others' they interact with. These interactions are not however seen to exist in a neutral power field, people possess different access to socio-cultural knowledge which unbalances the power dynamic in any social relation (Lyons and Cromby, 2005).

Farmers' 'role' identity seems to play out against the counter role of a stereotyped urban dweller (McEachern, 1992). The inclusion of Giddens goes someway to evidencing a means through which this antagonism with the 'other' can be resolve (Giddens, 1991). The theory of structuration argues that structural influences, such as institutions or formalised social interactions are critical in moulding identity (Gidden, 1999). So Burton and Wilson (2006) argue that the change in farmers views of the 'other', for

example through engagement in formalised conservation projects, is born out of the structured social interactions with counter role players.

In conclusion, SI is a socio-cultural theory which explores the formation of the individual self and society at large through social interaction (Quist-Adade, 2019). This is achieved through utilising meaningful words, gestures and actions, of which both parties shared a common understanding (Joas, 1993). SI theory aligns well with the social and cultural capitals definitions outlined in the literature review, and utilised in existing HFC literature (Mansfield, 2015; 2019)

SI has been used in a number of farming studies, with the concepts of cultural scripting and identity theory likely to support the aims of this study (Silvasti, 2003a; Burton, 2004). Of particular interest within this study, is the role scripts play within the formation and support of individual and group identity amongst regional farming communities (Goffman, 1971; Vanclay and Enticott, 2011). Supported by Identity theories's belief that individuals' relationships to the group or social network, depended of their observation of particular socio-cultural shared views and meanings (Stryker and Serpe, 1982). Through this shared display of significant symbolic understanding the individual can expect to receive social affirmation and group belonging (Cast and Burke, 2002; Burton, 2004). In the next section these concepts of SI will be combined with ideas earlier identified in MCCF, forming a conceptual framework model for this study.

3.7 Conceptual Framework Diagram

Given the focus of this study on the significance of cultural and social capital, it is crucial to develop a testable conceptual framework aligned with this objective. The examination of relevant literature and analysis of the multiple capitals framework theory emphasise the essential role of cultural and social capital in shaping group identity and fostering collaborative practices. The proposed framework aims to specifically illustrate how socio-cultural identity is formed through the interaction of cultural and social capitals, viewed from a symbolic interactionist perspective. Additionally, the diagram expands on the concept of multiple conceptual capitals frameworks by exploring the consequential effects of identity formation on group membership and access to various capitals.

The framework aligns with the principles of Symbolic Interactionism, suggesting that intangible cultural capitals, such as ideas, practices, traditions, and values, are developed, validated, and adapted through social interactions with others (Throsby, 1999; Mansfield, 2019; Blumer, 1969). These social interactions are facilitated by social capitals, represented by relationships of trust, common rules, norms, and more (Emery and Flora 2006; Mansfield, 2019). For farmers in the HFC, this interactional process leads to the formation of a shared cultural identity based on the mutual understanding of symbolic language and shared meanings of objects (Meads, 1967; Goffman, 1971; Blumer, 1969). Consequently, this shared cultural identity becomes the basis for group membership and access to the

group's collaborative activities, which in turn provides access to a wide range of capitals within the system (Cast and Burke, 2002).

Importantly, this process is not unidirectional, and other capitals, particularly those embedded in manifestations of cultural capital, also contribute to socio-cultural identity formation. These feedback loops can occur in various ways, such as through ownership or creation of tangible cultural capitals, like maintaining key components of the cultural landscape or possessing culturally significant livestock (Rebanks, 2015). Moreover, the development of specific cultural human capital, such as cultural knowledge related to upland livestock breeding and landscape management skills, plays a role in shaping identity (Burton *et al.*, 2005). Financial capital can also impact cultural identity, as individuals may use it to acquire items of cultural significance or status (Sutherland and Burton, 2011). Additionally, the phenomenological practices of living within the cultural landscape or actively contributing to its maintenance profoundly influence farmers' identities (Mansfield, 2011).

This conceptual framework diagram, labelled as Figure 39, is aligned with existing hill farming capitals frameworks (Mansfield, 2019). The framework explores the micro interactions between intangible cultural capital and social capital, viewed through the lens of Symbolic Interactionism (Blumer, 1959). Furthermore, it incorporates elements of tangible cultural capitals into the process, considering their manifestation across a broad spectrum of capitals. By doing so, the framework builds upon existing conceptions of social capitals as key contributors to community sustainability, while acknowledging the gatekeeping role of culture in group identity formation (Emery and Flora, 2009; Burton, 2004). The study will therefore explore evidence of the role played by both tangible and intangible cultural capitals, along with social capitals, in creating this value within the context of hill farming communities.

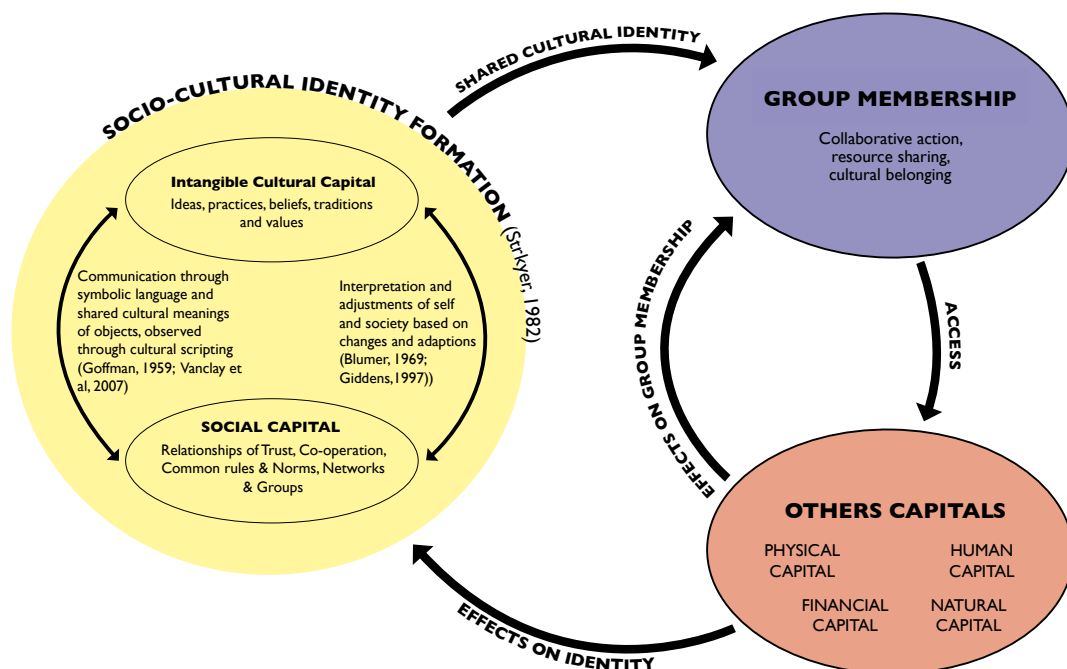


Figure 39 Conceptual Framework Diagram for the formation of socio-cultural identity

In conclusion, this chapter has thoroughly explored the conceptual landscape of the study. Firstly, it provided an overview of the current understanding of Hill Farming Communities (HFC) as a multiple capital framework. Secondly, it probes deeper into the interrelated and interactive nature of the various capitals within this framework. Of particular focus was the examination of the interconnectedness between social and cultural capitals, as depicted in Figure 38. This investigation of the Multiple Capital Framework (MCCF) and its relation to socio-cultural capitals underscored the necessity of adopting a socio-cultural theory to support the study.

Section 4 involved an analysis of potential socio-cultural theories, ultimately selecting Symbolic Interactionism as the most suitable fit. Subsequently, an extensive exploration of Symbolic Interactionism and its applications in farming studies was undertaken to identify relevant aspects of the theory to be incorporated into this study.

The culmination of these efforts resulted in the development of a conceptual framework, which posits the value of social and cultural capitals within HFC. Specifically, the diagram highlights that this value lays in the creation of a shared cultural identity which acts as a key to unlock the community's capital assets for both individuals and the group as a whole. Moving forward, the next chapter will explore potential methodological approaches to provide evidence for this conceptual framework. These approaches will aim to address the study's aims and objectives (Chapter 1), which were derived from the insights gained in the literature review and conceptual framework sections outlined above.

Chapter 4: Methodology

The previous chapter finished with the formulation of a conceptual framework, which explores the value of cultural and social capitals to hill farming communities. In this chapter the method used to test the framework will be laid out. First, the rationale for the methodological approach will be explored. Second, the specific delivery of this method will be discussed. Third, the data outputs and how they were analysed will be examined. Finally, ethical considerations will be raised and discussed.

4.1 Methodology rationale

The object of the method was to test the CF diagram discussed in previous chapter. Testing of this diagram will require the collection of two forms of data. Firstly, relational data concerned with the contacts, ties and connection of social capitals (Allen, Terry and Allen, 2005). Secondly, attribute data relating to cultural capitals in the form attitudes, options and behaviours (Vlami *et al.*, 2017).

Originally, the relational data, was to be collected through Social network analysis with supporting semi-structured interview questions (Scott, 2017). The attribute data was to be collected utilising social constructivist methodologies in line with the symbolic interactionist core of the framework. Namely, ethnographic participant observation and unstructured interview techniques (Corbin and Strauss, 2008; Charmaz, 2014).

How this mixed methodology would have collected data on the varying components of the CF diagram are outlined in in Table 1. However, before preceding with this method a pilot study was undertaken to assess its suitability and effectiveness.

Three parts of mixed methodology	Elements of conceptual framework they explore
Participant observation Initial Events	Intangible cultural capital cultural manifestation in other capitals symbolic language and shared cultural meanings collaborative action
Semi structured Interview	Intangible cultural capital symbolic language and shared cultural meanings cultural manifestation in other capitals collaborative action
Social Network Analysis	Group Membership social capitals cultural manifestation in other capitals collaborative action

Table 1 - Breakdown showing what elements of CF diagram will be explored by mixed methods

4.2 Pilot study

To evaluate the initial approach, a preliminary study involving three participants was carried out. One participant was selected from each of the three distinct hill farming regions, in accordance with the sampling method detailed in the corresponding section. Each participant was chosen as a central representative in their respective area, capable of providing

substantial insight into the potential effectiveness of the method as a valuable source of comprehensive data.

During the three initial pilot interviews, it became evident that the participants did not find the Social Network Analysis (SNA) engaging. The farmers exhibited resistance towards participating in the SNA activity, and those who did engage provided generic and non-committal responses. Further investigation revealed their unwillingness to formalise their connections with other group members, and their desire to avoid any criticism of fellow group members. The SNA results merely indicated equal connections to all members of the broader community, suggesting willingness to collaborate and share resources with anyone. However, subsequent pilot ethnographic activities and interviews revealed that this was far from the actual situation. The informal data collection activities revealed nuanced social relationships among farmers, characterised by varying degrees of engagement and bonds that seemed to align with socio-cultural divisions. These complex social relations did not align with the oversimplified SNA outcomes.

The insight gained from the pilot study suggested that SNA data collection portrayed the social connections farmers believed they should exhibit, rather than presenting a realistic depiction. Additionally, farmers felt uneasy when asked to participate in the SNA exercise, contrasting with their comfort during open, semi-structured interviews. These interviews proved to be a pleasurable experience, leading to quick comfort and willingness to engage with the lines of inquiry.

From the initial interviews and ethnographic activities conducted in the pilot phase, participants clearly expressed preferences for certain data collection methods. Instead of formal activities like SNA, they indicated a strong preference for conversations and practical demonstrations with the researcher. Semi-structured interviews conducted in familiar settings, such as their homes or neutral venues like livestock auctions, were deemed most effective. The pilot participants also highlighted a significant challenge to data collection—many hill farmers were apprehensive about engaging with academic research. Consequently, it was crucial for the researcher to be sensitive and adaptable, meeting farmers on their own terms and in environments where they felt at ease.

Furthermore, the pilot participants recommended an increased focus on ethnographic activities for more successful data collection. They believed that working environments or familiar events would allow farmers to behave more naturally and comfortably. Additionally, since articulating certain cultural aspects was challenging for participants, observing these aspects in action would offer a more valuable avenue for data collection.

In light of this feedback, the methodology was revised. The unpopular and ineffective SNA was replaced with a significantly expanded range of participant observation activities. While the initial target of 30-40 interviews was maintained, the number of ethnographic activities was increased from 3-5 to 10-15. In practice, the researcher conducted 16 ethnographic activities, several of which were deemed socio-culturally significant by the participants themselves during subsequent interviews.

Building upon this revised approach, the following section outlines the theoretical foundations that inform the chosen method mix, and subsequently delves into a detailed discussion of the data collection process.

4.3 Theoretical underpinning of method techniques

4.3.1 Interviews

The chosen approach for conducting interviews in this study was informal and semi-structured, developed in response to feedback from the pilot study. Interviews serve as a conventional means of gathering data, particularly when researchers aim to understand participants' viewpoints or tap into their expertise (Gubrium & Holstein, 2001). Nonetheless, the methodology of interviews has not been without criticism, notably from ethnographers and conversational analysts (Alvesson, 2010; Atkinson & Silverman, 1997; Potter & Hepburn, 2012). This critique often revolves around interviews' limitations in addressing issues of power, race, and class within social research (Briggs, 2007). Some critics also question the ability of interview data to represent distinct entities (Roulston, 2010).

In response to these critiques, interviewing approaches have incorporated more constructivist elements (Corbin and Strauss, 2008, Charmaz, 2014). These interviews are not constrained by predefined question scripts but aim to elicit rich and data-dense responses (Corbin & Morse, 2003). Allowing participants ample time and space to explore their own narratives is

considered essential for generating a comprehensive dataset (Corbin and Strauss, 2008; Clarke *et al.*, 2015). Constructivist interviewers pay close attention to the interview's context and construction, focusing not only on the narrative itself but also on language nuances and pauses in data flow (Charmaz, 2014). They seek to uncover participants' definitions of language and events, aiming to perceive the world through their perspective and gain insight into assumptions, implicit meanings, and unspoken understandings (Clarke, 2005). Moreover, greater emphasis is placed on acknowledging the researcher's subjective position and biases, which are continually explored through memoing (Corbin and Strauss, 2008).

This study's approach retained the foundational structure of traditional interview techniques, employing a semi-structured set of questions (Table 2), but also incorporated aspects of constructivist methodology. This allowed participants sufficient time and space to share their narratives and facilitated an exploration of their tacit cultural meanings.

4.3.2 Participant Observation

Social constructivist methodologies aligned with the symbolic interactionist framework were used to collect attribute data through participant observation. Studies grounded in symbolic interactionism often follow an ethnographic paradigm (Allen, 2017), although a full ethnographic approach was deemed impractical within the existing framework of this study. Nevertheless, certain key techniques from the ethnographic tradition offered effective means of collecting socio-cultural data (Jorgenson, 1989).

Participant observation studies are typically shorter in duration than ethnography and have a narrower scope (Guest *et al.*, 2013). In the context of this study, this approach allowed for aspects of ethnographic investigation, such as contextual observation of cultural norms, within a more manageable timeframe (DeWalt and DeWalt, 2011). Participant observation was suitable for this study given its alignment with the symbolic interactionist perspective, as both share a pragmatist philosophical origin (Mills *et al.*, 2010).

Practically, participant observation offered two strengths for this study. Firstly, it provided flexibility in terms of the researcher's level of participation or observation, depending on the researcher's visibility (Guest *et al.*, 2013). This adaptability enabled the researcher to adjust their role according to specific observed activities, actively participating in some instances and maintaining a more distant observer role in others, such as at a shepherds meet. Secondly, participant observation offered various techniques for observing and documenting socio-cultural interactions (Mack *et al.*, 2005). However, it did not possess the comprehensive scope to solely test the central framework; therefore, it was integrated as part of a broader methods package, alongside the aforementioned semi-structured interviews.

The combination of participant observation and semi-structured interviews constituted an effective methods package, enabling the collection of a rich dataset encompassing both data on social connections and socio-cultural identity. The subsequent section will delve into the specific nature of this mixed data collection process.

4.4 Data Collection

This section provides a detailed overview of the activities undertaken during the data collection phase. It encompasses the sampling strategy, the specific data collection procedures, and an outline of the interview questions used.

4.4.1 Sampling

The initial sampling approach in this study followed a purposive method, targeting participants who would offer a representative sample based on predefined criteria (Ritchie, Lewis, and Elam, 2003). The objective of this initial approach was twofold: to ensure relevance and diversity within the sample. Since the study aimed to construct a framework for the UK hill farming community, a critical consideration was to attain a wide geographical representation. The study enlisted initial participants from three distinct hill farming communities, each located in areas with varying degrees of visibility and protection for hill farming traditions. These communities were situated in different regions within Cumbria, encompassing the agro-pastoral World Heritage site of the Lake District National Park, the nationally protected North Pennines Area of Outstanding Natural Beauty (ANOB), and the unprotected areas bordering these regions in central Cumbria.

Given the relatively insular nature of these distinct hill farming communities, the initial purposive sampling strategy aimed to recruit influential community "gatekeepers" as the first participants. These gatekeepers, identified through engagement with key breed associations

specific to each region, were pivotal in granting access to their extensive social networks within their respective communities. This approach was adopted because the literature highlighted the significance of sheep breeds as tangible cultural assets, with individuals associated with these cultural symbols often holding sway within the community and closely tied to hill farming culture (Mansfield, 2011; 2019). Moreover, farmers primarily raising specific hill sheep breeds could be readily identified as hill farmers, making them ideal candidates. The breed associations possessed information about a diverse array of hill farmers and were willing to facilitate access to their membership. The three selected spatial regions were each associated with prominent hill sheep breeds: Herdwicks in the Lake District, Swaledales in the North Pennines, and Cheviots in the borderlands (Walling, 2015).

Once an initial diverse and relevant gatekeeper sample was established, subsequent sampling was carried out through a snowballing technique. This method was effective as it leveraged the existing participants' connections, enhancing the likelihood of acceptance into the study (Cohen and Arieli, 2011). While snowballing can potentially lead to a sample that leans toward homogeneity within the existing group (Lupton and Tulloch, 2002), its application in this study actually yielded a heterogeneous set of participants. This group encompassed a range of farming systems, various gender representations, and differing age groups, providing diversity within the broader community context.

The specifics of the participant sample will be examined more comprehensively in the forthcoming chapter outlining site overviews.

Before examining those details, the subsequent sections will elaborate on the specifics of the data collection process.

4.4.2 Collection process

The data collection stage of the study was carried out between May to December 2022. The initial data collection activity was to undertake a one hour interview with the participants, within which a semi-structured interview was undertaken. This was audio recorded to avoid the need for constant note taking allowing for development of a more conversational engagement. All interviews commenced with a generic starting question designed to put participants at ease and get conversation started, this question was a variation on:

“Could you please tell me a little about your farm and farming operation?”

Followed by

“Could you tell me about any farmers that you work or collaborate with?”

Depending on the initial response to this starting questions or issues that it raised, additional questions from the semi-structured menu would be asked (Table 2).

Also integrated within the interviews were aspects taken from constructivist concepts around symbolic language and object meaning. The

Semi-structured Question Menu

Laid out in approximate order but inflexible dependant to answers
Colour coded in relation to areas of CF digram part they are testing

Why did you choice these other farmers?

What makes you want to collaborate with them?

Would you say you trust them and if so why?

Could you tell me about anything you feel you have in common with them?

Would you say you shared values or beliefs? Could you give an example

What do you admire most about Farmer X?

When and where did you last meet one of your social network?

Could you tell me what you spoke about?

Where would you be most likely meet the majority of your social network?

At what event would you be most likely to meet them its?

Do you ever visit the farm of the people in your social networks?

Could you describe the farm of one of your social networks?

When you visit what is the first thing you notice?

Is there anything on that farm you wish you had here?

Table 2 - Data collection question menu (colours relate to the areas of the CF Digram to which the questions relate)

interviewer would look to check definitions of language, double check meaning of terms used (Charmaz, 2006; 2014).

After one hour participants were told how long had passed and interview would be ceased unless they wished to continue. In the majority of cases participants wanted to continue as they were engaged by the conversation and interviews would continue for an additional 30 minutes to one hour.

These additional sections of interview either continued covering questions from the menu or topic of interest raised during earlier discussions.

Following a snowball sampling method, at the end of the interview, participants will be asked to recommend a person on their social network to interview next. Contact details for this person and a potential introduction will be requested. In some cases this was not something the participant was comfortable doing, in which case the researcher returned to the breed associations for an alternative participant.

The second part of data collection was to undertake an array of participant observation activities at an event. The events attended were those identified by participants as location for the meeting up with their social networks or events of socio-cultural significance. Initially the literature review had identified shepherds' meets as meeting both these criteria and a number of these such events were attended. However, during interviews the events participants most regularly cited as being both a social event to meet their network plus a cultural significant activity were livestock sales. Thus a significant number of livestock sales were also attended, the details of these and all events listed are illuminated in greater detail in Chapter 5.

At these events the researcher looked to act as an active guest, helping or engaging with the activities. This allowed for up close observation of social interactions but also chances for informal interviews to clarify researchers' impression of interactions (DeWalt and DeWalt, 2011). In regards to what specific phenomena were observed this study followed the guidelines laid

out by Mack *et al.* (2005), Table 3 shows the core areas for consideration. Data recording during participant observation visits was in the form of field notes, either written or audio recorded by the researcher at points during the activities. These notes were then extended and fleshed from researchers memory in the evening after events (O'Reilly and O'Reilly, 2009).

Participant Observation - Socio-cultural event
A general menu of things to observe and lines of informal interview Colour coded in relation to areas of CF diagram they are testing
Appearances - clothing, ages, vehicles,
Verbal behaviours and interactions - who speaks to who, how long, who initiates interactions, language or dialect used, tones of voice
Physical behaviours and gestures - what people do, who does what, who inter-acts and who doesn't
Objects e.g machinery, livestock - things of interest, objects people are drawn to or discuss
Sub groups- people who stick together, what they might have in common

Table 3 - Participant observation general menu

How these data and that from interview was handled will be explored briefly but before discussing that, the ethical consideration taken when collected data will be briefly outlined.

4.5 Ethical Considerations

The study's methodology and approach underwent assessment by the ethics committee at the University of Cumbria, resulting in approval. Drawing from this process and the committee's recommendations, several critical ethical principles were integrated into the methodology.

4.5.1 Interviews

Prior to engaging in interviews, explicit written informed consent was obtained from all participants, aligning with established norms in qualitative research (Wiles, 2013). This consent process was accompanied by a written overview of the study's aims and objectives, along with a comprehensive guide to relevant support networks. While the lines of inquiry did not explicitly scrutinise areas of physical or mental distress, they had the potential to touch upon sensitive issues. For instance, the study of Hill farming communities could indirectly encompass historically distressing events such as Foot and Mouth disease and Bovine TB. Moreover, contemporary concerns like community marginalisation, livelihood risks, and farmer mental health warranted careful consideration (Mansfield, 2011). In recognition of these possibilities, supplementary resources and support contacts were provided to participants.

Safeguarding the well-being of participants stood as a paramount concern, in keeping with established qualitative research ethics (Byrne, 2016). Every participant was assigned a pseudonym, either randomly generated by the researcher or chosen by the participant themselves. Furthermore, any personally identifiable information was either redacted or altered to ensure anonymity within the close-knit community.

Given the small and marginalised socio-economic context of the community, measures were taken to safeguard the collective welfare of the community as a whole. Conscious efforts were made to prevent the inadvertent "deprivatisation" of the community (Gubrium & Holstein, 1995). Additional precautions were enacted to avoid any offence or misrepresentation of community members. This entailed sharing draft research materials with participants and, if necessary, community leaders. This provided a platform for feedback, particularly concerning culturally sensitive aspects (Ellis, 2009).

4.5.2 Participant Observation

The bulk of observational activities took place at public events, with the focus limited to observable public behaviours, spoken discourse in public settings, and interactions among individuals (Bulmer, 1982). The researcher, however, did engage with event organizers to discuss attendance and the nature of observation. The events in question were public gatherings where participants could reasonably anticipate being observed by strangers (Kinney, 2019). In situations where uncertainty existed or concerns arose about potentially intruding on individual privacy, formal written consent was sought.

When the researcher aimed to gather personal data, this was pursued through direct observation or structured interviews. This process commenced with the researcher introducing themselves, clearly stating their identity and affiliation. Subsequently, formal written consent was sought.

Any observational or interview data generated through the aforementioned means was not recorded audibly and was restricted to general notations within the researcher's field notes, recorded either during or after the event.

Finally, if specific forms of data collection, such as audio recordings or photographs of participants, were employed, formal written consent was procured.

This study adhered rigorously to ethical considerations and practices, fostering a framework of respect, privacy, and well-being for all involved. With approval from the University of Cumbria ethics committee, a meticulous approach was taken during both interviews and participant observations. This allowed the collection of ethical sound raw data, how this data was initially analysed and how this informed on going collection activities is explored briefly in the following section.

4.6 Data Analysis

The attribute data generated through interview, and participant observation was analysed using qualitative techniques. All audio recording of interviews were transcribed into qualitative analysis package NVIVO. This provided the full content of the interviews as text data, which was then analysed, and grouped to themes and codes.

The transcripts underwent comprehensive manual coding. The researcher systematically reviewed each line of interview data, assigning specific codes and themes aligned with the framework. While initially adhering to

the pre-established diagram themes, any newly emergent codes or themes were designated under their own distinct concepts. A meticulous examination of language use, term definitions, and object meanings was conducted, facilitating an exploration of the pivotal components of socio-cultural identity formation, as emphasised in the conceptual framework.

NVIVO was also employed to transcribe field notes from participant observation, which were then subjected to code and theme assignment. Memoing was an integral part of the coding process. These memos captured the researcher's reflections, emotions, and biases pertaining to the selection of particular codes and themes. This approach allowed for an insightful exploration and analysis of the researcher's perspective, contributing to the overall development of a comprehensive conceptual analysis.

Transcription, initial coding, and memoing occurred promptly after data collection, ensuring that emerging themes and ideas could be seamlessly integrated into the ongoing data collection process in an iterative manner. This strategy bolstered the study's capacity to foster evolving themes and follow up on insights originating from participants' data.

In conclusion, the thorough qualitative analysis undertaken in this study, encompassing both interview data and participant observations, exemplified a robust and systematic approach. By employing NVIVO for transcription and coding, the study harnessed the power of technology to transform raw data into meaningful insights. The manual coding process allowed for a nuanced exploration of themes, both pre-established and

emergent, while maintaining a keen focus on language nuances and symbolic meanings. The integration of memoing not only enriched the analytical process but also offered a unique window into the researcher's perspective. Embracing a dynamic and iterative approach, the study seamlessly interwove the analysis with ongoing data collection, resulting in a comprehensive exploration of socio-cultural identity formation.

4.7 Method Conclusion

In conclusion, this methodological endeavour aimed to test the validity of the conceptual framework discussed earlier. The study employed a mixed-methods approach to collect two essential forms of data: relational data pertaining to social capital connections and attribute data reflecting cultural capital aspects. To achieve this, a comprehensive data collection strategy was meticulously designed and executed, building upon lessons from a pilot study.

The pilot study played a pivotal role in refining the methodology. It revealed that while Social Network Analysis (SNA) proved ineffective and disengaging for participants, ethnographic activities and semi-structured interviews yielded valuable insights. Responding to participants' preferences, the methodology was adapted, favouring participant observation over SNA and increasing the scope of ethnographic activities. This flexible approach ensured a more natural and comfortable interaction, aligning with symbolic interactionist and constructivist principles.

The data collection process was executed with ethical sensitivity. The study secured informed consent, safeguarded participant identities, and considered the welfare of the broader community. The researcher's role as an active guest in observed events facilitated unobtrusive yet insightful data collection.

Data analysis was equally rigorous, involving qualitative techniques and NVIVO for transcription and coding. Manual coding captured nuanced themes, with emergent codes receiving their unique categorisation.

Memoing offered insight into the researcher's perspective, enhancing the analysis. The iterative nature of data transcription, coding, and memoing integrated emerging insights seamlessly, contributing to a comprehensive understanding of socio-cultural identity formation.

In summary, this methodological approach provides a thorough and ethical foundation for exploring the complex interplay between social and cultural elements in the hill farming community. By combining participant observation and semi-structured interviews, this study presents a holistic perspective that not only respects participants' preferences but also captures the intricate web of relationships and meanings that constitute socio-cultural identity.

Prior to delving into an intricate examination of data analysis and its outcomes (Chapter 6), the subsequent chapter dedicated to site overviews will present the sites selected for data collection, elaborate upon the demographic characteristics of participants, and provide a detailed account of the specific ethnographic undertakings. This chapter aims to offer a

comprehensive overview of both the participants and the collection procedures, thereby establishing a contextual framework for the subsequent in-depth exploration of the generated data.

Chapter 5 : Case Study Areas Overview

This section looks to outline the specifics of sites and participants selected within this study. First, the wider Cumbrian agricultural context will be outlined. Second, the agricultural statistics associated with three site areas will be explored. Third, the spatial location and demographic of participants with the three separate areas will be laid out. Fourth, the specific agricultural systems operated by participants and their demographic will be examined. Finally, the spatial layout and specifics of participants observation activities will be explored.

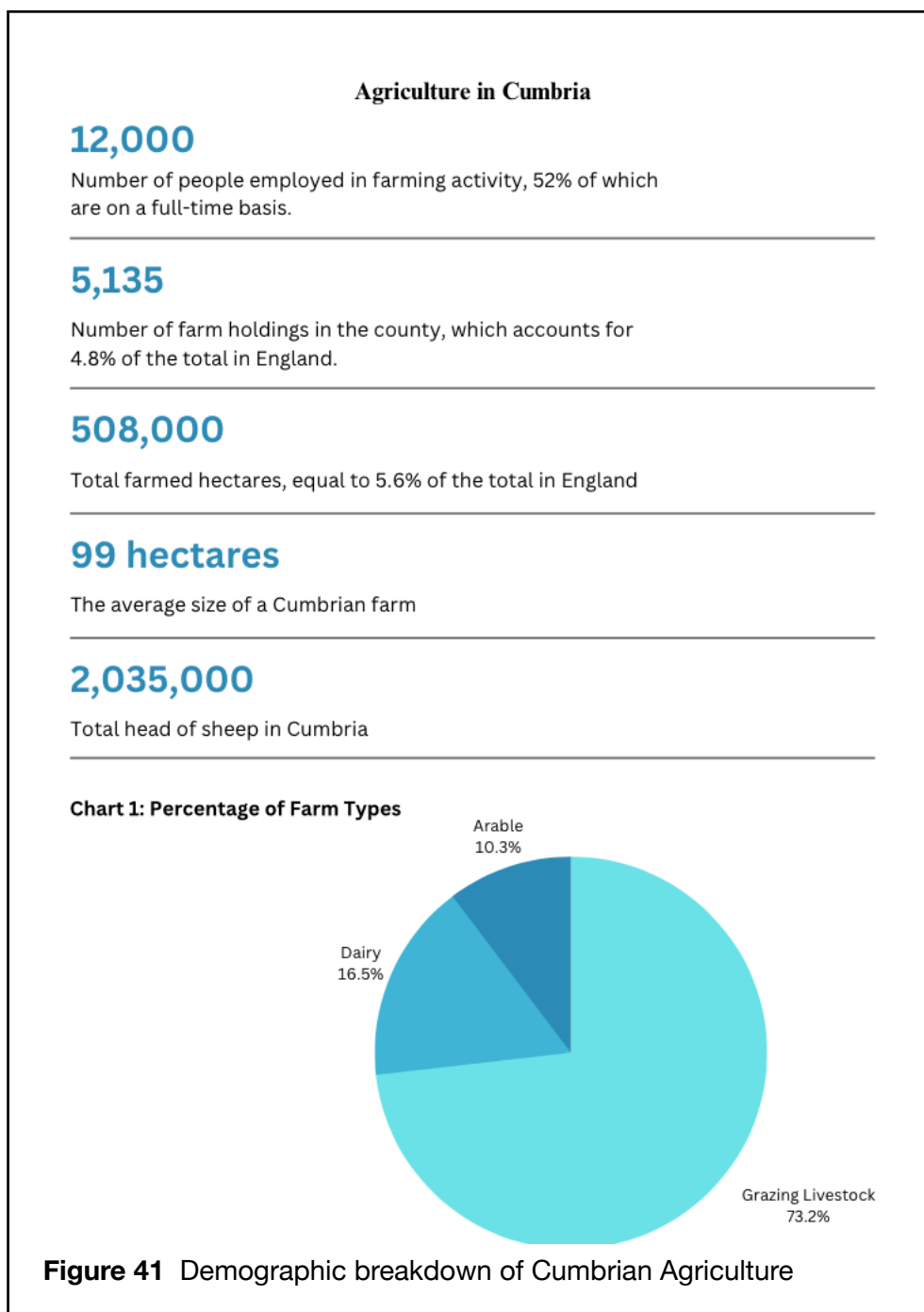
5.1 Cumbrian Context

All 3 areas sit broadly, at the time of study, within the County of 'Cumbria' (Fig. 40). From 1 April 2023 local government in Cumbria changed. The six district councils and Cumbria County Council were replaced by two new unitary authorities of Westmorland and Furness and Cumberland.



Figure 40 Mapping of three Cumbrian study sites

At the time of data collection of the 35 participants interviewed, 31 sat within the county of Cumbria. After the change of unitary authorities 4 still remain outside these areas, with 15 now in Cumberland and 16 within Westmorland and Furness. All participants fit within the broader agricultural demographic, shown in below Figure 41.



5.2 Three case study areas

This section explores the three site areas individually, looking to connected them to the wider Cumbrian context, but also highlight the differences between each area.

5.2.1 Area 1: Farming in the Lake District National Park

The Lake District is a region and National park made up of numerous distinctive valleys and lakes formed by glacial action. This has created a harsh and unique upland environment, containing 90% of the Less Favoured Areas of Cumbria (Mansfield, 2015). Figure 42 show a exemplar of a traditional Lake District farm, with a traditional farmstead set within the rugged upland landscape, populated by local livestock breeds.



Figure 42 Traditional Lake District Farm retrieved from <https://twitter.com/lakedistrictnpa/status/1536395488383094784> 8/9/23

Farming in the Lakeland area has traditionally been based around a distinctive communal system which over a long period of time has evolved a unique system involving common land management, hefting of sheep and continues the use of traditional field layouts (Winchester, 2000).

Common land remains a significant feature of lakeland farming. The Lakeland region contains the largest concentration of common land in the United Kingdom at approximately 112,900 hectares. Due to the large extents of this common land the farming system has traditionally relied on the hefting of sheep.

Hefting is a traditional way of managing animals on large areas of communal grazing, often on common land. To establish a heft the animals, usually sheep but sometimes cows or ponies, have to be kept in place by constant shepherding as there are no physical boundaries' (LDNPA, 2023).

The Lake District is England's largest National Park and UNESCO World Heritage Site. Just under 50% of the National Park is owned by 3 major landowners; the National Trust, United Utilities and the Forestry Commission. The implication of this is, many farmers in the region are tenants of these three landowners, this is particularly the case within the central Lakeland region where the National Trust owns in excess of 90 hill farms.

The most recent statistics for the LDNP, identify a total farmed area of 146,443 hectares, which are made up of 1243 separate holdings of an average size of 118 hectares (DEFRA, 2022).

5.2.2 Area 2: Farming in the North Pennines AONB

The North Pennines Area of Outstanding Natural Beauty (AONB) is a landscape of open heather moors, dramatic dales, upland rivers, woodlands and hay meadows. Sparsely populated with stone-built villages and littered with the remnants of its mining and industrial past. The area has many distinctive geology and landscape features, significant archaeology and supports important biodiversity in a range of key habitats (NP ANOB, 2023).

The total agricultural area of the North Pennines AONB 188,142 ha, with a land use breakdown laid out in Figure 43.

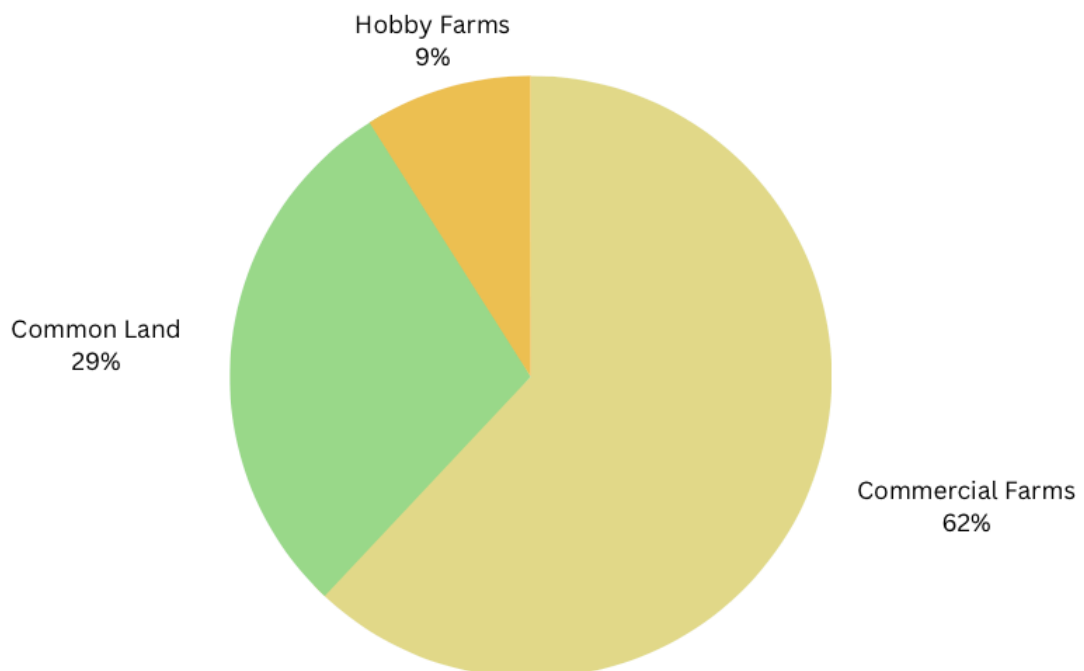


Figure 43 Percentage of Agricultural land use in North Pennines

Outlined below are some of the key land use and agricultural statistics as provided in DEFRA (2023):

- The main land uses are permanent grass (50%) and rough grazing (45%)
- 87% of land area is occupied by farms of 100 hectares or greater
- Total of 37,000 cattle
- 469,000 sheep (including 221,000 breeding ewes)
- 172,616 ha is entered into agri-environment (AE) schemes in the North Pennines AONB,
- Contains 30% of England's upland heathland and 27% of its blanket bog

5.2.3 Area 3: Farming in the North West Region

The North West Region in this study is made up of a number of agricultural areas within the central core of the County of Cumbria. The study area is made up of non designated land from Teviot dale, just over the Scottish border, down through the Eden Valley bordering the North Pennines and as far South as Howgill Fells.

Eden Valley - an alluvial valley following the Eastern edge of the North Pennines sandstone escarpment. The area is dominated by the River Eden and its tributaries. The land use is mixed agricultural with most farms operating proximately livestock systems.



Figure 44 Eden valley pastoral field system (author's image)

Howgill Fells - are a region of distinctive rounded hills situated in between the Lake District National Park to the west and the Yorkshire Dales National Park to the east. Again a mixed farming system operates but with a strong focus on livestock.



Figure 45 Howgill fells above Sedbergh (author's image)

The Cumbria- Scottish Border - contains a complex varied of geologies and land types. It is an areas dominated by mixed agriculture but with high proportions of commercial forestry and renewable energy.



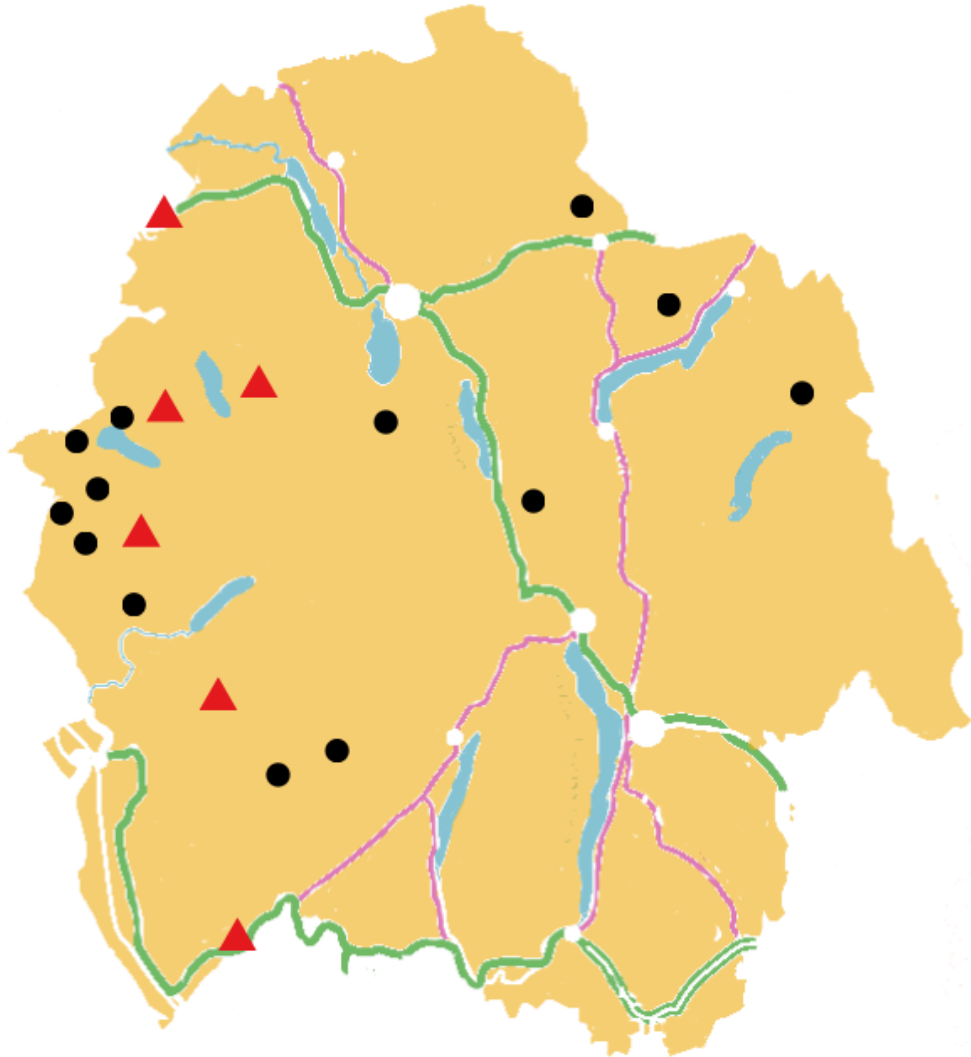
Figure 46 Typical mixed land use in Borders landscape retrieved from <https://www.scotlandinfo.eu/scottish-borders/> 28/7/23

In relation to farming demographics, the northwest area has a strong connection with the wider agricultural profile of Cumbria. The farm sizes in this region are generally consistent with the county's average, and the farms typically follow a mixed agricultural pattern. While livestock grazing is the dominant activity, there are also higher levels of mixed arable farming, with crops such as fodder beets, maize, and oil seed rape being grown.

5.3 Spatial layout of participants and activity sites

The following section contains three maps which provide information on each area's participants and their demographics. Each map provides the same data for each area, namely a map showing the spatial location of interview participants and ethnographic site activities. Followed by a breakdown of interview participants' demographics, including age, sex and farm size.

Area 1: Participants and Activity Sites



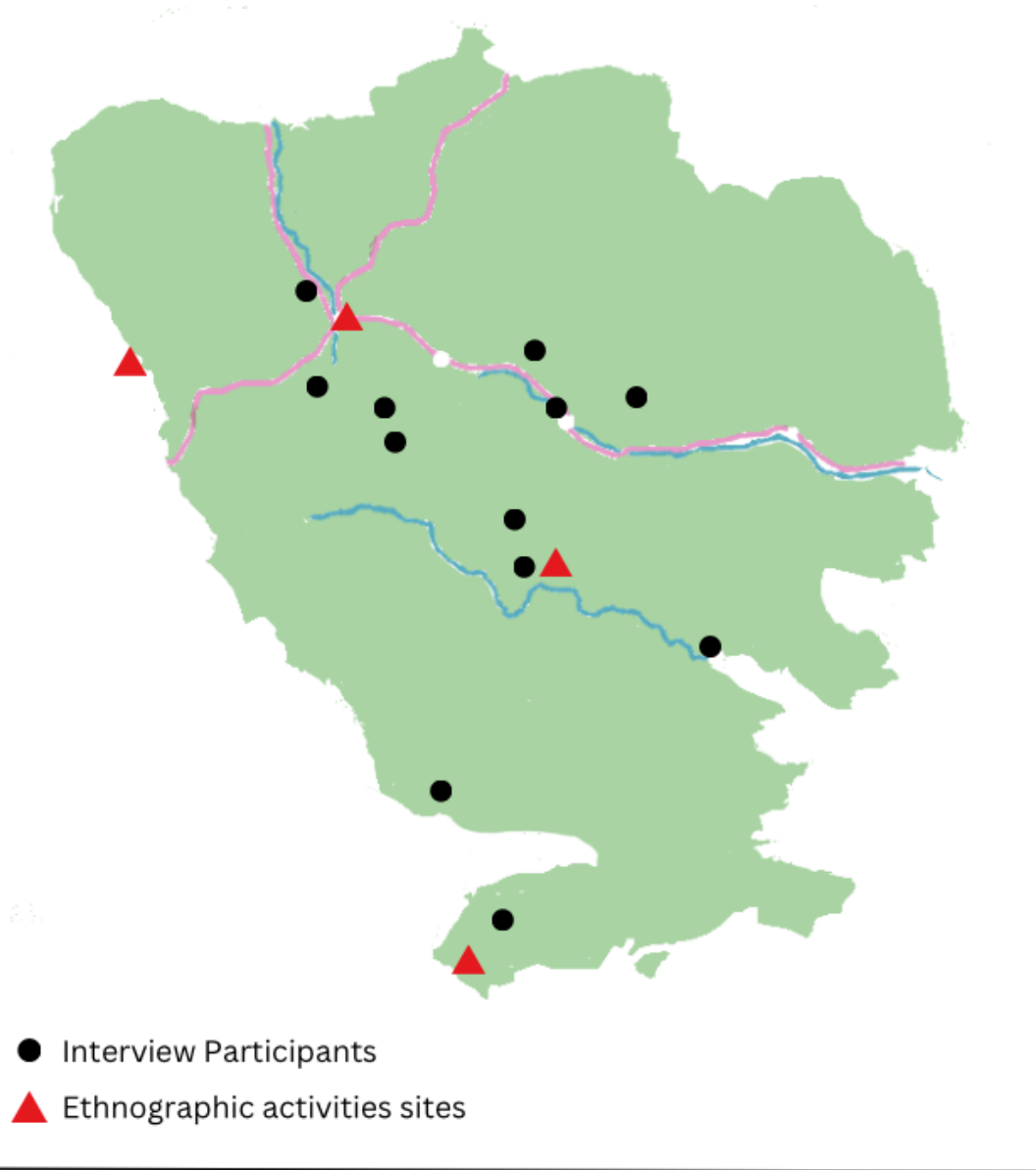
- Interview Participants
- ▲ Ethnographic activities sites

Area 1: Participant Demographics

Age Range - 39-80
Gender - 10 men 2 woman
Farm size - 40 -150 acres
Common/Moorland access - 150-400 acres

Figure 47 Lake District National Park participants details

Area 2: Participants and Activity Sites

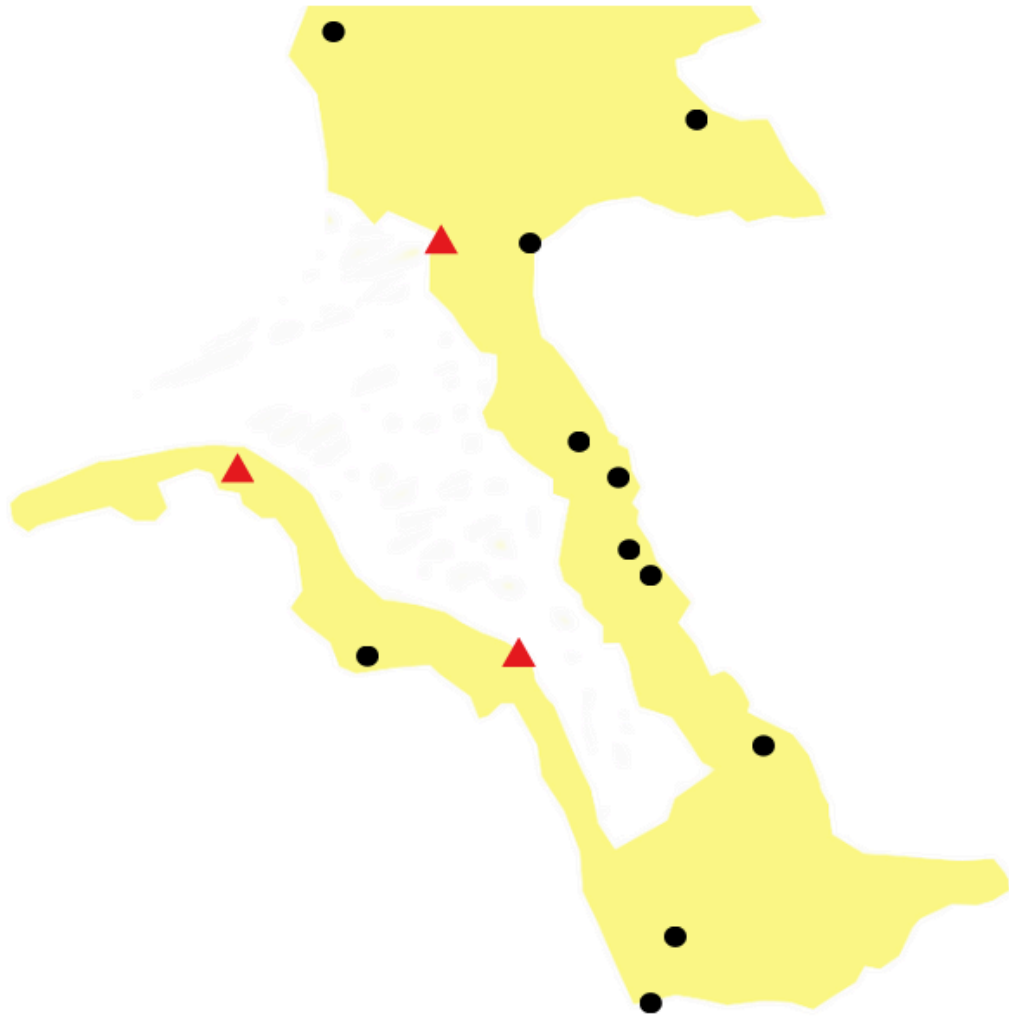


Area 2: Participant Demographics

Age Range 25 - 60
Gender - 10 men 2 woman
Farm size - 25 to 190 acres
Common/Moorland access - 50 to 600 reses

Figure 48 North Pennines ANOB participants details

Area 3: Participants and Activity Sites



- Interview Participants
- ▲ Ethnographic activities sites

Area 3: Participant Demographics

Age Range - 40 - 65
Gender - 8 men 3 woman
Farm size - 80 to 120 acres
Common/Moorland access - 150 or less

Figure 49 Cumbrian participants details

5.4 Hill Farming system operated by participants

During data collection participants identified that whilst continuing to operate traditional hill farming system, many had expanded to operate varying parts of the livestock production system. Participants identified 3 parts to their farming operations:

1. The traditional hill proper (open moorland)
2. Inbye -system in the field around the farmstead
3. A lowland part on lower altitude fields either contiguous to farmstead or on rented/owned land.

Figure 51 below highlights these three parts of the livestock production system which participants identified. In the following three sub sections the specifics of these three parts will be explored in greater detail, followed by the demographic breakdown of these systems within three participant areas.

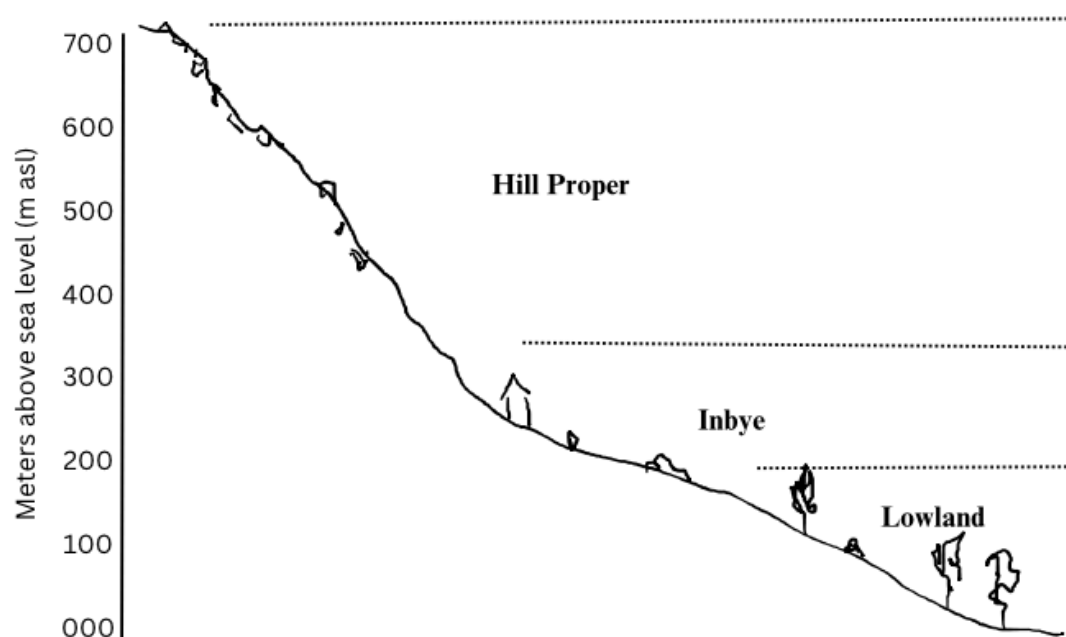


Figure 50 Three parts of hill farming system in relation to altitude

5.4.1 Hill Proper

Altitudes - Participants were operating the hill parts of their systems at a range of altitudes between 250 -700 meters asl. However, the vast majority were operated on semi- natural moorlands and common land at altitudes of 300-550 masl.

Types of Vegetation:



Semi-natural grasslands



Heather moors



Acidic blanket bog

Breeds of Livestock:

SHEEP



Herdwicks



Swaledales



North Country Cheviots

CATTLE



Luings



Short horns



Belted Galloways

What they are doing: System specifics

- Low intensity grazing 0.5 ewes per hectare
- Hardiness and production on single pregnancies favoured
- Older ewes drafted from flock in autumn to sell to lowland farmers or use on inbye flocks for further breeding
- Best young females retained for replacement of drafted ewes, males lambs sold 'store' to be grown on by lowland farmers
- Cattle predominantly used for low intensity conservation grazing as part of agri-environmental schemes.

Figure 51 System Specifications of Hill Farming Proper

5.4.2 Inbye

Altitudes - Participants were operating their inbye systems within the fields around their farmsteads, within this cohort these field systems were situated between 150-250 m asl.

Types of Vegetation:



Unimproved rough grassland



Semi-natural hay meadows



Improved pasture

Breeds of Livestock:

SHEEP



North of England Mules



Cheviot mules



Bluefaced Leicesters

CATTLE



Limousin



Charolais



Short horns

What they are doing: System specifics

- Inbye flocks created by breeding drafted hill ewes with improving ram to create mule sheep.
- Mule sheep then either retained for further breeding or sold in autumn to lowland farmers.
- Many farmers operate small flocks of improving breeds e.g Blue faced Leicesters. These provide the rams for cross breeding.
- Cattle predominately used for suckler herds whose primary purpose is to produce nutrients for inbye grassland, in a rotational system

Figure 52 System Specifications of Inbye

5.4.3 Lowland

Altitudes - Participants operated the lowland part of their systems in a number of ways. Some on more productive areas of their main farmsteads or at secondary sites, either rented or owned. All these varying lowland systems operated at below 180m asl.

Types of Vegetation:



Improved grassland



Fodder crops



Coastal plains

Breeds of Livestock:

SHEEP



Mule Suffolk Cross



Mule Texel Cross



Commercial e.g. Aberfield

CATTLE



Limousin



Charolais

What they are doing: System specifics

- Mules crossed with commercial lowland sires to produce commercial lambs to be sold 'fat' (ready for slaughter)
- Many participants were fattening their own stock, utilising improved quality of grazing at lower altitudes. Plus the addition of fodder crops, for example turnips, they were able to grow in the richer lowland soils.
- Cattle again being fattened for direct sale and slaughter
- Traditional hill farmers were able to operate this part of the system by purchasing land in lowland areas.

Figure 53 System Specifications of Lowland

5.4.4 Farming System Demographics

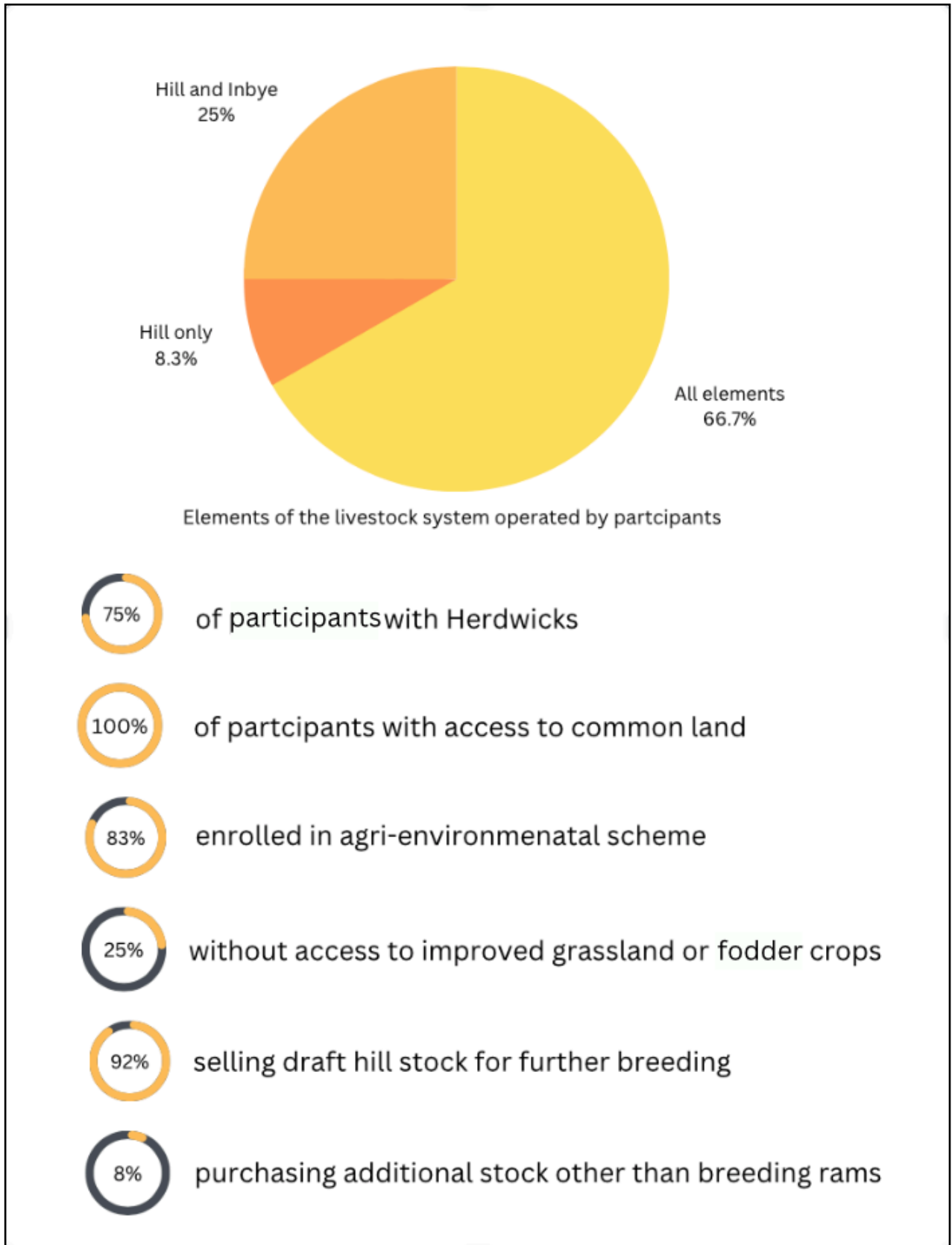


Figure 54 System Demographics Area 1 participants (Lake District National Park)

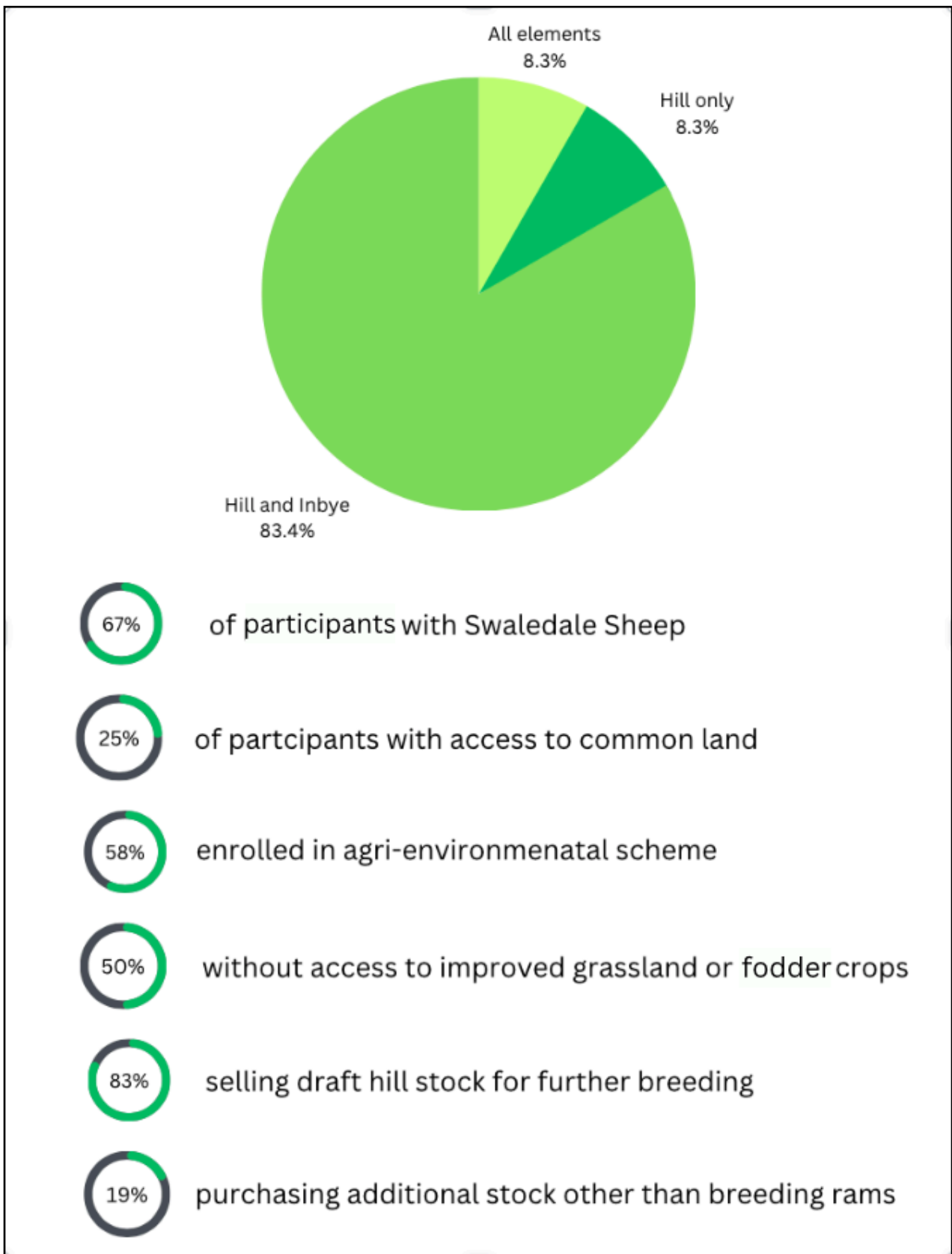


Figure 55 System Demographics Area 2 participants (North Pennines ANOB)

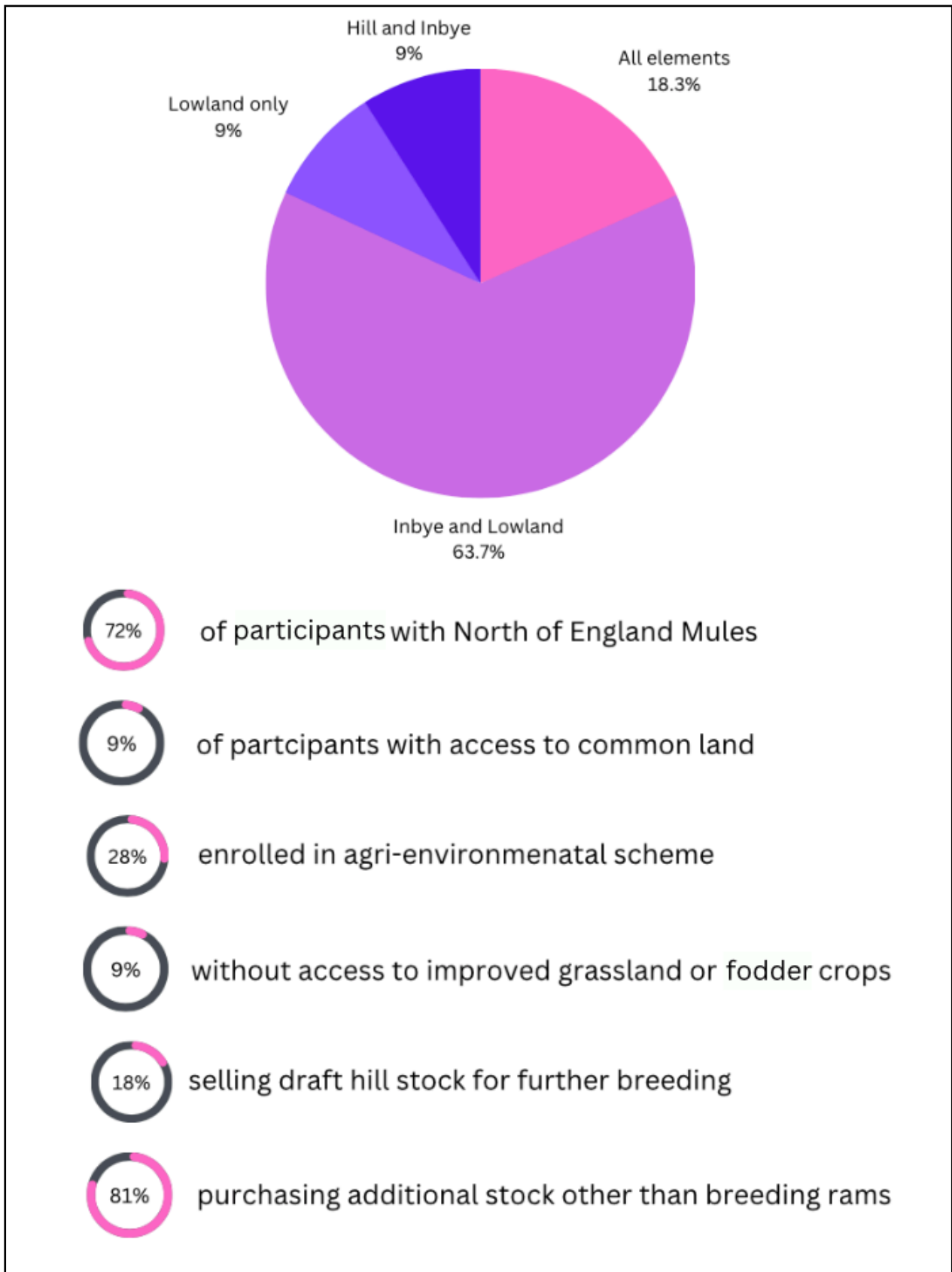
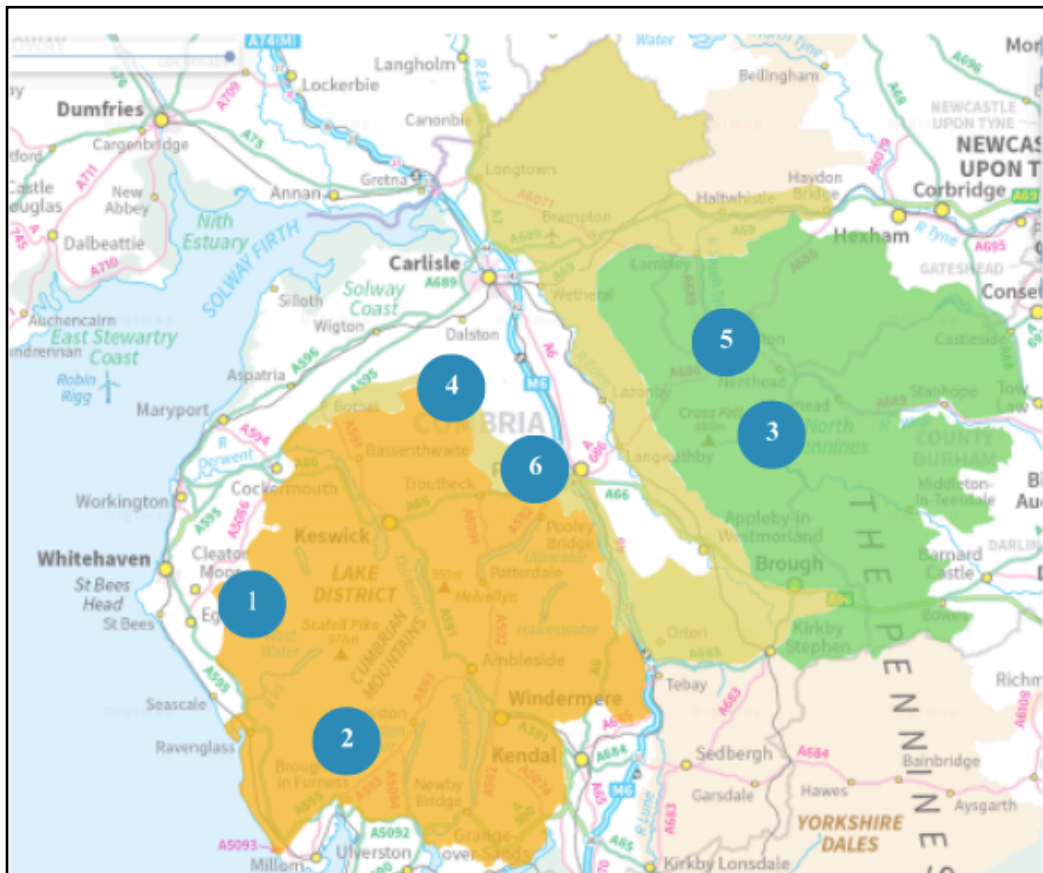


Figure 56 System Demographics Area 3 participants (Cumbria- Scottish Borders)

5.5 Ethnographic areas and activities

The following section will lay out the areas of ethnographic study. First looking at shows and shepherds meets and secondly at auctions. In both cases a map of the sites will be provided followed by a breakdown of the activities and observations.

5.5.1 Ethnographic Activity Sites: Shows and Shepherds Meets



Small hill farm specific:

- 1 Ennerdale Show - The Leaps, Kirkland, Cumbria
- 2 Eskdale Show - Eskdale Green, Cumbria
- 3 Langdon Beck Show - Forest-in-Teesdale, County Durham

Large general:

- 4 Heskett Newmarket Show - Newlands, Cumbria
- 5 Alston Agricultural Show - ShowFields, Alston, Cumbria
- 6 Skelton Show - Old Park, Hutton in the Forest, Cumbria

Figure 57 Map of shows and shepherd meets

The ethnographic activity sites were broadly split into two types, first small local shows which had developed from the traditional practices of shepherd. These shows were very regionally specific with most entrants coming from within a 20 mile radius. These events tended to be hill breed specific, with the local regional species providing the majority of entrants.

5.5.1.1 Small hill farm specific shows



Figure 58 Ennerdale Shows - Livestock competition 2022 (authors image)

Ethnographic activities observed:

- Showing and judging of hill sheep breeds
- Speaking with entrants and other visitors

Key Findings :

- a gentle competitiveness but taken very seriously.
- communal activity with competitors helping each other out.
- informal conversations amongst competitors and small groups of observers.
- activities undertaken for the participants, not public facing, not focused to informing or educating visitors.
- strong intergenerational presence with multi generations of same family exhibiting together.
- showing livestock a key 'shop window' for breeders.
- those not exhibiting were there to identify good livestock to purchase later in the year.

5.5.1.2 Large general shows

The second type of show visited were the more general agricultural shows (Fig. 60), these featured an array of livestock exhibits with farmers coming from 50 miles plus to attend.



Figure 59 Hesketh Show - Livestock competition 2023 (authors image)

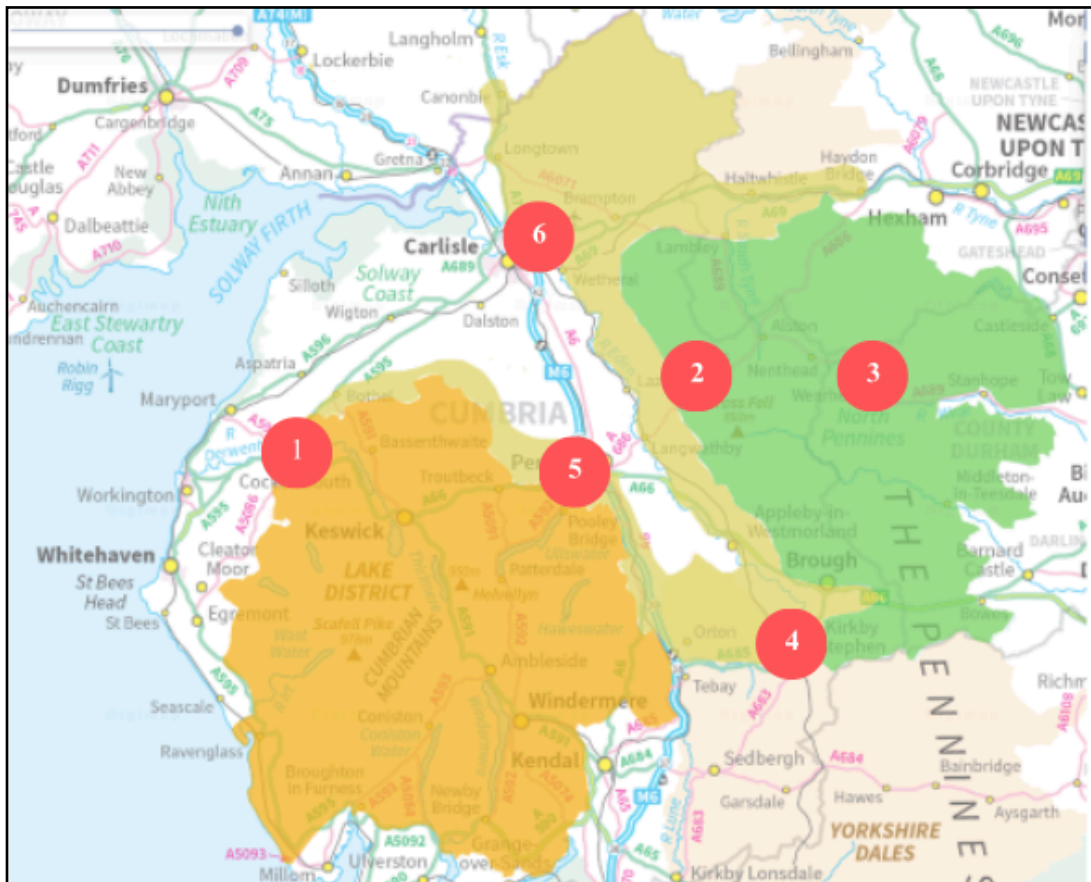
Ethnographic activities observed:

- Showing and judging of hill sheep breeds
- Speaking with entrants and other visitors
- Attending farmer focused presentations

Key Findings

- Although, much larger in scale and number of entrants, these general agricultural shows shared many similarities with smaller events.
- The showing and judging of livestock was carried out in the same way.
- Slightly reduced collaboration between competitors due to less previous connection but still relaxed and cordial.
- A wider variety of livestock classes with less focus on hill breeds.
- More visiting farmers there for a general day out, rather than specifically looking to identify future purchases.
- The hill livestock categories featured many of the same participants seen exhibiting at smaller shows.

5.5.2 Ethnographic Activity Sites: Livestock Auctions and Sales



Hill breed specific:

- 1 Herdwick Tup and Drafts Sales - Mitchell's, Cockermouth
- 2 NEMSA/Blue Faced Leicester Tup Sales - H&H Lazonby
- 3 Swaledale Tup Sale - BCA, St John's Chapel
- 4 Swaledale Tup Sale - H&H, Kirkby Steven.

General sales:

- 5 General draft ewes and mule sales - Penrith & District Auction
- 6 General Livestock sale - H&H Auction Centre, Carlisle

Figure 60 Map of auction and sale sites

Similar to the shows, sales visited break into two distinct categories. First, are the culturally significant breeding hill sheep sales, which are regionally and breed specific. These are equal part economic and social events, whilst acting as key cultural centres. These sales were run at small, traditional auction houses, at specific times of the year ordained for this event for generations.

5.2.2.1 Small hill breed specific auctions and sales



Figure 61 St Johns Chapel Mule Sale (image retrieved from <https://www.barnardcastleauctionmart.co.uk/St-Johns-Chapel> 11/9/23)

Ethnographic activities observed:

- The sale of breeding rams and drafted ewes from hill breeds
- The 'back stage' activities of managing the auction days
- Pre sale shows, in which stock for sale is judged

Key Findings:

- not just a sale but a cultural event where all members of the local hill farming community congregate.
- vast majority of vendors will enter stock into pre-sale shows with awards generally seen to increase sale prices
- much purchasing is inter communal, with members buying from each other
- very little profit is made, any money made on sales is re-spent on replacing stock
- purchasing is very public with all participants observing and noting who buys what.

5.5.2.2 Small hill breed specific auctions and sales



Figure 62 Kirkby Steven Mules Sales (author image)

Ethnographic activities observed:

- The sale of breeding rams and drafted ewes from hill breeds
- The 'back stage' activities of managing the auction days
- Pre sale shows, in which stock for sale is judged

Key Findings

- hill farmers mainly selling draft or store lambs to lowland farmers from other regions of UK

- very low entry into pre-sale show. Farmers didn't see any substantial price increase or as an opportunity to gain status.
- development of social connections limited to building purchaser-vendor relationship
- very few hill farmers attending to purchase stock, mostly sold to lowland farmers and middle men.
- many farmers not staying for sale or to socialise

5.6 Area Overview Conclusion

The data collection for this study was conducted in the Cumbrian region, which is known for its high levels of agricultural activity, specifically in livestock production. Three areas were chosen within this broader region, each with different levels of designation and protection for hill farming.

The Lake District National Park, with its World Heritage status, has a strong connection to regional hill farming traditions. The North Pennines ANOB has limited protections for hill farmers, while the central Cumbria region has no designation or protection.

Each area had a diverse group of participants who were demographically representative of the spectrum of farms in those areas. These participants provided a spatial and structural definition for the wider livestock system in which they operated. They emphasised that their operations were no longer just hill operations, but instead, they delivered systems that included a

mixture of the whole livestock spectrum. Although the constituent parts of this three-part system looked very similar across the three areas, the mixture of operations was very heterogeneous. The system demographics provided by participants showed a wide range with notable variation between regions.

The Lake District featured very high levels of common land access and use of local hill breeds, while the North Pennines retained high levels of local hill breeds. but saw a greatly reduced reliance on common land. The North West region provided the most mixed picture, with the greatest variety of systems and a focus on mule breeds of sheep.

Through ethnographic activities, a split in the role and importance of shows and sales was identified. Small regional shows and sales provided not only a socio-economic outlet for farmers, but also retained cultural significance. In contrast, larger general shows and sales provided an economic output for hill farmers but limited socio-cultural opportunities.

This study focuses on the socio-cultural aspects of the hill farming community. In the following analysis chapter, the interview and ethnographic data provided by participants will be explored to provide evidential support for the conceptual framework.

Chapter 6: Data Analysis

6.1 Introduction

This chapter presents the results of the data analysis conducted on the dataset collected for this study. The purpose of the analysis was to build evidential support for the conceptual framework developed in the first two chapters of this thesis. The analysis will follow the sections of the framework attempting to connect data with these sections, building a body of evidence for the importance of social and cultural capitals to hill farming communities through the development of a shared identity. The chapter begins with a description of the dataset and the data preparation process. It then presents the findings of the data analysis in a sequential manner. Several new themes and unexpected concepts were developed throughout data collection. However, these will be explored within the discussion when developing a revised conceptual framework.

6.1.1 Dataset and Data Preparation

The data used within this analysis was derived from two sources, first 35 semi-structured interviews conducted with participants from three areas as outlined in previous chapter. Second, from observation notes taken from 13 ethnographic activities undertaken within the three target areas. All the data were transcribed and coded within NVIVO software to develop a set of themes and codes aligned with Conceptual framework. Thus out put is laid out below Table 4:

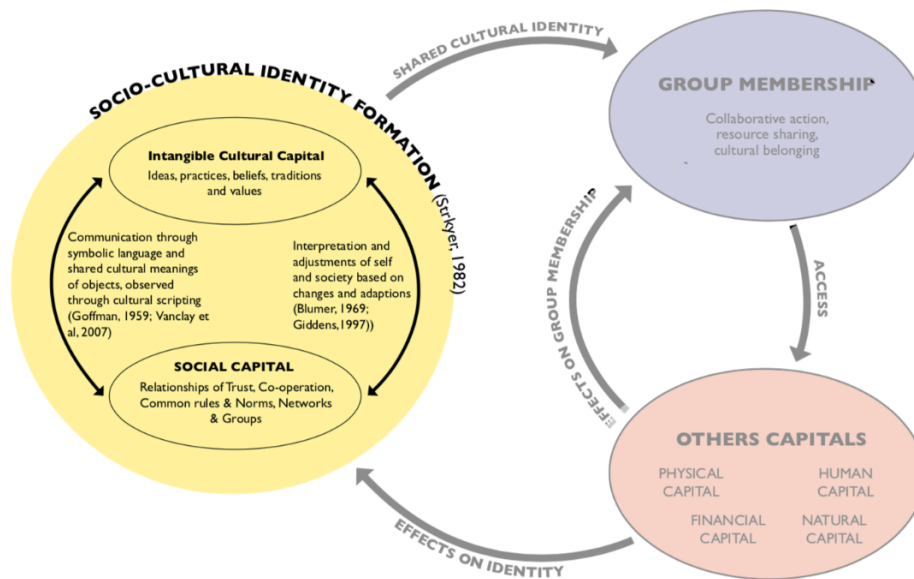
Theme	Codes
Socio-cultural identity	Vocational lifestyle Livestock person Food producer
Intangible cultural capitals	Diplomacy/Humility Rightness of system for place Connection to/custodianship of the land Individual/self reliance Supporting others Hard work Intergenerational cultural knowledge transfer Centrality of livestock
Social Capital	Relationships of Trust Reciprocity and exchange Common rules and Norms Network & Groups.
Cultural Communication	
Interpretation and adjustment	
Shared cultural identity (VLP) leading to GM	

Group Membership	Resource sharing Cultural belonging Group status Group Membership aiding access to other capitals
Cultural manifestations in other capitals	Physical Capitals Natural Capital Human capital Financial capital Other Capitals Effects on Group Membership Effects on identity

Table 4 Breakdown of NVivo themes and codes

The upcoming analysis explores these coded themes in a sequential manner following the framework through its circular flow from socio-cultural identity formation through group membership to others capitals and back.

6.2 Socio-cultural identity



Datas indicate that participants in all three study areas shared a socio-cultural identity, that of the vocational livestock producer. This identity is built upon three pillars borne out of the data, that of the vocational way of life, skilled livestock person and food producer. Each one of these three pillars will be evidenced with data providing a foundational identity to follow through the rest of the data analysis.

6.2.1 Vocational lifestyle

A central theme within the data set was participant's strong self identification of hill farming, as vocational and that hill farming was a cultural way of life rather than a profession:

“Yes, farming for most farmers, it takes up a lot of your life. It is all consuming.”

NW Farmer 8

“Yeah, it's a long process from start to finish and I class the finish as the end of my life, you know, I'm nowhere near finished yet.”

NP Farmer 7

The continuation of this vocational lifestyle was viewed as being central to farmer's sense of well being and happiness:

“What I love about farming is the lifestyle, working outside with the animals”

NW Farmer 8

“My time is on the farm and I'm totally happy with that, and I'm really happy to spend all my time looking after the animals. The idea of free time that's just totally at odds with most farmers thinking.”

LD Farmer 4

Certainly, the broad consensus amongst participants was that they did not undertake this work for financial gain. It was about doing what they loved and living a way of life they thought important:

“A neighbours' wife said this to me, three things in this world you want, something to do, something to look forward to, somebody to share it with

him and the rest. (emotional). If you've got those three things, you don't need anything else. If you've got enough money to live. Are any of those millionaires happy?"

LD Farmer 2

However, this way of life is perceived to be under threat, with changes to land management seen as an existential threat to this way of life:

"Well, I just think it's a way of life and that, you know, if it's stopped and done away with. They rewild it, it's just it's a way of life that's just going to disappear. And you know, it's wrong. You know, we're neighbours we work together, it's, you know, it's part of the valley and it's just , you know, it's just going to all disappear."

NP Farmer 5

According to the data, hill farmers view farming as a calling that they pursue throughout their lives. For them, it's more about finding fulfilment and preserving a way of life, than about making money. This idea will be revisited later in the discussion, when examining how hill farmers' identity is contrasted with conservationism. For now, turning to the second pillar of their identity, which is centred on their livestock, particularly sheep and cattle.

6.2.2 Livestock person

Throughout all the data activities, participants expressed a passion for livestock keeping, on visits they were very keen to show the livestock, sit and watch it in the fields or show off pictures on the farmhouse wall of prize winning livestock.

When asked about livestock farmers' responses are equally passionate and clear:

“It’s all these people care about . It’s their life. It’s all they’ve ever done. All they ever wanted to do, and all they are ever going to do.”

LD Farmer 3

With several going as far to connect livestock with their identities:

“Our identity is our flock. If they go, we will go with them”

NW Farmer 7

“You know, your flock is your identity, and you wouldn't want to lose that and you want to strive to have pride in that stock.”

NW Farmer 10

or another describing it as something which became part of them:

“Swales [Swaledale sheep] does get under your skin, and once you start, it just gets hold of yer. It's an addiction and it's like, you know, a lot of the people at the rams sales, they're the same.”

NP Farmer 5

The centrality of livestock to farmers' identities is seen to affect their economic situation. Many participants spoke about how they would turn down economic advantage to retain their livestock. This was particularly common in relation to stock reduction schemes. A farming advisor explained with reference to Natural England, how attempts to pay farmers to reduce livestock numbers fared :

“They are like "I can give you this money to take your flock off the common" , and the farmer will respond, "No, thanks", They can't understand that, "Because you're going to be better off and You're a business," but they just don't understand the value of those sheep to the person.”

This phenomenon extends to shows and auctions where winning and being recognised as a excellent livestock person outweighs any financial gains:

“But then you do have people who are absolutely so obsessed and I'm sure the actual money part isn't as important as the wining part. Winning is worth more than the money.” LD Farmer 8

Based on the data collection, it appears that farmers connect their identity with that of their livestock. This deep connection often leads them to prioritise their animals over economic gain, and to maintain their livestock in a way that aligns with their personal values. This is a crucial point that we will revisit in the discussion chapter, as this emphasis on livestock contrasts with the prevailing economic drivers in agriculture. The importance of livestock was often intertwined with the third pillar of farmers' identity: their role as food producers, this aspect will be explored in the next section.

6.2.3 Food producer

During farm visits and attendance at shows, auctions etc, the topic of focus often second only to livestock was the notion of hill farmers as food producers. Auctions act as the focus of this, but all farming activities were never far removed from the role participants thought central to their vocation, to produce food.

This pillar of identity was spelt out clearly during an early interview by NW Farmer 1 :

“...as a farmer, my main aim in life is to produce food for people to eat. And I would like whoever buys the food that comes off this farm to have a good eating experience.”

And supported by NP Farmer 3:

“We're not tree keepers, we produce food. Yes, we're food producers. And I'm pretty sure that ninety nine point nine percent would agree.”

This centrality of food production was also supported by a farming organisation worker:

“Absolutely. Yeah, yeah, that's how they see it, they are keeping livestock to produce food for the nation.”

Other's pointed to the fact that food production was closely associated with happiness and contentment in their role:

“If I can rear something up what's healthy, you know, for its lifetime and from my work managing the land, produce a nice product on someone's plate when its finished. I think that means a lot.”

NP Farmer 4

The Food Producer role was seen as central to the older generation of farmer brought up during post war and common agricultural policy era:

“Its stupid. The fells were meant for sheep and you go to Penrith, there's all that good land that's planted with trees, it breaks your bloody heart.”

LD Farmer 5

But also continued to be a major consideration for the new generation:

“Yes, generally, within the young farmers that my son works with, they're all really interested in food production. He's the vice chair of the local Young Farmers, They wouldn't be discussing like tree planting.” NW Farmer 11

Although other forms of product produced by their labour was creeping in:

“That's our primary goal to produce food and wool, but we do it in such a way that we're actually delivering quite a lot of environmental benefits as well.”

LD Farmer 1

Many participants voiced or showed an interest in natural capital production, for example during wildflower meadow restoration events attended by the researcher. However, much of the conversation and focus was still on how productive the field would be to feed livestock, what were the nutrient levels and the practicalities of land management.

Participants consistently emphasised that their main aim as farmers was to produce food for people to eat, and the role of food producer was seen as crucial to their sense of purpose and contentment. This focus on food production was particularly important to the older generation of farmers who were brought up during the post-war and Common Agricultural Policy era, but it also continued to be significant for the new generation. Although some farmers expressed an interest in producing other products, such as

natural capital, the conversation and focus remained largely on how to produce enough food to feed their livestock.

The data collected from farm visits, interviews, and other activities indicate that hill farmers from each of the three study areas have a strong sense of identity that is closely tied to their farming practices. This identity is built on three key pillars: a sense of vocation, a deep connection with their livestock, and their role as food producers. These pillars are interconnected and shape the way farmers prioritise their farming practices and align their actions with their personal values. Overall, the data suggest that hill farmers view their farming practices as central to their identity and sense of purpose, which has implications for the future of farming in these regions.

The centrality of food production in combination with the lifelong commitment to a vocational way of life built around working with livestock, forms hill farmers shared socio-cultural identity, that of vocational livestock producers (VLP). The following section will explore how this identity is established, evaluated, and disseminated within the community. This will begin, by examining the intangible cultural assets that serve as the foundation for the socio-cultural identities of those involved.

6.3 Intangible cultural capitals

Intangible cultural capitals (ICC) are identified as ideas, practices, beliefs, traditions and values associated with a specific culture. During research activities a wide variety of ICC were identified and thematically coded, namely, Diplomacy/Humility, Rightness of system for place, Connection to/custodianship of the land, Individual/self reliance, supporting others, hard work, intergenerational cultural knowledge transfer and centrality of livestock. The following section will delve into these themes, encapsulating a blend of the aforementioned identified forms of ICC.

6.3.1 Diplomacy/Humility

During all ethnographic activities hill farmers were noted to be humble and diplomatic people. They would generally avoid conspicuous behaviour outside of the cultural norm and would avoid any direct criticism of others. A senior hill farmer offers some clarification:

“Being aggressive... trying to boss people around is considered really unnecessary. But diplomacy, persuading people to do what you want them to do. Possibly by demonstrating how to do it...is recognised as a skill.”

LD Farmer 1

This was re-enforced by many participants during interview, a common response would be that of LD Farmer 8:

“Yeah, you've got to be a diplomat all the time.”

With senior or respected figures within the community associated with a humble and diplomatic approach:

“He's not just a farmer he's a diplomat and is, as, you know, an elderly statesman on the job.”

LD Farmer 2

The reason for this humility and diplomatic approach was laid out by NW Farmer 5:

“So you've got to be very diplomatic to be a hill farmer, even more so than just being a farmer in the wider farming community because you've got to be able to arrange to do the gathers, swap stock, support each other, help each other out. Because you're in usually difficult conditions where somebody will need some help at some point because of weather or disease or just family illness.”

Although, this approach is not viewed as a form of weakness, as explained by Farm support work:

“Some people are really, really tough. And sometimes that can seem very coarse and very brutal. But then at the same time, they are very gentle. Yes, diplomatic.”

So the common shared approach of humility is due more to the harshness of the environment and working system, whilst also having to retain good relations with your neighbours and competitors, with whom they have to co-operate. This humility in approach is common with interactions and resources sharing activities between farmers. LD Farmer 6 elaborates:

“All I'd say is everybody is very happy to help and for nothing in return, it seems, I'm not saying that they're not keeping score, and I don't think they're keeping score in such a way so that they can claim things back from me. Yes, it's just because in a way, everyone's quite humble. And I think if they have helped you, they feel better and more accepting if and when they need to ask you for help.”

So the approach of diplomatic and humble working is in many ways a pragmatic reaction to the need to work collaboratively. People have to rely on each other to carry out their working life, producing livestock in a limited environment. By all adhering to a system of practices and beliefs which limits the risk of alienating others, they increase collaborative efforts.

6.3.2 Rightness of system for place

There was a strong sense of belief amongst all participants that the hill farming system of livestock production they operate is correct and appropriate to place. This seems to connect to their continuation of a traditional farming system, and a connection to their ancestral predecessors.

“And the way I farmed here was something that has been perfected over the last 300-350 years, and it's worked really well for a lot of generations. And if it ain't broke, why try and mend it?”

NW Farmer 1

This connection to ancestors and traditional rightness of system is particularly strong amongst Lake District farmers, who view their practices as a continuation of an ancient system:

“We still live in a semi world environment. Very, very little input in terms of modern agricultural systems. And we farm the sheep that evolved almost certainly from the early Viking settlers. And so, you know, we're looking eighth, ninth, 10th centuries. So a thousand year of evolution has led us to where we're at, but probably for the last 500, the systems that we operate in very, very similar. We haven't changed an awful lot.”

LD Farmer 1

The belief in the rightness of the hill farming system extends beyond the farm and it identified with the wider landscape and environment beyond.

Many participants believed that the system they operated was totally compatible with the environment of the upland. NP farmer 8 was very clear about his beliefs:

“It's a balance between nature and farming, they can both go hand-in-hand. They have done for hundreds of years.”

North Pennines Farmer 4 reiterated the beliefs of many participants when he described the place he felt farmers play in the cultural landscape of the uplands:

“Farming made that landscape how it is.. Exmoor, Dartmoor, all them and everybody says, "Oh, it's it's it's magical" Well it is, but it's farmers that made that landscape, nothing else, you know.”

This sense of the rightness of the farming system for the landscape in which they operate appears to be part of a broader connection to landscape described by many participants. This connection or custodianship of the hill landscape will be explored in the next subsection.

6.3.3 Connection to/custodianship of the land

A theme raised by many of the participants both in interview and during ethnographic activities was the connection to the hill landscape and how they believed themselves to be custodians of that land.

“This beautiful land is on your doorstep. You only have to walk to it. You don't need a passport. You don't need bags of money. You can go and see it and the tranquility of what you've got up there. And we are custodians of it.”

LD Farmer 3

The hills or fells themselves appear to play a central part in this belief, with several participants making direct reference to their life lived on and in the shadows of these geological features. The farmer quote below is indicative of this widely held feeling:

“[T]hey are 'as old as the hills,' aren't they? the fells and they're there. So I think it gives you a certain place and grounding that they're just on your doorstep. And I think just humility every day that you wake up here, we're just so grateful to be living here.” NW Farmer 11

When asked about what was central to hill farming culture , LD Farmer 1 was very clear about its relationship to the landscape:

“The first thing is that an absolute affinity with the land that we farm, we are part of it. It's not just a commodity that we get up and utilise. It's part of what we do. We feel attached to it, we are as Hefted as our flocks of sheep.”

Whilst NW Farmer 8 introduced an elements of the aesthetics of the hill landscape:

“Yeah, the way the land looks, that means a lot to me personally, anyhow.”

Through the research process the interconnection of the land, the lifestyle and the farming system came up time and again. Farmers often seeing themselves are totally interlinked with the land and its historical management. The final word on this core cultural belief should be left to one of the participants :

“I’m part of that land, that looks after me. Therefore, I’m part of it. But I have an absolute obligation in my own mind to look after that land and to be careful with it.”

LD Farmer 9

The connection to the fell landscape is a deep one, which penetrated within the hill farming communities intangible cultural beliefs. The fells are viewed as a tough and isolating place, this deep connection might well go some way to illuminating the next theme of cultural capitals, in which individuality and self reliance are viewed as central to hill farmers cultural characters.

6.3.4 Individual/self reliance

In the same way that the fell lands that they inhabit are harsh and testing environments, so too are the hill farmers that make their lives there. The community has a central belief in the farmer as a tough, independent and self reliant person:

“[Y]ou’ve got to be a bit mad in someways. You’ve got to have so much determination. You know to keep going when the conditions are really against! And you hear a lot about mental health in farming these days. Well the amount of mental strength you have to have at times to run one of these hill farms.”

LD Farmer 6

The toughness of hill farming appears too affect the beliefs farmers have about themselves:

“We’re really nice people, I think, but we don’t like anybody messing with us. To put it in layman’s terms.”

LD Farmer 1

Problem solving and resilience to challenges are also a cornerstone of their practices and beliefs:

“There's no such thing as a problem only solution. And they don't roll over and cry. They don't roll over and get their belly tickled. They find a solution.”

NP Farmer 4

Also, seeing competition between individuals, particularly around livestock preparation and showing as an important practice:

“I think you need a little bit of a competitive spirit. I've played quite a few different sports over the years. I don't know, but I think I've got a competitive side anyway.”

NP Farmer 5

This all leads to the traditional practice of farmers being very independent and self reliant on their own farms, they don't ask or expect each other to help or interfere with their own private farmstead or business. A common question asked was about who you go to for advice, the common response was no one. They did get advice but would never be seen to ask directly. It was usually done by asking questions about livestock:

“I don't ask advice so to speak but would see how people's lambs look and I might ask what they've been doing with 'em. What's new, what they've done different this year.”

LD Farmer 4

The tradition of the individual on their own farm was widely observed throughout the study areas:

“On the other hand, when it comes down to homestead its your own, and how you farm it is down to you. Then I think it's completely down to how you think you can make it work.”

LD Farmer 6

Although, this self reliance was a common theme it interacted with another equally strong tradition that of supporting other community members, as outlined by LD Farmer 5:

“And not necessarily taking advantage of anyone else, and not being taken advantage of ourselves, so in many ways, our culture is very much about self-reliance. But at the same time, it's a combined self-reliance. It's a community of collaborative self-reliance. We exist because we all work together and support each other.”

LD Farmer 1

Self reliance and toughness are critical to farmers sense of self, however this is tempered by the need to work with others. This manifests as a tradition of support within the community. The next section looks to the data to build the evidence for this community of support or supporting of others.

6.3.5 Supporting others

Throughout ethnographic activities with hill farmers the practice of supporting each other, and belief in community was often to be seen. Examples were numerous, but two specific observations provide a useful starting point to this section.

Observation 1: At a livestock auction an elderly retired farmer in a mobility scooter was unable to access the viewing area due to it being up steep stairs. This was noticed by a senior hill farmer and with minimum fuss he caught the attention of a handful of the youngest, strongest farmers present. They quickly picked up the mobility scooter including elderly farmer and carried him up the stairs, placing him in a prime area to view the sale. No great fuss was made, then they all went back to tending their stock. Later when ready to leave the same process was completed in reverse.

Observation 2: A smaller but no less interesting example. At a ram sale two competing vendors were placed in pens next to each other. During a conversation with one of the vendors their next door neighbour interrupted to ask if they could help grooming the other ram. The farmer stopped our conversation and went to help their rival brush and prepare their ram. This brushing is a process which can increase the sale price of the livestock. The first farmer had nothing to gain from this help, if anything it could negatively affected the price they might get for their ram. However, this help was provided with out hesitation or requirement of anything but a simple thank you upon completion.

This appears a common belief and practice amongst hill farmers, if someone needs help or a bit of support they will automatically assist. LD Farmer 2 identified this as a cultural phenomena:

“You know, it's this kind of helping hand, hand on the shoulder. The quiet word in the ear, you know, the conversation in the pub. It's all part of our culture.”

The reason behind the willingness to help and support one another was taken up by NW Farmer 4:

“[H]elping each other out in a crisis is one of the strongest parts of our culture, because of the mutual understanding of how bloody hard this is.”

Supporting other community members were common amongst participants and appeared to be born from a shared understanding of how hard it is to making a living as a hill farmer. The hardness of their vocational way of life will be explored in more detail in the next section, which looks at the traditional practice of hard work within hill farming culture.

6.3.6 Hard work

During all activities, particularly attempts to gain interviews, accessing participants was most commonly hampered by their business and

commitment to constant work. The only way to contact hill farmers was to get them on their mobile phones whilst working which could be from anytime from 5am to 10 pm, or by physically finding them in the fields at work.

The vocational nature of the job and its focus on hard constant work begins at a early age. When an elderly farmer in his eighties was asked about starting his farming career this was his response:

“I started at fifteen and I've worked every day since. I left school at three o'clock and I was at work at half past. And the only time I've ever been out of work was when I had a double rupture and a twisted bowel.”

LD Farmer 8

The commitment and work ethic was a common theme amongst many participants, NW Farmer 9's farming approach was not uncommon:

“And then I was working, like a lot of hill farmers do, I was working flat out, I mean, I was working 18, 20 hours most days.”

This drive for work seems to be deeply engrained in all hill farmers and something which is an assumed cultural belief. If hill farmers are not seen to be working hard, it will reflect negatively on them amongst their peers. LD Farmer 4 makes a telling comment about hill farmers and work:

“Lot of people who farm and farm properly, like fell farmers they will always find a job or something to do. If you can’t find a job to do on a farm, there's something sadly wrong with you.”

As a set of practices, beliefs, and values, the notion of hard work was often associated with the vocational nature of the hill farming lifestyle. A number of participants engaged with this idea directly. For example Cumbrian farmer 4, who makes the comparison between their current life as a hill farmer and previous time spent in the military:

“[Both] are not just a nine to five, neither of those are and people understand that it's about getting things done that need to be done rather than, ‘Oh, I don't fancy that right now. Oh, I just don't feel like it’ .”

This vocational focus on hard work and having to do things because they need doing, was often associated with the central concern of livestock production. Hill farmers practices cannot be 9 to 5, because that is incompatible with the rearing of livestock. However, participants never thought of this as a chore, part of their lifestyle was the pleasure of working with livestock on a constant basis, LD Farmer 5 a well regarded livestock breeder explained their evening routine:

“But I don't know, some people at night will go and watch Coronation Street on telly. I'll go in the shed and play around with cattle. (Laughs)”

The positive effects and benefits of the vocational lifestyle were a common theme amongst participants. Many see the way they live as positive in comparison to much of contemporary popular culture, NW Farmer 10 put it like this:

“So when you come in in the evening, you're physically tired, you haven't got time to like, scroll through Instagram and worry about things that other people have got that you haven't, because you just like having your tea and going to bed. So you can get up early in the morning to tend to the livestock.”

However, there are undoubtedly negatives to this traditional practice of constant hard work and belief in a committed vocation. Health issues and injuries can be common, NP Farmer 7 provided a specific example:

“You know, farmers have a lot of health problems that are never recognised because they just think "Oh well it'll be all right." My father had a heart attack. He was 61 and died. Had he been feeling ill, had he not been right? Well, we'll never know. I would suspect that he had been but was just of that stature and generation, They just carry on.”

During ethnographic visits to auction houses and sales, this issue of hard work and its impact on health was supported. Many auctions houses have NHS health workers on site during sale day to try and encourage hill farmers to have vaccinations or health checks. Speaking with the staff, they explained that they can't get farmers to come into surgeries for these

services as they are too busy. So the NHS attempts to come to them to provide basic health care requirements.

Hard work was identified as a central practice within hill farming, with both positive and negative implications for individuals. A number of participants identified this cultural belief and practice as being instilled in farmers by their elders. This connects directly to the following section which explores the cultural practice of intergenerational knowledge transfer.

The data suggest that hard work is a key aspect of hill farming, and that it has both positive and negative consequences for individuals. Several participants noted that this cultural value and practice is often passed down from elders to younger generations. This observation is closely linked to the next section, which delves into the cultural practice of intergenerational knowledge transfer.

6.3.7 Intergenerational cultural knowledge transfer

Intergenerational and inter familial knowledge transfer was a topic explored by many of the interview participants. A senior hill farmer outlined the system of intergenerational mentoring:

“Obviously, you mentor your son. You mentor the younger people on surrounding farms and equally, those older guys on those farms will be doing the mentoring the other way.” LD Farmer 1

The familial transfer of knowledge was a feature many farmers referenced with NP Farmer 4 response when asked how they have learned to was atypical:

“Mostly from my father, learning the traditional practices.”

How this knowledge is transferred was described when one farmer explained how his son had come to learn the process:

“He's done it as a kid. You know, he's gone to the fell with me like, I could set him off now with the dogs, and he would go and gather, he knows the job already.....Aye, he's come with me over the years. Or if I've not had t' time he's gone with our neighbours and they've shown him.”

LD Farmer 6

This theme of learning as a child was central to Lake District farming cultural practices and beliefs, particularly in relation to the communal gathering of common moorlands. The experiential learning of the gather process begins at a young age, as pointed out by LD Farmer 3:

“You start when you’re very little, when I first went it was just a matter of trying to keep up with Mum and dad. Which isn’t easy when you’ve short legs.”

And follows a gradual immersion into the techniques and skills as the child developed the physical strength and stamina:

“The kids are they're going to the fell with mom and dad. And as soon as you get 13 to 14, you just sent out by yourself.”

Due to the culturally immersive and experiential nature of the learning experience many participants found it hard to recognise the skills and knowledge they had accumulated. LD Farmer 10 was able to gauge it to some extent:

“there's a lot of skill. It's yeah, it's not just skill it's more knowledge built up over the over the years. Well, since you've been doing it for a child.”

A retired shepherd when asked if people understood the skills and knowledge they had developed he answered:

“No, they've just been brought up with it, to them it's just an everyday life, you know, it's just like eating and sleeping.” LD Farmer 7

Many, however could only describe it in terms of instinctive knowledge, something they just knew how to do:

“When you gather, you do it instinctively but you don’t know why you’re doing it instinctivelyand all the guys that work in the uplands, work in the fells have that instinct.” LD Farmer 4

A senior shepherd elaborated on this, whilst highlighting how those who haven’t engaged in this immersive cultural learning struggle :

“And that understanding is inbred. It's instinctive, culturally instinctive. And for someone to come from outside and even consider doing that is impossible. Impossible. They would have to have someone with them that understood how the system worked and it would take them three or four years to get their head round it.”

LD Farmer 1

Instructively a farmer who moved to a common as a young man and hadn’t learned as a child, when asked how he knew how to gather his sheep:

"I didn't, you know, like I couldn't have got them off when we moved here, If this lot [multiple generational shepherding families] hadn't showed us, if you haven't gone and gathered with them and seen how to run them.” LD

Farmer 8

To explore this phenomena of culturally embedded learning, interviewees were asked about other mechanisms of learning. When LD Farmer 2 was asked about learning fell management skills from a book his response was:

“Not a cat in hells chance, you would be a marvellous man if you could write a book on that.”

Another participant was slightly more positive :

“[Y]ou can get the basics from a book but you need to be doing it with people who know how to really learn.” NP Farmer 6

Through the data collection activities intergenerational knowledge exchange was highlighted as critical to the farming system. Central to these cultural practices of knowledge exchange is the livestock of hill farming systems. It is around these that much of this exchange takes place, with livestock acting as a mechanism for the sharing of cultural knowledge. The next section will explore hill farmers ICC beliefs and practices relating to livestock.

6.3.8 Centrality of livestock

Livestock as a central feature within hill farmers’ identities has been explored earlier (Section 4.1), this section will explore how livestock

permeates the ICC. Many of the key cultural events observed revolved around livestock, as highlighted by NW Farmer 10:

“The social and cultural value of hill farming in this area is generally through sheep. The hefted flock is at the heart of everything.”

Underpinning this centrality of livestock within the socio-cultural life of the hill farming community are some deep rooted beliefs and traditions. One belief expressed by many participants is the near sacred place of livestock, particularly hill breeds of sheep to farmers. This is most clearly communicated in a quote by LD Farmer 3:

“But our two hills flocks, they are sacred within our farming operation. They'll never be totally erased.”

The sacred nature of these flocks within the farmer's work lives has led to a strong emotion attachment outline by two participants. NP Farmer 5 outlines the near familial sense of connection and place livestock take up:

“We spent so much time with our livestock, in the end they're like family.”

Whilst, NW Farmer 7 expands on how this emotional connection affected what farmers consider important:

“People are not interested in having like a a new car or a new trailer or anything, their interest is in having really good quality stock ... the pride is in the stock.”

The language in both these quotes is very strong, talking about family, love and pride. Similar thoughts are common amongst hill farmers and manifest in a strong attachment to the traditional practices of hefted flocks and hill breeds:

“[T]he most important thing is that hefted flock on that fell. If we can continue to graze that common and bring them down to fatten then I’ll be happy.”

NW Farmer 11

This attachment to tradition can be so strong that even when farmers radically change their farming operations it is difficult to totally give up the traditions around livestock. A farmer who had moved away from his family's traditional Swaledale sheep breed couldn't completely cut ties with tradition:

“But if I have a handful of Swaledale about, it reminds me where I've come from. I know where I've come from and I know where I've got to go.”

NP Farmer 5

In this quote the farmer appears to connect the livestock to his origins, who he is. The livestock acting as a cultural anchor within his life. This can

weigh heavy on many farmers though. Breaking with the traditions and beliefs around hill sheep breeds can generate strong emotions. NW Farmer 1 talks about a neighbour changing their livestock breeds:

“But at the same time, because of the traditions, because of the way things have always been done, you start to look at what this chap is doing and you shake your head and you think, ‘God. What a waste of a good farm.’”

A deep connection to breed and the impact of change, were highlighted starkly during ethnographic activities in the Lake District. A number of conservation organisation projects have removed or significantly reduced the population of the indigenous Herdwick sheep breed from some farms. This was widely met with anger and outrage amongst the hill farming community, they viewed this as a betrayal of their farming traditions and community beliefs. The loss of the sheep was felt as keenly as the loss of any members of the community, as the sheep are very much central to the social connect and cohesion of the community.

As explored in earlier section on socio-cultural identity, livestock management make up a key pillar of this identity. The above section builds on this exploring how livestock have developed a near sacred place within the life ways of hill farmers. This generates very strong beliefs and traditions around this livestock and goes some way to explain their significant in identity.

6.3.9 Intangible Cultural Capital Conclusion

In conclusion, the data suggests that hill farming communities have a strong sense of identity, built around their vocation of livestock production and deep connection to the fell landscape. They have a tradition of collaborative and humble working, tempered by individuality and self-reliance, which is supported by a strong sense of community and intergenerational knowledge transfer. Hill farmers value hard work, which is both a positive and negative aspect of their culture, and is often passed down from elders to younger generations. Livestock management is central to their cultural practices, with livestock holding a near sacred place within their life ways, generating strong beliefs and traditions around them. Overall, the hill farming culture is a complex and interconnected system of practices, beliefs, and values, which serves to sustain their way of life and connection to the fell landscape. These ICCs appear to be consistent amongst participants from all three study areas, providing some evidence to support the notion of a relatively homogenous set of cultural values underpinning the wider hill farming community.

In the conceptual diagram, Social Capitals are depicted as interacting with the ICC discussed in this section. The next section will look at the data collected in relation to social capital, building in the social context to the above cultural ideas on hill farmer identity.

6.4 Social Capital

In the context of this study social capital (SC) is defined as “features of social organisation, such as trust, norms and networks that can improve the efficiency of society by facilitated co-ordinated actions” (Putnam, 1993). This led to data collection of SC to be under the umbrella of four main themes, namely Relationships of Trust, Reciprocity and exchange, Common rules and norms and finally, Network & Groups. Due to the interactional nature of SC there are implicit overlaps in the data but for the process of clarity they are explored below within these broad headings.

6.4.1 Relationships of Trust

Throughout the data collection activities, trust has been highlighted as central to hill farming communities. Either when working on collaborative land management activities like gathers or selling livestock, trust is cited as vital.

NP farmer 12 provides a succinct review :

“Sheep farming , especially in the hills is all about trust.”

This comment was made in relation to the returning of lost stock and management of boundaries, but it holds for many other activities. A theme raised by many participants was the importance of trust when it came to the

sale and purchase of livestock. Farmers have developed relationships of trust over long periods of time with those they buy and sell livestock from:

“I like to buy my tups [Breeding rams] off the same people, a woman from Shap. We've had her tups, three or four times. It's the trust, cos if they're done well, you'll gan back again.”

LD Farmer 8

As highlighted in this quote the trust is very often built around the quality and consistency of the livestock for sale. This was supported by many participants, LD Farmer 5 puts it simply:

“If you know you try to buy off somebody who sells the best [livestock].”

From the other side, a well regarded breeder of cattle explained:

“When we sell our bulls it's all about relationship.”

This point was further explored by a farmer from the North Pennines who was a large and reputable vendor of livestock within their region:

“Reputation stands for a lot. The quality of the livestock and also the person behind it. Like how genuine and how honest and trustworthy you are as well. Yeah, that's where your reputation comes from.” NP Farmer 5

These assertions can be broadly supported by ethnographic observation, particularly at livestock sales. Many buyers knew in advance who they would be looking to buy from or were repeat buyers. They chose these vendors because they had brought stock from them before, if the stock worked well for them and if the vendor was seen to be fair if anything went wrong, a strong sense of trust was developed. The retention of trust in livestock dealings was a tricky balancing act as explained by NP Farmer 10.

“We sold a tup a few years ago and unfortunately he didn’t work. So we did the right thing, gave the guy all his money back and took it back. We had it tested and it worked fine but we did the right thing at the time.”

Even though the vendor was not at fault and the animal was in correct working order, they were still required to act in an extremely fair way. The negative effect on reputation would not have been worth the money.

Relationships of trust are also central to collaborative working or sharing of resources. When working together hill farmers do not worry about contracts or legal guarantees, generally business is done on a hand shake:

“There's nothing written down. It's just very much good working relationships.”

NW Farmer 4

The key to trust in this situation is keeping your word and being seen to deliver your side of any bargain. NP farmer 8 explained how they were able to continue a ten year land sharing arrangement with another farmer:

“We were originally put together by a land agent and the relationships’ just grown. And you know, we’ve built up trust with him and hopefully we’re respectful enough to, you know, look after the land. We’ve got good relationships with the staff. So it it seems to work well,”

This highlights a key point in trust development, it takes time, a concept well understood by a land based charity worker, whose role is to develop relationships with hill farmers:

“I think we can actually have a good relationship with all of our farmers, hopefully most of our farmers, because at the moment we don’t. But it’s a it’s a long game of building relationships.”

The time issue was also raised by an incomer to a hill farming community:

“But because neither of us are actually local to the area, but we’ve been here a long time if people know us. We also have this reciprocity and, you know, trust and bartering that maybe doesn’t normally happen with people that aren’t, you know, local, I suppose.” NP Farmer 2

Ethnographic data supports this assertion, with many farmers distrustful of outsiders because they don’t have dealings with them over livestock or land

with them. They are not able to engage in the traditional mechanism of trust building. So, trust has been identified as a difficult thing to build and maintain. A number of participants also raised the issue of loss of trust being an easy thing to happen:

“Undoubtedly, undoubtedly. But it only takes one mistake to break a trust.”

NP Farmer 9

“So when I go to someone else to help them solve a problem if that person can't help them solve a problem or suggests that can when maybe they can't. Trust would very quickly evaporate.” LD Farmer 1

The second point is certainly one supported by time spent with hill farmers, they are very cautious about taking or giving out advice to one another. The stakes of getting this information sharing wrong are high, as loss of trust is fickle. However, a senior figure did highlight that years of trust development did buffer him from this:

“I'm a trusted person, shall we say. Personally, when I said it only takes perhaps one mistake, and that trust evaporates, maybe that wouldn't be the case with me.” LD Farmer 1

The implications of loss of trust are difficult to assess, hill farmers were in general not keen to talk about such things as it would be viewed as being critical of others, a practice they generally avoid (see section 6.3.1).

However, when brought up by participants in broader discussion the main

reasons for loss of trust were identified as, lack of good collaborative working, poor livestock quality and undiplomatic behaviour. The outcomes of this loss of trust would be other farmers would be disinclined to engage in collaborative activities, share resources or buy/sell livestock with that person. These are explored within this analysis of key aspects of hill farming so a loss of trust has significant implications for a farmer. An aspect of social capital which both requires trust and helps in the building of trust is reciprocity and exchange, this will be the subject of the next section.

6.4.2 Reciprocity and exchange

As discussed at the end of previous section reciprocity and trust are common bed fellows, this is a concept hill farmers are well aware of:

“But you know, it’s all about building up the sort of trust and exchange, for example, when we made our hay last summer, our neighbours next door is a dairy farm, their son came in mowed for us, never charged us because we do things for them.”

NP Farmer 1

This make a good point about trust and reciprocity but also highlights something significant, most reciprocity and exchange in hill farming communities revolves around labour. A resource that is in a sense free but extremely valuable to the farmers involved. The exchange of labour was a

very common activity amongst all participants, and it was usually a very informal interaction. NP farmer 8 provided a customary example:

“I’ve a friend, every now and again, we’ll be on the phone. He’ll ask what I’m up to, if I say I’m working the sheep, he’ll say “I’ll come over and give yer a hand”. Then he’ll do a day with me, I’ll do a day helping him, you know. And it just gets him out and it gets me out.” NP Farmer 6

What is common about this interaction and many of the farmers interviewed are two factors. The exchange is between two close associates or friends, and that the exchange is direct e.g one day work for one days work, so the exchange is fair.

Sometimes the reciprocity will be more around a specific task and involve larger groups, for example:

“I’m just thinking, my son Peter works very closely with three or four farms locally. They’ll come and help him to do a bit of fencing. He’ll go back and help them to do some walling. That’s the sort of work, and a lot of it’s done like ‘in piece’. You know, there’s no there’s no bills at the end of the day, just to have an agreement between them ‘you do this, I will do that’.” NW Farmer 1

Although, this exchange is more formal, with a discussion around the terms of exchange, it still follows a similar model. One in which trust and a fair

or equal exchange is informally negotiated or accepted as the norm within which this activity would take place.

During time spent with farmers this sort of reciprocity was common place, no real discussion would be required, if someone asked them others would agree without question. The mechanism which allows this free exchange of labour was elaborated by LD Farmer 3:

“I suppose you put in a favour in the bank as well. You know, if they need a hand they know you're going to come, if you've called, if you've called for a favour, you know that. And if you've got the time to spare to help somebody out, there'll be a day when you're really busy and you need something, they'll always be there to help you out.”

A cultural norm for those who are trusted within the community but is often also available to newcomers. The explanation for this was posited by LD farmer 4:

“It is offering up the help so that it's accepted, but also that does build bridges, doesn't it? Yes. You know, so I think everybody wants to build bridges, especially with new people.”

So, reciprocity and exchange in the form of labour can be open to newcomers and well established community members. However, a form of exchange which appears to be limited to deeply embedded community members is the exchange of objects of cultural significant. During

ethnographic observations sometimes the activity of breeding ram (tup) exchange might be undertaken. The breeding tups are a highly valuable form of livestock, with significant cultural value. Sometimes these would be exchanged by close members of the community, allowing each to gain from the variety in genetics for breeding. This form of exchange was also seen with sheep dogs, as LD Farmer 6, explained:

“A lot with the dogs as well, for generations, they are bred on the farms. You know, they'll be old breeds that go back years. Like, obviously you've got to fetch in new stock but like when I was a kid, if LD Farmer 3 had a litter of pups he'd give me one of his and if I had a litter I'd give him one of mine. OK, that's how we used to work. ..Yeah, you see that everybody just gives each other a pup.”

Again, sheep dogs are valuable and culturally significant other than human actors, which as the quote highlights have long developed connections to the community. The exchange of dogs would only happen between close members of the community, this is unlikely to be offered to a newcomer.

As alluded to within this section, exchanges can often relate to common rules or norms which are known by community members, for example, the fair exchange of labour. In the following section more of these rules and norms, both formal and informal will be explored.

6.4.3 Common rules and Norms

These forms of SC are generally related to the practical aspects of day to day life, namely co-operative land management, behaviour and the sale of livestock. Most participants in one form or another were involved in the collaborative management of land, either in the form of commons or shared access to private fells. These common resources are often administered by formal groups, either grazing committees or ownership groups, which have their own rules and regulations, plus mechanisms of sanction. In conjunction with these formal rules there are more informal rules and norms which are policed within the communities. LD Farmer 2 provided an insight into the workings of his commoning system:

“Because as I said to you before, it's like a boarding school. You might know the Three R's, but you don't know the school bully and you don't know the prefects. You don't know the school rules. Yeah. And until you realise that, then when you get to the hierarchy and the people that know the school rules and possibly the bullies, what have you? And they know how to manipulate and turn the screw. And as I said to you. You need to have a lot of knowledge, have a chaperone when you go out onto those fells, keep your head down, learn the rules and don't get browbeaten. We don't actually roll over and have our tummy tickled because we are all competitors out on that fell. And we need to hold our own. But don't step out of line.”

LD Farmer 2 introduces an interesting point to the use of common rules and norms, they have to be learned and that they are taught by other more experienced farmers or “chaperones”. They are not the formal rules of the grazing committee available to read at leisure in a book.

Whilst taking part in a communal gathering activity a number of these informal rules or norms were highlighted by farmers. Sheep belonging to other farmers were identified and either herded away towards their home farms or collected with the rest. Those collected would be brought and penned separately so they could be returned to the owner. This was an unwritten rule of courtesy which the farmers undertook.

Very similar practices were identified by farmers working on private fells, they would often be fenced but common norms of behaviour around livestock were expected.

“We lose a few sheep every year, a fence might come down or whatever. But our neighbours will find them with theirs and bring them back. We do the same for them, it’s just what you do.”

NP Farmer 10

The sanctions around these informal rules were unclear. However, anecdotal stories from participants, indicated if community members were seen to break these rules, for example not return other’s livestock, it would lead to a strong reaction. Even the whiff of such a practice would lead to a community member being ostracised, whilst, failure to broadly align with

rules and norms on commons, generally lead to a reduction in collaborative help for the farmer or a partial isolation from the wider community.

The second main area for common rules and norm within the data were those intertwined with the sale of livestock. A common theme amongst all participants and observed widely during ethnographic activities was the norms around livestock presentation. Varying breeds were dressed and presented differently depending on what appear to be cultural traditions. Herdwicks would often have their fleeces dyed red whilst North of England Mules would be dipped and dyed a straw yellow. These were not rules or norms enforced by auction house or breed associations but those collectively accepted by farmers as an expected norm. NP Framer 6 elucidates on the practice with regards to Swaledale tups:

“We have to go a dig some peat and then mix it with water and then brush it into them, and then they'll possibly want that done twice. And then on the Swaledales face, the black supposed to meet the white with no white in the black. So it sounds stupid, but you pluck them out with eyebrow tweezers. And so depending on how much whites in the black, that might take a day, titivating them up. And then they'll want washing the afternoon before the show. So it's quite time consuming.”

Although, many participants found the practice a burden they were unwilling to break with it. Certainly during time spent at auctions and sales those sheep presented to a high standard within the culturally acceptable norms would fetch higher prices. However, as pointed out by a number of

farmers the costs involved in getting them to these standards would have cost the farmer at least the additional sums achieved per head, delivering no net economic gain.

Another set of cultural norms and rules within the sale of livestock involved the perception of fairness. When selling, particularly cultural significant livestock like breeding rams, a set of rules around fairness are expected. Again, these do not appear to be laid out by auctioneers or associations, but have developed amongst the farmers over time, with the focus being on maintenance of reputation. A good explanation was offer by NP Farmer 4:

“You've got to stand behind your stock. If anything goes wrong and you don't, people talk about it and people don't come back. Where if you've sold a tup, that doesn't work, you just deal with it straightaway. It's either money back or give them another one if you've got one spare. It is reputation, if you're known to be fair with people, they will come an' buy from yer. It doesn't take long for people to talk about bad things.”

A specific example of this was offered in support by NW Farmer 3:

“We sold, a tup a few years ago and unfortunately it didn't work and we sold him for quite a lot of money. So my husband did the right thing, went to pick him up. We give the buyer the full amount back and we kept him.”

A final widely viewed norm in connection with the sale of livestock was the concept of paying ‘Luck’ money to the purchaser. The process was explained by LD Farmer 12:

“When we sell, you always give a bit of luck money to the buyer. We tend to give ‘em back about a pound on the hundred. It just sweetened the deal, it’s just wishing them luck, hoping the stock does well for them.”

This process was observed at all sales attended and played out in exactly the same way. Once a farmer had sold their stock in the auction ring, they would return after a short time to pass a sum of cash to any of the buyers who had purchased their stock. Again, this was not a formal process expected by any institutions, it was ancient system which the farmers continued to practice. As a senior farmer explained:

“Luck money was in the past part of the bartering system. You know, it was part of all those hand shakes and whatever, and finally you’d basically give 10, 20 pence to make it lucky. Now it’s got up completely out of hand.” LD Farmer 8

It appears to be like much of the rules and norms around livestock selling to be about retaining a good and fair reputation, one which develops a network of buyers who will return to purchase stock in the future. These and other networks built around trust and alliances to shared values provides the first part of the next section, looking at social capital in the form of networks and groups.

6.4.4 Network & Groups.

During the data gathering process a wide variety of groups and networks have been identified by participants. These two forms of SC are clearly linked and intertwined but for the purposes of clarity in this section they will be covered in two separate sub sections. Firstly, looking at the array of groups described by participants and secondly exploring the networks that have developed within the communities.

6.4.4.1 Groups

A number of groups were talked about by farmers but the common factors which connected them all was, either the practices of farming or livestock production. The most common groups that participants were members of were specific hill sheep breed associations, namely Herdwicks, Swaledale or North County Cheviots. NP Farmer 7 answer when asked about his membership was common:

“Joining the society was the first thing I did when I brought some Cheviots.”

Many of the interviewees were active members of breed associations, often sitting on their boards or specific sub groups within them, for example those responsible for organising ram sales. Broadly, interviewees thought the breed associations provide an excellent collaborative group in which they could support and prompt the breeds in which they all invested much

passion and time. NP Farmer 5 explained why they sat on a breed association management council:

“It's a privilege and an honour to serve on council. I think all those council members are very passionate about the breed.”

A high proportion of participants were also members of hybrid sheep associations, the most common being the North of England Mule Sheep Association (NEMSA), these mules are not a hill sheep, but the product of the crossbreeding of hill sheep. Several participants identified the advantage of this group membership, with NEMSA organised sale of livestock and group membership being seen as key to gain good prices.

Breed associations were by far the most common group to which participants were members, but a number of other groups were highlighted. Amongst, younger participants or the children of interviewees, membership of Young Farmers Clubs was still quite prevalent. LD farmer 6 outlines the benefit to his son:

“They learn a bit about all sorts, livestock showing , generally farming but it's a chance for them to get out on trips, meet some mates.”

Whilst NW Farmer 4 explained how membership had positively affected him:

“Well a number of those guys I work with today, I first met them at Young Farmers. We used to share a lift or whatever, but we’ve been mates ever since.”

However, the YF groups are under threat, LD farmer 3 outlines the issues:

“When I used to go to YF there were 27 odd groups round here. I think it might be down to 10-12 now. We’ve certainly had 2 near us close.”

This theme of reductions in groups was repeated by several participants with regards to another traditional farming group, that of weekly/monthly discussion groups.

“They used to be more common, the discussion groups. Every week in some places, farmers would come along they’d get a speaker and it was a chance to learn something. But they are getting less common.” NW Farmer 3

LD Farmer 3 explained one of the problems leading to this breakdown:

“We used to have a discussion group once a month but it was a bit outdated, more a thing for the older guys. So some of us younger fellas sort of went off and did our own thing.”

Finally, in terms of groups there were a mixture of general help and information groups of which farmers were members. For example, NP Farmer 1 was a member of a sheep club:

“So through our vets, we're part of there's a sheep club and there's some very big sheep farmers and not so big sheep farmers, but that you have meetings and you talk to them about anything sheep related.”

These groups can be quite regionally specific and a variation was seen between the three areas of study. In the North Pennines the majority of participants were members of a local community support group, a phenomena not seen in the other two areas studied. Participants indicated the higher levels of membership in this region was based to the historic hardships felt in this area in the Foot and Mouth outbreak of 2001. Many farmers had required additional support during this period and the community support group and developed a local statue during this difficult time. The other two regions has not been so negatively affected by Foot and Mouth.

In general, groups were centred around the core interests of the hill farming community, largely livestock production and farming practices. These general themes are carried into the social networks and places of network connection to be explored in next section.

6.4.4.2 Networks

The social networks within hill farming communities were found to be generally built around the communal management of land and the sale/showing of livestock. These networks are developed over time and supported by the shared vocation work of livestock production. In regards to common land management, LD Farmer 4 explained:

“We’re a fairly close community, you know? ...When you're in our job, like, it's so much easier if everybody's pulling in the same direction. If you start falling out the only thing that suffers is the livestock, you know, so it's it's so much easier if everybody can get on and and pull in the same direction, you achieve so much more.”

From this close community working of livestock over long temporal periods friendships and networks develop:

“We've been the shepherds for those flocks for 10 to 15 years. So we've been relatively young and active for a long time and all been mates with each other. So there's a lot of collaborative work and community work.”

LD Farmer 3

These informal social networks were often seen to develop out of the more formal groups associated with shared management, for example grazier groups :

“after the graziers meetings, it's all men actually apart from me, but all the men we used to go to the pub.... So it's obviously a social because at the meetings there's agenda items to discuss, but there isn't much normal conversation, because it's more of an open forum and most of the people are there are fine, but we sort of stick to the agenda, whereas afterwards, you know, we unpick and analyse everything and it's much more, you know?” LD Farmer 5

The traditional meeting of networks at the the local pub is still a common practice amongst participants:

“I'll see most of these fellas down the pub on a Friday night” LD Farmer 6

Although, the connection is still very much embedded in the vocation of farming and livestock production. NP Farmer 6 explained what happens when meeting networks at a pub:

“The conversations are almost always about farming, it's a busmen's holiday!”

One of the major benefits of social networks outlined by farmers was the constant availability of support and help. When asked about how they could access help within their network if suffering an injury LD Farmer 1 said:

“We wouldn't have to call on anybody, they would just turn up, see if we wanted any help. And that would pretty much go for everyone.”

Interestingly, in a further response, outlining a real injury within the family he introduced a phenomena which is changing the nature of hill farmers' social networks :

“Three or four of them did actually physically land into the yard of the other farm where my son lives. Offering their assistance and all of us the rest texted and Whatsapped, e-mailed? Yes, offering help...That's part of the tradition. Absolutely.”

Technology was quoted by several of the participants as a growing component of networks, a NW Farmer 1 on a very isolated farmstead, mentioned that much of his network in terms of advice seeking was now on line:

“Farm discussion groups and farming forum is quite a useful, internet based place for discussions. Covers all sorts of subjects.”

Certainly communication within existing social networks had taken on a more technological approach, building on traditional systems:

“You know, and increasingly, we're seeing much of that done on social media, Facebook and WhatsApp and something like that. And it's much easier to ping messages around to, you know, you can tell everybody everything in one message, whereas previously, if it wasn't in the pub you had to go and find them know, that. But it's the same conversations. It's

exactly the same way of life, just embracing all new technologies and all pieces of equipment that can make the way of life.”

LD Farmer 9

This was seen to offer a number of benefits, however technology was also identified with the reduction of face to face meeting and opportunities to engage with networks:

“So the modern pieces of kit and the modern synthetic drugs and one thing of another do allow people to look after more sheep or more cattle. Yeah, but the time to go to socially interact. Even in a passive sort of way, just over the fence, over the edge, over the wall. Those opportunities reduce all the time. Cos less people. Consequently, less messages get pushed around.”

NW Farmer 11

Throughout ethnographic activities the strength of networks was often visible. Auctions, shepherds' meets, and local shows were full of opportunities to see networks interactions. All participants interviewed identified the sales and livestock auctions as the place they would see all of their social network. This was certainly supported during observations at these events, everyone appeared to know each other. Interactions would vary from a brief greeting, through to hours spent leaning on a gate chatting and laughing. This situation was clearly stated by NW Farmer 5:

“The auction system, the local auction mart, the shows, they're what holds the systems together, holds the people, community together.”

The social importance of these opportunities to connect with networks are not lost on farmers who work within a spatially isolated system :

“And then you've got the social side as well, which everybody meets up. You know, that's probably important especially when you live far out, a lot of people never see anybody for weeks now, you know? You know, because like, mental health in the industry is quite quite a big thing as well.” NP Farmer 8

The importance of sales and shows for social connection extended beyond those who actually need them for business purposes:

“I don't sell a lot at auction but I still go to been seen and meet people.” NW Farmer 12

An interesting aspect of hill farmers' social networks is the temporal breaks in connection. Many farmers will not see or speak to member of their network for months on end. This increased the importance of key seasonal events:

“It's like a little network but you only see them at that time of the year. And have a big catch up. It's a big community thing, actually 360 odds days a year you don't see each other. That's one of the best things about the show's summer , they really get people together.” NP Farmer 8

A very similar phenomenon was identified in relation to the key cultural livestock sales, NP Farmer 10 talks here about the Swaledale Ram sales in early autumn:

“And sometimes you see them [network], what, four or five times in a matter of weeks. You've got St John Chapel one week. Yeah, and Middleton in Teesdale. Then the next week you've got Kirkby Stephen and then you get another couple of days at Hawes the following week, then you might not see them people for the rest of the year.”

The social networks of hill farmers and the hubs for their connection, appear to function over a variable spatial scale. There are local networks which are serviced by regional centres, NP Farmer 7 outlined the importance of two sales sites within his region:

“Local auction marts, that's a good social gathering for people from the dales, not just this dale but Weardale, Teesdale,”

While some networks are extremely spatial diverse and connected through specific breed sales or events which bring these networks together. NP Farmer 5 explained about the connection he has through NEMSA sales in his region:

“These sheep connect me to people all over. I regularly sell to a guy in the south, West Sussex but I've also got contacts all the way up to the Highlands in the North.”

A theme discussed by several participants was the changing nature of the networks and their hubs. The time pressure on farmers was often cited for their reduced attendance at auctions:

“Yeah, but if you go, if you're going to auction marts now, I think auction marts would agree with us that most of the people that are hanging around the auction talking to each other. They're older farmers, because the younger generation have that much to do. There's that much pressure on, you know, that much work to do they don't spend a lot of time there. But having said that, the younger generation maybe have a different outlook on life.” NW Farmer 2

Covid was also identified as a catalyst to changes in the network connections formed around sales:

“I would say before the pandemic, ninety five percent of people would stop at the auction and show all the sheep...since the pandemic a lot of people, I think are just got in to the habit of just dropping off and coming home...You used to have loads of people and a lot of retired farmers, you know, standing having the craic and and it's all gone, it seems to, you know, just crushed the culture.” LD Farmer 4

“I used to see in the auction a line of old folk, and it was their pride and joy every week to polish the boots and get the tie on and go. And I went back after COVID and that line of 20 has gone down to two.” NP Farmer 3

The data indicates that social networks within hill farming communities are built around the communal management of land and the sale/showing of livestock. These networks are developed over time and supported by the shared work of livestock production. Through observations, it was found that auctions, shepherds meets, and local shows are what holds these networks together. However, within all three study areas these connections were beginning to change, with post COVID reductions to auction attendance identified by participants in all areas. The social importance of these opportunities to connect with networks is not lost on farmers who work within a spatially isolated system.

6.4.5 Social capitals conclusion.

The data indicate that all aspects of social capitals are critical to the running of the hill farming system. Trust is an essential component of hill farming communities and is central to many of their practices, including collaborative land management, buying and selling of livestock, and sharing of resources. The concept of reciprocity and exchange within hill farming communities is also deeply rooted in trust and a fair exchange of resources, with labour being the most common form of exchange. These exchanges follow cultural rules and norms that are not written but are generally understood and accepted within the community. Co-operative activities, and the sale of livestock provide opportunities for individuals to illustrate their understanding and adherence of these rules to the wider

group. In general, groups were centred around the core interests of the hill farming community, such as livestock production and farming practices, with friendships and networks developing over time through collaboration. Central to the development and maintenance of all the social capitals is the ability to engage in cultural communication. Although, there was some heterogeneity with regards to groups within the three areas, the other core social capitals appear to be fairly homogenous between the three areas. This will be explored in the following section, looking at how communication links the social and cultural capitals discussed in previous sections.

6.5 Cultural Communication

When attending key social events like shows, auctions and events as outlined in previous sections, participants would regularly communicate along specific lines. The lines of cultural communication would generally follow set themes, talking about livestock, the farming year, the weather or discussing shared problems.

A good review of the interactions was provided by LD Farmer 1:

“[E]verybody’s committed to those social gatherings to compare the quality of the livestock, to have a conversation about their experiences during lambing time, to talk about who’s got the best sheep dog in the community, who’s got the best Herdwick tup in the community, the conversations are exactly the same thing that would have been.”

A common initial exchange at an auction was narrated by NW Farmer 11:

“And I suppose to draw a comparison, if you were at a regular livestock auction mart and you see somebody with really good quality livestock, you might in passing make a comment to them how nice they look and then you can start up a conversation.”

This common approach to initial conversation was supported by NP Farmer 4;

“We go around the pens like any buyer and have a look. See who likes what. Talk to the owner, the current owners, ask them about their health, what they've been up to.”

This cultural form of communication based around livestock were seen to extend beyond the social event. During interviews LD Farmer 4 was asked about what conversations they have when working with other farmers:

“I'll say "Your lambs are good. Well, such and such's aren't so good, what's going on with them?". And then we were sorting this year, and the other fellas saying, “Bloody hell your lambs are good this time.”

A similar idea was expressed by NW Farmer 7 when asked about conversations with other farmers when out and about:

“Generally livestock, It's all about, "how is it getting on and is it doing well?"

The second aspect of cultural communication raised by participants related to the farming year and discussion of problems. When meeting up with social network at seasonal events NP Farmer 12 outlined the lines of communication:

“You pass comment on 'How your year been, lambing, how's the livestock are doing?' It's a nice there's a nice social aspect to it as well.”

This was strongly supported by ethnographic data collection. These exact themes were mention by farmers and often used by the researcher to engage farmer in conversation. A common sight at many social gathering would be farmers sitting in the cafe talking and laughing. NP Farmer 9 explained how often this is an opportunity to discuss shared problems, particularly around livestock:

“And actually, that's where we sit as a cattle mart, people come there and sit in the cafe, you know, bring their stock in, they're going get a cup of tea or whatever and say "I've had a terrible time, really bad lambing". "So have I' says another, "so Have I' or "such and such a fella , he's worse than all of us.”

Based on the data it appears that cultural communication provides an opportunity for farmers to compare and discuss their experiences, as well as share any problems they may be facing. It's also noteworthy that these themes extend beyond the social event, with farmers continuing to discuss livestock and farming-related issues even when working with other farmers or out and about. These features of cultural communication were identified within all three areas and manifested in a relatively homogeneous way. This cultural form of communication not only serves as a means of exchanging information but also strengthens social ties among farmers, not only within their central group but within the wider national community. How these interactions of intangible cultural capitals and social capital can adjust in relation to changes is explored in the following section.

6.6 Interpretation and adjustment

The core identity of hill farmers built through their intangible cultural capital and social capitals as proposed in conceptual framework was seen to be fairly stable. The central pillars of identity within the vocational livestock production identity appear within all aspects of ICC, social capitals and forms of cultural communication. However, some adjustments were identified by participants, particularly in regards to the increased focus to natural capitals brought about by agri-environmental schemes.

These adjustments as expressed by NP Farmer 1, have also impacted on the previously discussed communication topic:

“But interestingly, we're finding more and more people are talking about how well their hedgerows are growing or how well their area of wildflower meadow is flourishing and, all this kind of stuff.”

Whilst, a number of participants shared NW Farmer 11 adjusted identity, even though livestock production still remained central:

“I mean, I would, you know, I would probably be considered a bit of a nature friendly farming farmer. But the sheep are still the most important thing.”

A notion supported by LD Farmer 12:

“I'm a proud sheep breeder, I want the best flock I can. But I'm also proud of my hedgerows and meadow flowers.”

These adjustments were definitely becoming more common, but as highlighted in following quote the central identity of production and producing an economic output is retained:

“[W]e've put a lot of hedges in the last year. If you'd have said I'd be doing that 10 years ago, giving up productive land, I'd have thought you were mad But we've got foxes and curlews, all sorts of finches. If I can still

balance the books and do a bit more of this stuff, I'd be happy." NW

Farmer 8

To a much lesser extent within the data was an adjustment to identity related to off farm working. Due to the relative economic marginality of many hill farming operations, off farm working was becoming more common. Farmers who did take this step back from fully time farming did appear to make adjustments to their identities. Often, farmers who worked off farm appeared more distant from the broader community, potentially due as mentioned by LD Farmer 4 a reduction in regular contacts and communication:

"Yeah, I mean, a lot of that stems back from when I was working and then farming part time and whatever else. There was never enough hours in the day to get around it and do everything, so your interactions with neighbours was very limited."

From ethnographic activities undertaken within the community of which LD Farmer 4 was a member, they did appear distanced from the broader cultural group. They didn't attend cultural events such as shepherd meet or shows, didn't take part in the collaborative activities of common grazing and had moved away from the common cultural norm of keeping Herdwick sheep. Notably they were not recognised as someone others in the broader group were actively keen to engage with or consult for help or advice.

So, a number of adjustments were noticeable amongst participants relating to changes in farming practice. Interestingly, the reverse was noted with a participant who had recently joined the hill farming community from a career in the military. They had noted a number of changes to their identity due to increased time spent living and working with in hill community:

“I’ve lived here nearly a year and your whole perspective and perception changes. It doesn't change. It develops over time. And I think, yeah, we just grow more and more attached to it and even like. And this is the old adage where farmers never go away. But I went away for a couple of days and I just couldn't wait to get back. And I'm not someone that doesn't like London. You know, I went to London for, I think it was one night, and it just seemed even more busy and hectic than it had ever felt before. I thought, you know, don't be silly, I've grown up in the southeast of England but I felt like I've been in the rural state of West Cumbria for my whole life. I feel like a bit of a county bumpkin saying that, you know, it's true, and I just couldn't wait to get back. And now I don't particularly like going anywhere because I think it's because of the responsibility as well, you know, because, you are leaving the flock.” LD Farmer 6

It’s interesting to note how the vocational responsibility to livestock production, the flock, was cited as central to this change. LD Farmer 6 had in a relatively short immersion into the cultural lifestyle, noted an adjustment of their identity from a well traveled and cosmopolitan person to a rural ‘bumkin’.

The data indicates that adjustments in hill farmers' identities do occur and are generally due to changes in farming practices. Generally, the core identity of vocational livestock production was seen to remain stable, with adjustments identified in the increased focus on natural capitals brought about by agri-environmental schemes. Participants had made changes in their identities, such as being more nature-friendly, while still retaining the central identity of livestock producers.

6.7 Conclusion to socio-cultural formation

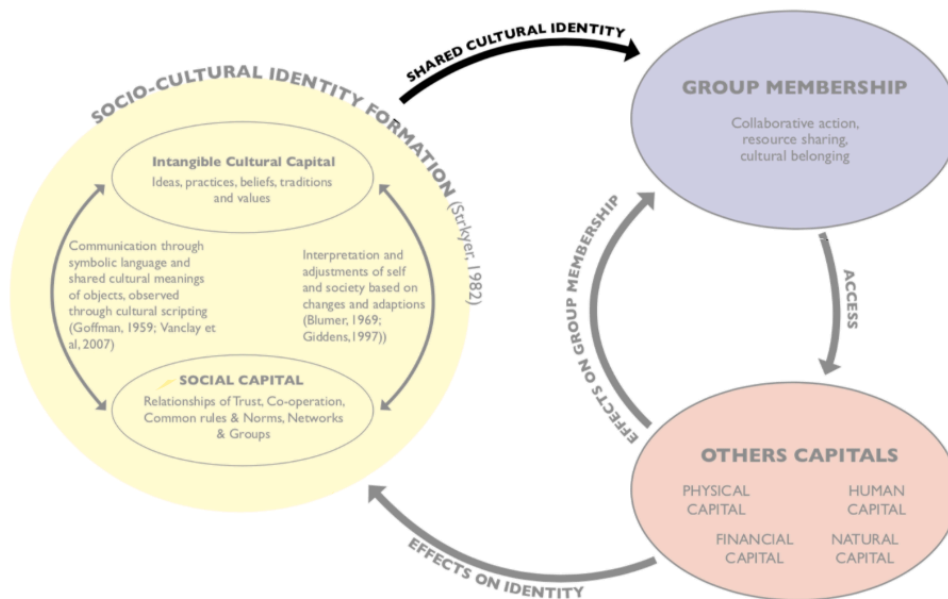
The data indicates that hill farming communities possess a strong sense of identity built around their vocation of livestock production and deep connection to the fell landscape. Their culture is characterised by collaboration, humility, and self-reliance, supported by a strong sense of community and intergenerational knowledge transfer. Livestock management is central to their cultural practices, generating strong beliefs and traditions around them. These ICC are seen to interact with social capitals in identity formation.

Based on data collection, trust, reciprocity, and co-operative activities are essential components of social capital, with cultural communication providing opportunities to exchange information and strengthen social ties among farmers. Adjustments in hill farmers' identities do occur, generally due to changes in farming practices, but the core identity of vocational livestock production remains stable. Overall, the data highlights the

complexity and interconnectedness of the hill farming culture and the importance of social and cultural capitals in sustaining their way of life.

The capital interactions explored above are identified in the formation of a shared socio-cultural identity among hill farmers, with the data indicating that these phenomena are homogeneous within the three areas studied. In the next section how this shared identity allows access to the broader group will be explored within the data.

6.8 Shared cultural identity leading to Group Membership



The collective identity associated with vocational livestock production, especially when actively practiced, has been recognised as pivotal for group inclusion. The exchange of values and beliefs linked to the VLP identity stands as a central foundation for gaining entry into this group. An

excellent example of this occurred during an interview with NW Farmer 10, they were explaining how they were able to successfully undertake off farm work for a cultural heritage based charity:

“I wouldn't be able to do it with half as much success if I wasn't a farmer myself. In fact I probably couldn't do it because my whole way of working is valuing what farmers value. And that's how you develop a relationship with them. Once you've got a relationship with them, that's how you can get things done. That's how you can work together.”

A similar sentiment was shared by LD Farmer 1, although in a more robust statement:

“if you're one of us you're right, if you're not one of us, you've got to prove yourself worthy of being one of us. And that sounds very kind of clannish. And I guess in many ways it is but it's just a fact.”

Time spent undertaking ethnographic activities broadly supported these themes. As an outsider to the socio-cultural group it can be difficult to be accepted and trusted. The socio-cultural groups are very tight knit and know each other extremely well, NP Farmer 1 support this observation:

“in these hill farming communities, usually, people are related. And they've known each other for generations, good and bad, you know, that goes deep.”

This was regularly observed with multiple generations of families attending events and activities. People would talk freely and gregariously with family, friends and farming acquaintances but could be quiet and taciturn with an outsider. It was only through repeat meetings and discussing things important to farmers that these initial barriers break down. Also, taking part in activities hill farmers seen as important helps with this acceptance, for example gathering hill sheep.

This was supported during an interview with LD Farmer 8, who was a relative newcomer to hill farming. They found acceptance to the group came from valuing the way of life, the livestock and joining collaborative farming activities:

“For example, we've always been out on as many gatherings as we can, which is pretty much all of them. Whereas I think the previous people never went out to gather the fell, which you can imagine a group of farmers think that you really should. And it's really important that that happens.”

The shared activities and events at which group membership can be accessed and reenforced are all centred around livestock production. A number of participants also spoke of the livestock themselves being key to the formation and maintenance of the group:

“It's the breed [Swaledale] thats connected a lot of people together.... There is a passion and people have the same values, you know, livestock

production is what we do.... It's that passion and pride that gels everybody together."

NP Farmer 5

This highlights the central place of livestock production and the shared socio-cultural values of hill farmers' identity in group cohesion and access. An interesting aside to the notion of identity leading to group membership, was a number of occasions participants raised the issues of people losing, or negatively affecting their group membership. This is not a subject farmers are very keen to talk about publicly as it was seen as a criticism of others, which its generally avoided. However, when raised the reasons for the loss of access revolved around peoples poor handling of livestock, lack of engagement with collaborative livestock management activities, and moving their farming business away from the traditional production model.

LD Farmer 1 mentioned a specific case where newcomer lost their acceptance after being critical of traditional livestock production models:

"They were kind of partially accepted into our culture for a while. And then they started to demonstrate that perhaps they thought it would be sensible if some of us change the way we do things. So they had to step back out again."

So, criticism of the core VLP activities of the group will impact on membership. Whilst, a number examples of farmers moving to new

farming methods was seen to have a similar effect. NP Farmer 3 highlight an example of farmers adopting new practices:

“...there are farmers, you know, either one or two farmers who very early on gone in to regenerative farming and felt a bit isolated.”

This phenomenon can be exacerbated if the farmer became associated with groups that after alternative values to farmers. Cumbrian Farmer 5 explained what happen to a farmer seen to be involved with conservationist groups

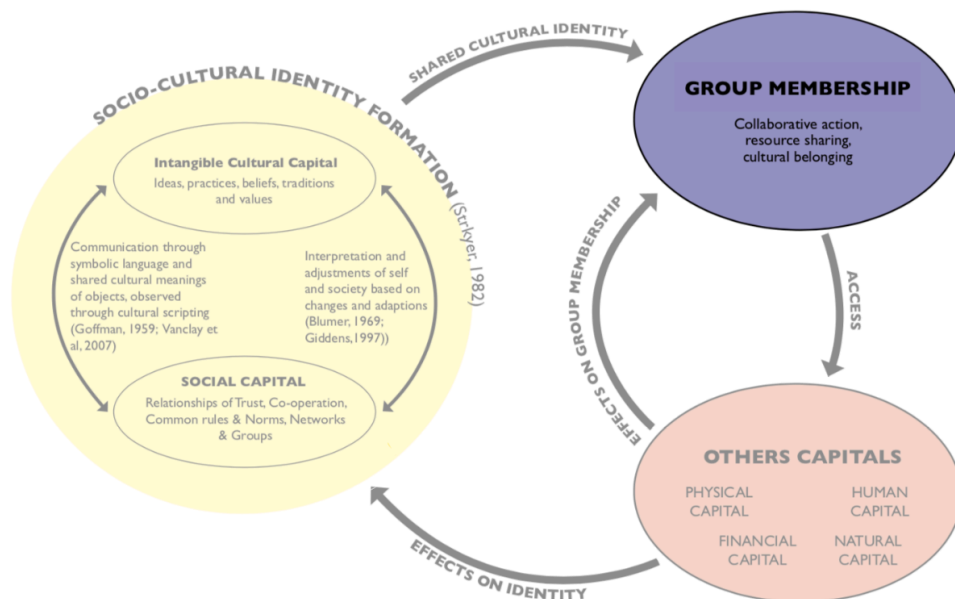
“[H]e was to some extent courted by some of the environmental groups... unfortunately if you are seen as being the sort of poster boy of those organisations groups, other farmers are suspicious of you.”

The shared cultural identity of vocational livestock production plays a critical role in group membership and access. This shared identity is based on the values and beliefs tied to VLP practices, which are a central pillar of the group's cohesion. Members of this group believe that to be part of their community, you need to demonstrate that you share their values and beliefs. This makes it difficult for outsiders to be accepted and trusted, as the socio-cultural groups are very tight-knit and know each other extremely well.

Access to group membership is established through a shared set of values and practices, with farmers having a keen sense of who belongs to the

group and who does not. However, this relationship is not static and can be gained or lost depending on one's behaviours and level of attachment to the shared values and identity. The key aspect of group membership is the adherence to the core socio-cultural identity of hill farming, specifically as vocational livestock producers. The following section will delve into the benefits of adhering to this identity and how it is sustained, examining how the VLP identity facilitates social activity and how culture is a vital component in bonding the group together.

6.9 Group Membership



The four aspects of group membership to be explored within this section are collaborative action, resources sharing, cultural belonging and group status. These can be broadly broken down into two distinct categories, with collaborative action and resources sharing being functions of social

interplay. Whilst, cultural belonging and group status, are manifestations of socio-cultural identity. However, they are not mutually exclusive, with shared cultural identity key to social cohesion and social activities central to maintain shared identity.

6.9.1 Collaborative action

Collaborative action was observed throughout the community at both micro levels on individual farms, through to macro levels across wide ranging landscapes, and spatially distinct groups. NW Farmer 3 provides a useful introduction:

“Absolutely, upland farming relies entirely on collaboration, it actually extends beyond the farming element of it as well.....It’s an upland and farming culture that extends beyond simply helping each other out with traditional skills. It’s about looking out for each other, it’s about looking after each other and it’s about showing other people when necessary how to do it right.”

At all ethnographic activities collaborative actions were observed, not only at the obvious events like communal sheep gathering but at places where participants might be expected to work as individuals. Auction houses are venues for the competitive sale of livestock, however, collaboration is common, rivals were observed helping each other, bringing stock to sale, or aiding in the safe movement of stock within the venues. Even at the point

of sale when the owner's of the stock is within the central ring moving stock and encouraging buyers, other farmers will take care of rivals stock, making sure they enter the ring in correct order. This process was observed across multiple sites and events, within different communities.

The reasons for this collaborative work appears to be a very simple and practical manifestation of shared objectives and values:

"Everybody is doing more or less the same thing and understands that these husbandry techniques and management techniques actually make sense and they have been passed on over centuries. And they've been brought up with it."

The collaborative action of the hill farming communities can be broadly broken down into two distinct scales, either the macro scale of common land management and regional livestock movements or the micro scale of individual farm. LD Farmer 7 provide as useful summary:

'You know, there might be a lot different separate holdings but basically as far as the the fell is concerned, they've got to be farmed as one. You can farm your homesteading individually as you want, but on the fell its a joint effort. And so you can't afford for there to be people who's going to upset the apple cart.'

The most visible manifestation of the macro scale is the collaborative management of common land or shared landscape resources.

“Whether it's common land or it's freehold unfenced fell. The whole system relies entirely on the collaboration of skilled operators working together to a common end. And to the advantage of each other, but also to the advantage of the environment and the production systems that exist on individual farms.”

LD Farmer 1

When taking part in a number of collaborative gathers of open fell the benefits of this collaborative process were made abundantly clear. One individual would find the collecting of their livestock from the large spatial extends of the fells almost impossible. By working collaboratively, farmers can manage all their flocks effectively and efficiently. This traditional activity has allowed farmers to access the natural capitals assets of large areas of semi-natural vegetation which would have been otherwise impossible to exploit.

This collaborative management of landscape was enacted along fairly standard lines with similar activities and timescale maintained from year to year. The collaboration of individuals farmers was much more piece meal and built around a tradition of helping when it was needed or asked for. An older Lake District farmer outlined this tradition:

“It always was, always. You always went and give it another fella a hand, another farmers if he was getting behind, you'd gan and give him a hand, always. Everyone did their bit, working together. It actually makes it hard

when you get one that doesn't pull his weight. They get round it but, there's no need for it. Simple. Very simple."

LD Farmer 5

The skills and knowledge of the community would be shared around often based on who had the right tools to helping any given situation:

"It's more of a multi toolbox. Everybody works together but has different skills within it."

Numerous versions of these micro activities were observed during study but a couple of example outlined by participants are illustrative:

"LD farmer 3 actually has a field that's split us from a block ground we have, he lets me walk my sheep back over these two fields. I'll go and see him and say, 'I want to fetch them sheep yam [home]'. And he'll actually move sheep for me to get mine home if he needs to, and things like that. It saves me hours with a tractor 'n trailer, so through being neighbourly and getting on, you know, we all work together. It saves money."

LD Farmer 6

A second example illustrates another common collaboration around livestock movements:

“Normally say on our big sale days I'll take him a load of sheep into the market and he'll do the same for me. Just when we're busy and that we'll give each other a hand.”

NW Farmer 5

Several participants mention this practice of helping each other when moving large numbers of sheep. This was often done in tandem with a form of resources sharing where they would share the cost of transportation or lend each other the equipment to move livestock.

Collaborative action is a fundamental aspect of upland farming communities. It occurs at both macro and micro levels, ranging from common land management and regional livestock movements to individual farms. This collaboration is based on shared objectives and values, such as the belief that husbandry and management techniques have been passed down over centuries and are practical. The benefits of this collaborative process are clear, allowing farmers to access natural capital assets of large areas of semi-natural vegetation, which would be otherwise impossible to exploit. In addition, the tradition of helping each other, or sharing equipment, allows farmers to work together effectively and efficiently, saving time and money. This concept of resource sharing as an important aspect of group membership is to be explored in the next section.

6.9.2 Resource sharing

The second social aspect/benefit of group membership is the sharing of resources between group members. As outlined at the end of previous section sharing most commonly revolved around equipment, specifically that relating to livestock management or farming tasks. A sample of resources sharing provided by participants can be seen below:

“Maybe borrowed a piece of equipment or they'll borrow a bit of kit. So, you know, things like that. So yeah, yeah, like, we all have big stock trailers. And if I'm taking six or 700 mule gimmer lambs to Cockermouth, they'll all come with they're stock trailers and take me a load into the auction, and we all work together like that.”

This resources sharing doesn't always involve the sharing of labour either, a number of participants mentioned how equipment is shared out from other group members to use:

“I might not be there myself, but if they needed an extra tractor at silage time. They come and pick my tractor. Then somebody else can drive it for two or three days and then they'll drop it off. If I need one his comes here. So, your not hiring a tractor or buying in machinery you don't need. We work that way together.”

Both the above quotes hint at the aspects of reciprocity involved in resources sharing, there is always an expectation or cultural norm that the

sharing with be returned in kind. Although, in some cases the resource sharing seemed to be open ended with no obvious reciprocation required:

“We've actually got LD Farmer 2's bull walker! I think, well, I think it's our Bull Walker now. It's been here that long! (laughs) He did borrow it back a couple of year ago. He rang to see if he could borrow it!”

LD Farmer 4

The second most common form of resource sharing revolved around livestock themselves. This was most likely to concur if a problem had arisen with a farmer's existing stock and was not necessarily a regular arrangement:

“So if I get stuck for a bull, like last year or a year before. My old bull, I should have got rid of him, but I didn't. I was too sentimental. And he went wrong about a month into bullying, so I just rang up another farmer and said ‘you haven't got a bull kicking around not doing owt?’ He says, 'Well, I will do in about a month's time', I said that'll do, so I'd wait a month. So it knocks me calving pattern back a bit but at least I've got some calves”

Sharing of livestock does appear to have some rules or norms attached to it, as outlined by LD Farmer 6 who borrowed a breeding ram from a neighbour:

“So we didn't buy any tups this year. We just borrowed them from next door neighbour, just as a gesture of good will from him. But i looked up the

tradition and some places say that you should pay them £5 for a lamb or something as a payment, or another thing is just a gift or something like that. Well, we gave him a really nice bottle of whisky that Christmas.”

Other forms of resources sharing mentioned by participants were more random and appeared to correspond to specific needs or issues that arose. For example LD Farmer 2 explained what happens when his neighbour has a issue with his machinery:

“Every now and again, LD Farmer 1 will dump his bike in the middle of a wet bog. And if they can't get hold of me, then his son will come and borrow my quad bike and a bloody long rope to get him out!”

This relationship was only possible due to the development of trust between the two parties, both had been neighbours for over 50 years. Reducing the need for formal permissions or arrangements to be made over sharing.

This statement was broadly supported by ethnographic observations, the farmers most likely to be shared with were those that were identified as good, passionate farmers. If farmers had good quality stock, were proved trustworthy and open to reciprocity then resources would flow quite freely. Those who are considered to have poor stock, were uncooperative and unwilling to join in collaborative activities were unlikely to have resources shared with them. This appeared to link to cultural belonging with the sharing of cultural values and identity encouraging sharing. Other aspects

of this cultural belonging within the group are to be explored in the next section.

6.9.3 Cultural belonging

The first of the cultural aspects of group membership to be explored are the factors revolving around cultural belonging. These were seen as relating to connection to place and farming lifestyle within the unique hill environment. Connection to place and a life lived within the unique environment of the hills was common amongst participants. LD Farmer 9 response when asked to describe their start in farming is similar to many:

“I was born on a farm in Borrowdale, And not particularly big farm, but quite a high lying farm. I think that it's about 900 feet above sea level. And so I was brought up there and when I left school and I've come to work at home.”

The uniqueness of the hill farming environment was also a common theme, with participants keen to make a distinction between themselves and other farming areas:

“You can't compare an upland farm that's in the Cheviot hills to a hill farm on top of Borrowdale.” LD Farmer 11

This connection to a unique environment making them feel quite different to people from other areas, and finding it challenging to be out of the cultural landscape of their births and working lives:

“[W]e feel really a little bit like a fish out of water if we're not in and around these areas, if you know what I mean. All of us. I'm not just suggesting its me in particular. But I would say that that's a fairly common kind of attitude right across the hill farming community.” NW Farmer 8

The groups connection to the landscape being identified as central to the retention of people within this way of life:

“I think it's a shared connection to the land that supports us. And many of us, myself particularly. I've had opportunities to go and do other things, but.... this bond, this absolute connection with the land was the strongest sort of pull that I had”.

The continuation of people within the landscape and the shared way of life, built around the day to day vocation of livestock production, bonds the members to the group. Even when not working together, hill farming is a very visible activity, as outlined by LD Farmer 7:

“It's part of, it's a tapestry of people's stock, people's livelihood. And the fact that I might see one of the farmers driving across on their quad bike and I know exactly what they're doing and they wave. And so it's it's more

than it's more than just when we meet up for meetings or when we meet up together from the fell, it's sort of every day, really."

So the day to day tasks of a hill farmer are not just seen as an isolated endeavour but a part of a wider group working within a continuous cultural landscape :

"Without that cultural bond that keeps us all together it becomes so fragmented that it's just another task. Whereas at the moment, this cultural coming together, this bond, this heritage. We do it because that's what we want to do it because we enjoy it." NW Farmer 9

This strong sense of group belonging and bonding to place and way of life, lead many participants to identify themselves more as a tribal group:

"So, you know, part of our culture is actually quite tribal. We would I'm sure at one point we would be a tribe? You know that the people in the Lake District would be a tribe." LD Farmer1

The distinctiveness of the group was linked to their daily activities. They perceive themselves as unique from other contemporary social groups due to their adherence to a cultural way of life associated with their work:

“And obviously there's also lots of cultures... But most of those exist alongside their daily existence.... But the culture that we have is the culture that existed and developed around our day to day business.” LD Farmer 8

Such strength in feeling around the uniqueness of the cultural group had developed that several participants go as far to say they view their hill farming community as an indigenous tribal group, several offer compassion to other indigenous groups from around the world:

“We kind of I don't know if we if we were the tribesmen of Papua New Guinea, we would be celebrated as a cultural icon. Like the Sami people of Scandinavia, pretty much do what we do. But they are always highlighted as this fantastic cultural people. Who should be protected and you know, and the Ivenki in the Siberian forest and the Inuit, you know? Yeah, we need to protect these cultures and protect these cultures. Our culture is equally valuable.” LD Farmer 1

While NW Farmer 1 picks up on this threat to his cultural group:

“And and it's exactly the same as we've seen happen, say, in Australia with the Aborigines, the cultures that have been virtually wiped out. And everybody thinks it's an absolute crime that their way of life is being wiped out. Well, why is it not a crime for my way of life to be wiped out?”

As a strong cultural group, participants had an equally strong sense of where the centres for the performance of their cultural belonging existed:

“We have retained as part of our cultural heritage the absolute flagships of our culture. The agricultural shows, the sheep sales, going to the auction mart. Those exist exactly as they did thousands of years ago.” NW Farmer 1

This was certainly supported by many participants, with several identifying the livestock auction, shepherd meets and agricultural shows as a place where members of the group would go to feel comfortable within a shared cultural embrace:

“The only place you will get them to open up and speak, is if it's informal and it's something like an agricultural show or a cattle market. Where they will go and they are in familiar surroundings.” NP Farmer 8

Even though the culture of the group was very much built around the daily business of livestock farming the cultural belonging was seen to extend beyond the regular engagement with the work:

“Retired farmers often go to Kendal auction on a Tuesday and Thursday because they know their friends are going to be there. So you'll see, like a retired farmer, he'll sit and watch a few of the lots go through and then he'll go and sit and have his dinner. People go and sit with him. Yeah. I chat to a lot of people in the cafe, at the auction.” NW Farmer 11

Ethnographic observations support this strongly, with auction sales being as much about community connection and the sharing of culture, as the functional sale of a product. Shepherds meets and shows were similar, they might have their upfront purpose for the displaying livestock but they extend to being much more an expression of a cultural groups way of life and an opportunity for members to meet up to celebrate the culture.

“So it's a real community, the showing. Yeah, it's terrific, there's a bit of fun on a night. You know this people firing barbecues opening a few beers. I don't like the shows during the day to be fair, during the night times you have a good craic and you catch up with like minded people.” NP Farmer 9

Hill farming communities have a strong sense of cultural belonging that is centred around their connection to the land and the unique environment in which they farm. This connection to place and way of life is a common theme among participants, who identify themselves more as a tribal group rather than just a farming community. The continuation of people within the landscape and the shared way of life, built around the day-to-day vocation of livestock production, bonds the members to the group. The day-to-day tasks of a hill farmer are not seen as an isolated endeavour but as part of a wider group working within a continuous cultural landscape. Due to cultural belonging connection to the working tasks of hill farming, individuals are able to build or lose cultural status through the undertaking of these tasks. The next section explores the data in relation to the development and loss of this cultural status within the group.

6.9.4 Group status

As explored above, the hill farming community considers itself to be a strong cultural group, as in any group status and group position is a factor. In this section the data relating to development and maintenance of cultural status will be explored. Followed by some evidence to support the mechanism through which status can be lost.

LD Farmer 1 provides a good introduction to the nature of status within the cultural group:

“Everybody can be a hill farmer if you want to be one and you understand the basics. But some people are really good farmers, so the David Beckham's of the farming world. So we all understand who they are. So there's this cultural structure as well.”

This notion of a good farmer within the group and how this is know by others was explored with all interviewees. A common answer was one reported by NW Farmer 11:

“Probably farmers with proven achievement. Somebody perhaps who was at the top of the showing worlds in a particular breed of animal. “

This picks up on two key points that were common amongst respondents. One that for a farmer to have status they must be a proven operator.

Secondly, that the mechanisms for supporting cultural positions were often based on the quality of livestock. This general conjecture was supported by LD Farmer 6 when asked about a fellow farmer regarded highly in the community:

"He's the main Swaledale guy up here and he's also has some very good Herdwicks as well. He has some good stock."

While, when a highly regarded farmer was asked why he had developed status within the group his response was a mirror to LD Farmer 6:

'Probably just my knowledge. I've been doing it a long time and I've got a good herd of suckler cows up and I know all the genetics of all the bulls and that.'

So, the quality of livestock is important in cultural status, building on this NW Farmer 2 identified production and the running of a successful farming business:

"You've always got people in the industry that are kind of like leaders... they are good examples of how to run a farming business and because they have done well, people know them".

The final pillar of this cultural status and in line with the shared vocational livestock production identity was farmers commitment to the vocational lifestyle:

“You've got to demonstrate that you have this absolute cultural bond and this desire to be as good as you possibly can be. And you don't have to physically go off and do anything particular to prove that, it's just people watching you all the time.”

LD Farmer 1

This quote also provides an insight into the mechanisms of status development, farmers do not have to actively seek this position because they are all being watched by their peers. This point was picked by NW Farmer 5 and linked back to livestock:

“People put their best stock in the fields next to the road, where the farmers can see them? You wouldn't put your worst stock next to the road, you'd put them somewhere else, you know?”

The very public nature of hill farming means that assessment of group members adherence to the shared values of farmers and their performance of the core pillars of cultural status are easily accessed by their peers. This can also mean that cultural group status can easily be damaged or reduced if farmers fail to align with these shared practices. In a direct confirmation of NW Farmer 5 assertions about where stock is placed NW Farmer 9 had this to say about a neighbour:

“I was looking in at my neighbours' fields. Well, I was appalled, some of the stock he had in their was shocking. He'd been cross breeding with all

sorts of lowland breeds, I think he's creating a real problem for himself. It's a real shame as his father had built up a good reputation for his stock"

This theme was repeated by several participants, when discussing a farmer on their common who had lost a good deal of his family's historic status LD Farmer 6 had this comment to make:

"The state of his livestock, it's a fucking disgrace!".

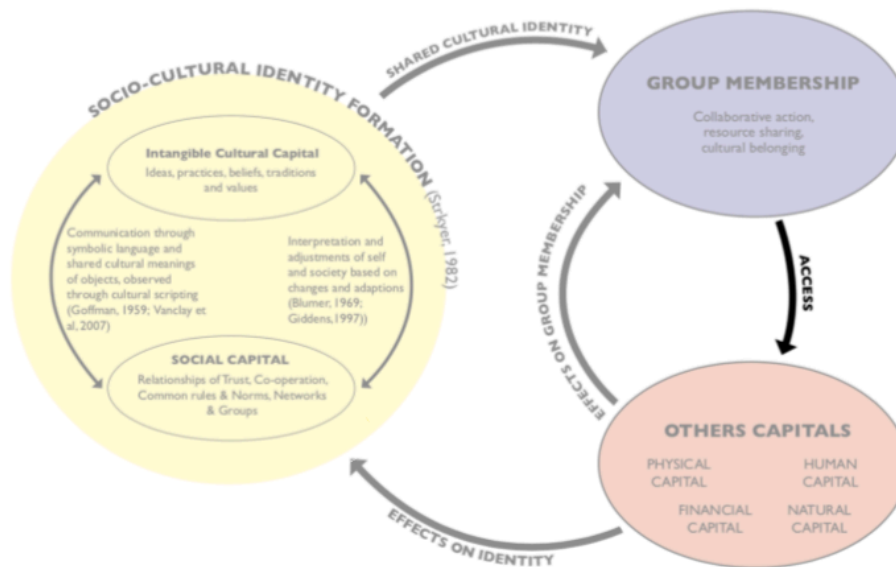
The farmer in question was mentioned by many of the farmers interviewed in the area, his status was very low within the community and the most common issue for this stated was his poor livestock.

The data indicates that the hill farming community places great importance on cultural status and that this status is closely linked to the quality of livestock, successful business practices, and commitment to the farming lifestyle. Those who are regarded as "good farmers" or have "proven achievement" within the community are seen as having higher status. Additionally, the public nature of hill farming means that peers are constantly assessing each other's adherence to shared values and practices, making it easy for status to be lost if farmers fail to align with these standards.

Data collection within this research study appeared to suggest that the position of farmers within the group is very closely associated with their livestock, a theme identified by participants across all three study areas.

This livestock is considered to be a form of physical capital within this study, this and other forms of capitals and how they related to socio-cultural identity will, be explored in the following section. However, before delving into those, first an outline of how group membership enables access to these other capitals is required.

6.10 Group Membership aiding access to other capitals



As outlined in previous section collaborative working within the group was seen as crucial to much of the process of all farming, if farmers are not able to act as a group they would struggle to access financial capitals outputs;

“[Y]ou’re in usually difficult conditions where somebody will need some help at some point because of weather or disease or just family illness, you know anything, there’s going to be things that are going to stop them being

able to be an active member of the community at certain times and they need support. And so you've got to get on with everybody.” NP Farmer 6

This helping of each other to access financial capital especially in difficult times is viewed as a significant part of cultural group membership and mutual support:

“That kind of collaborative helping each other out. Pre-dated modern insurance systems, people didn’t have insurance, if you fell ill. You were knackered. You know, your business, your wife, your family, everybody was completely buggered. And but the neighbours would inevitably rally around and give you time to recover. ...That still exists absolutely still exists, that helping each other out in a crisis is one of the strongest parts of our culture.” LD Farmer1

Group membership is also shown to be part of the more day to day access of financial capital, as explored above collaboration and resources sharing allows the saving of cost, with many farmers sharing equipment :

“[J]ust to save money on haulage costs....if we didn't do that, we would have to pay a hauler to do the job. And we've both got all the gear so no need to be at more expense to ourselves.” NP Farmer 12

Whilst, in other situations labour is provided to fellow group members at much reduced rates, thus reducing costs and improving profits for all:

“We have a lad in the village who comes and bails for us. We do work for them, so the price was less than it would have been, if we’d just got an ordinary contractor in.” NW Farmer 2

Access to human capital in the form of knowledge exchange is strongly linked to a shared group membership:

“When I’m looking for a bit of information at an auction for example, I’ll go round have chat with people, see whose running systems like mine. It’s those people I’ll mostly likely listen to, people who are doing it similar” NP Farmer 6

A specific example of this was offered by LD Farmer 2:

“We’re thinking about some changes to our inbye breeding, again I asked my peers this, when where come to lambing time.”

or NP Farmer 10 explained how he gathers knowledge for his farming operation:

“I’ve gone around and took a bit from everyone. So that kind of gives me perspective and I know what direction I wanna take things in.”

This sharing of knowledge within the group was common amongst participants. The benefits to this go beyond just the accessing of human capital LD Farmer 1:

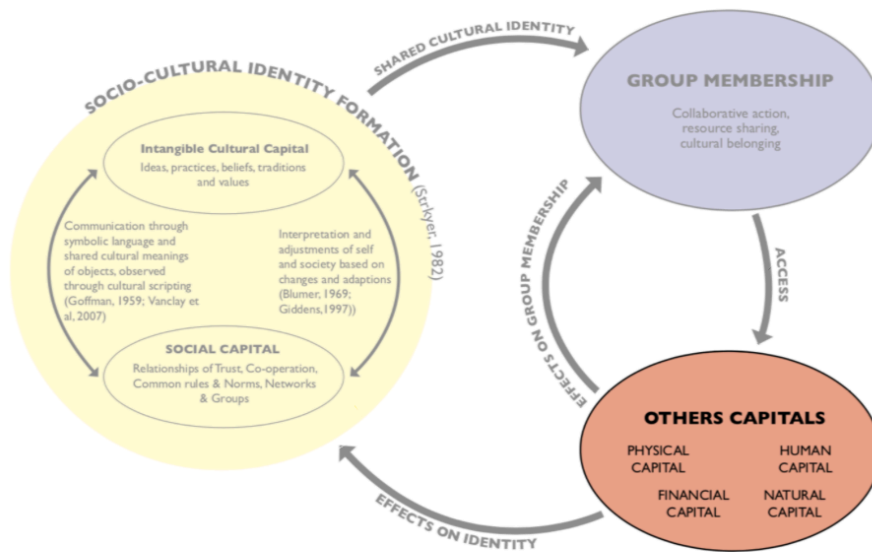
“So we're all sharing knowledge, we're all sharing experiences. We if there's a problem, we share it. You know, we don't let it bottle up inside us, we give each other, emotional support. You'll find that although farming is a very, sort of isolated, insular type of activity. Consequently, there's quite a lot of people suffer from mental stress. You'll find that not many of them are in the upland sector because we do pick up on the fact that somebody is on a bit of a struggle.”

A notion supported by NW Farmer 2;

“If you've had a problem, someone else will have had worse, it makes you think its only a small thing. Or someone has had the same problem and found a solution and they can share that with you or vice versa.”

Group membership allows farmers to share resources, knowledge, and emotional support. This collaboration is particularly important in times of crisis, where farmers need the support of their peers to overcome challenges such as weather or disease. By working together, farmers are able to access financial capital through the reduction in costs and improve profits. Additionally, group membership improves farmers' access to human capitals in the form of knowledge, allowing farmers to learn from each other's experiences and innovate in their farming practices. Beyond financial and human capital, group membership provides emotional support to farmers, who often face isolation and stress in their work.

6.11 Other capitals



The below section explores how other capitals become culturally significant or interactional with socio-cultural identity. Physical capitals are linked to cultural heritage, as well as their impacts on socio-cultural identity. Natural capital is an important part of cultural heritage and is often intertwined with physical capital. The financial capital of the community is influenced by values, beliefs, and social norms, with these factors being more important than the actual monetary value of the assets. While, human capital is strongly linked to values, lifestyle, and beliefs, and it plays a key role in the formation of social capital. The following sections explore the data relating to these other capitals as individual components.

6.11.1 Physical Capitals

Physical capitals within hill farming communities are identified as building & walls, livestock and plant and machinery. Through their interactions and importance to the shared socio-cultural identity these capital can take on cultural significance, or be considered tangible cultural capital or heritage.

Interviewees highlighted hill sheep as being the most significant forms of tangible CC. Although, farmers also place hill sheep dogs within this area, linking them to the cultural heritage of the uplands as much as hill sheep breeds:

“A lot with the dogs as well, for generations, they are bred on the farms. You know, they'll be old breeds that go back years.”

LD Farmer 9

The working of the dogs was also connected to the heritage and historic ancestors of existing hill farmers:

“Sheep dogs has always been a passion in our family, we've seriously competed with them for generations.” LD Farmer 10

However, they still remain an essential physical capital which is vital to the contemporary work of a hill farmers:

“You know, you can't just set off with a mediocre dog and expect it all happened.”

NW Farmer 10

The cultural importance of hill dogs is supported also by their economic value. Well regarded dogs with fetch figures in the thousands, with their value equated to a human equivalent or equal:

“Your dogs are everything. Somebody said, "Fancy paying £20,000 odd for a dog". I said 'it's better than a fucking man isn't it!'”

Livestock, particularly hill sheep are more commonly considered a form of physical capital which is also a form of tangible cultural capital. This was broadly supported by participants who appeared to connect hill sheep and the cultural heritage of hill farming. LD Farmer 1 repeated an often repeated view of the Herdwick sheep breeds' position with in the cultural heritage of the Lake District:

“The sheep are absolutely the the guardians of the Lake District, and they've been around for such a long period of time.”

Whilst, in explaining the cultural accepted norms and techniques for preparing sheep for sale and showing, NP Farmer 6 made the connection to the land and heritage of the sheep breeds:

“The logic behind rubbing peat into the fleece, well, just obviously where they originated off the Yorkshire fells and they are peat fells. But obviously in this area it's more the red on the Herdwicks because these are iron ore fells. So that I think the peat just demonstrates where it comes from, because often when the sheep are gathered, if they have been rubbing in a peat hag, the black stains them, and same with the Herdwicks being among the iron ore being red. So I think that's where their traits come from.”

The addition of traditional cultural markings onto hill sheep was a common practice and remained a practical mechanism to identify sheep:

“So we've got smit marks. So our sheep'll have a stroke in the middle rib on the far side. So on the right hand side, in the middle rib as well.” LD Farmer 7

This markings do not only provide a practical solution to identifying livestock but develop into a cultural capital, connecting contemporary farmers to their ancestors and wider cultural heritage:

“So the smitting and the ear lugs have been done for a long time. Ancient. Our farm marks have been used since at least the Napoleonic wars. But if you go back to the very first flock books, which at about 1820s.... A lot of people think the lug [ear] marks were brought by the Viking settlers who came here in the 10th, 11th century.” LD Farmer 2

Participants appear to connect hill sheep and the cultural heritage of hill farming, which is demonstrated through traditional cultural markings and practices, such as smit marks and ear lugs. These markings carry a physical manifestation of cultural heritage, with many of these systems marking going far back into the cultural origins of the hill farming system. In summary, physical capitals are more than just objects necessary for farming; they are a vital part of cultural heritage and community identity. Another capitals critical to the cultural heritage of hill farming are the natural capitals of the upland environment, their cultural connection is explored next.

6.11.2 Natural Capital

Iconic natural capital output of the community, for example hay meadow, or heath moors, are closely associated with the cultural heritage of the hill farming communities. During an ethnographic activity visiting hay meadows with farmers, the meadows are viewed by participants as a symbiosis between natural processes and the practices of their cultural life. Many of the farmers could appreciate the biodiversity value of these resources, but their primary interest remained in how they acted as fodder resources from their livestock systems.

This symbiosis of culture and nature was theme picked up by interviewees:

“The evolved management regimes that exist as part of those systems are absolutely part of the natural process. They have been around for so long, it's actually part of the natural process. And the reason that biodiversity is the way that it's been farmed for generations.” NP Farmer 8

With a number of participants echoing LD Farmer 1 thoughts:

“So we've been the original ecologists, we were the original environmentalists? We were thinking about looking after those areas long before, long before it became sexy, you know?”

This theme of farmers viewing themselves and their cultural system as a precursor to any environmental movement was picked up by NW Farmer 11 with regards to new agri-environmental scheme requirements:

“And also things like I had to have a muck management and nutrient management plan for the farm. Well, cows are in the barn the muck gets pushed out the back and it gets spread on the fields in the summer. That is my nutrient management plan. But this system has been in existence for probably 500 years. So why do I need to suddenly start?”

This integration of natural process to the cultural system was highlighted by many participants, they felt strongly that what they did was to support natural process and maintain a sustainable land management system. NP

Farmer 6 picks up this theme whilst going on to outline his cultural connection to the natural capitals:

“You know, you've got to you just keep it in good condition to hand on the next generation, whilst being conscious of like, you know, you're living with nature. You probably take a lot of nature for granted and you see lapwing chicks and and all them nesting birds. It's all part and parcel of life of nature, but you just take it for granted because you get used to it. A lot of people don't understand it, but you've got to have regard and respect for nature because it doesn't matter what you do and you'll never beat nature.”

The broad consensus amongst farmers was their cultural system of land management was critical to the creation and maintenance of natural capitals:

“You know, there's a sign down the valley, it says North Pennines Area of Outstanding Natural Beauty. That's really wrong? Because it should say 'area of managed beauty'. That was generations of farmers that made that landscape and created that landscape.” NP Farmer 3

Whilst, all of this output was always connected directly back to the core identity and objectives of livestock production:

“This is what we actually do, we produce lamb, but we're going to lay all these hedges, we're going to plant a whole load of new hedges. We've done

all this work up the back here, put in leaky dams to try and prevent some flooding. But this is all done off the back of these lambs.” NW Farmer 9

Based on the data the relationship between natural capital and the cultural heritage of hill farming communities appears symbiotic, where the evolved management regimes of livestock systems are critical to the creation and maintenance of natural capitals. Participants view their cultural system of land management as essential to supporting natural processes and sustainable land management of natural capital. This close connection has led to the elevation of elements of natural capitals like hay meadows to items of cultural significance.

The phenomenon of other capitals being culturally significant seems to stem from the shared socio-cultural identity among farmers, where objects gain importance due to their association with the vocational work of the community. The upcoming investigation will focus on two capitals that are closely linked to the manifestation and impact of this shared identity on capital.

6.11.3 Human capital

Human capitals are identified with regards to hill farming communities in the form of knowledge and family connections. Both these were seen to be interconnected with the core identity of the vocational livestock predictor. The vocational aspects of shared identity were central to the deep immersion in the cultural life of live community critical to farmers

knowledge development. Human capitals were learned through acting out the shared socio-cultural identity over prolonged periods leading to a communal respect for age and experience accrued by doing the life-style .
LD Farmer 4 speaking about a senior neighbour:

“He's done it for 56 years., he'll have the most knowledge of anybody.”

OR

“Experience, you're never going to get there until you've proven yourself, you've got to be a proven operator, before anybody will listen to yer.” NW Farmer 2

This cultural accumulation of knowledge is closely associated with the intergenerational farming family unit. The experience of multi generations are seen to develop a combined cultural knowledge:

“I don't think 30 years of experience is a lot and go around most farm kitchen tables. Concurrently, most farm businesses have got way more experience than that.”

NW Farmer 10

The traditional hill farming family was placed at the centre of the community and its cultural practices. For example LD Farmer 3 explains this family make up and how they are all involved in key cultural activities like gathers:

“It's a family affair. You tend to find that the mum and the kids, to be sexist, although on our common there this three or four matriarchal farms. But you tended to see dad and the lads out shepherding. But gathering, certainly shearing time when it's summer, and it's probably going to be dry. You nearly always end up with at least one or two families with mom and the kids, out there as well.”

This multiple generational engagement with the key task of hill farming encourages the sharing of cultural tastes between generations:

“When it's lambing my youngest daughter goes round on the quad bike with her grandad. He teaches her what to look for. She has developed a similar taste in sheep to him.” NW Farmer 8

This passing down of cultural values, tastes, beliefs were identified as important to identity:

“Its our cultural identity. You know, that's that's who we are. And growing up, even though I didn't grow up on a farm. My uncle, his main interest was in the stock and that's passed on through the generations. And that's great, you know, to have that knowledge transfer. And so, yeah, I think that's absolutely the most important thing.”

However, this is not necessarily a linear process, as outlined by NP Farmer 12:

“My dad was never that into the Swales. It was my grandfather who looked after this bit of the farm. It sort of skipped the generations. My father is more interested in cows.”

This continuity of existence and lived experience, is seen to forge connections back to cultural ancestors. NP Farmer 12 asked if his childhood was similar to that of his children:

“ It’s just like a carbon copy of my childhood. Just a matter of going along with mum and dad, whatever they were doing.. When we go clipping with my brother and family there's seven little ones. And you see them play in the streams or the river. And you can almost visually think it’s from a hundred years ago.”

The data suggests that knowledge, which is a form of human capital, is acquired through cultural immersion over long periods of time. As a result, age and experience are highly valued and respected in the community. Typically, this knowledge is passed down through generations within families, and intergenerational transfer of knowledge is considered to be the key mechanism for learning. This creates a strong cultural identity that connects contemporary farmers with their ancestors. This shared identity is a crucial factor in determining the creation or lack of financial capital, which will be discussed in the next section.

6.11.4 Financial capital

The main outcome of data collection is that the vocational livestock production identity is seen to regularly override the drive to produce financial capitals. Pursuing the shared objectives of hill farming culture and living a vocational life are more important than the amassing of capital. Put simply, when NP Farmer 2 was asked if he farmed the fells for the money his response was:

“Not a chance!?”

However, there is a recognised need to make some money farming and the tension around this often relates to socio-cultural identity. Diversification is a common mechanism through which farmers can access additional financial capitals but this is often seen as a distraction from the core cultural activities that drive them:

“Yes, I’ve had to diversify into tourism and off farm work but it’s just to subsidise what I want to do, what I was brought up to do, which is livestock farming.”

NW Farmer 11

Whilst, the term diversification is a challenging one, with LD Farmer 10 saying:

“Diversification! We hated the word! We said it's a way of adding value.”

This adding of value aligns the diversified revenue streams to the core production of livestock not to a new approach moving the farmer away from their central focus, the raising of livestock.

Subsidy has been a part of hill farming for many years but what farmers thought this subsidy should be paid for was illuminating. NW Farmer 9 provides an insight:

“I'd rather they paid us for like keeping appropriate sheep and maintaining walls and hedges and things.”

It's interesting to note that the farmer would rather be subsidised to produce key cultural physical capitals like hill sheep and maintain elements of the cultural landscape like walls, than be paid for other public goods. The food production identity was also present in participants responses to subsidy payment. NP Farmer 8 was relatively happy to be seen as subsidised in the aid of food production:

“Farmers receive a subsidy, but it's the price of food to a certain extent that's being subsidised. And I don't mind that, I don't mind people seeing we are giving something back in the form of cheaper food for getting subsidised food and food security.”

A secondary aspect of culture and its interaction with financial capital did actually lead to accumulation, although not without its complexities. Cultural knowledge was seen to lead to financial accumulation in the form of the skilled breeding of valuable livestock. With cultural significant livestock like breeding rams achieving price well above their basic value, LD Farmer 9 identified this phenomena, whilst also highlighting the issues it caused for the financial security of the wider community:

This happens in all livestock but I think it's absolutely crazy some of the prices stuff its getting too.. You know, with with the ones of us, that have been on committees or whatever tell government "Well, you know, things are really bad, you know, you just, just have be careful what you do because people are going to go out of business or fall off the edge" And then all of a sudden, bloody record price, £15000 for a Herdwick ram. Talk about shooting yourself in the foot. And that that's all the politicians will say. "a new record for the Herdwick ram, things can't be too bad!"

However, even though these price inflations can cause problems, through them skilled breeders immersed in the cultural knowledge system within the community are able to generate increased financial capitals. A NP Farmer 7 offers some details on this practice:

"And I breed some pedigree bulls. That's the only way I could see where I could add a lot of value to what I was doing to make to make them pay a lot better."

So, a small number of group members are able to capitalise on their culturally accrued knowledge and the communities interest in key cultural livestock. However, it's important to note these top breeders are often reinvesting the profits to retain the quality of livestock which have built them the cultural status:

“I'll cover the costs of replacements with what I've sold, because what would happen if you used that part of it as a business and start to take that money out and, keep it. That's what you should be doing in business sense. But what you actually do is take it away from your flock, you're just sort of treading water. You're not actually trying to make your flock better?” NP Farmer 6

As NP Farmer 6 highlights if the farmer were to just take the capitals as profit it would have an effect on the quality, perceived or otherwise of their stock, reducing their status and the increased capitals incomes they can become accustomed to :

That's, how the system works for the people who have the best flocks. If they stop buying the best tups. Or start buying the wrong type of tups. Then five years' time they won't have the best anymore.”

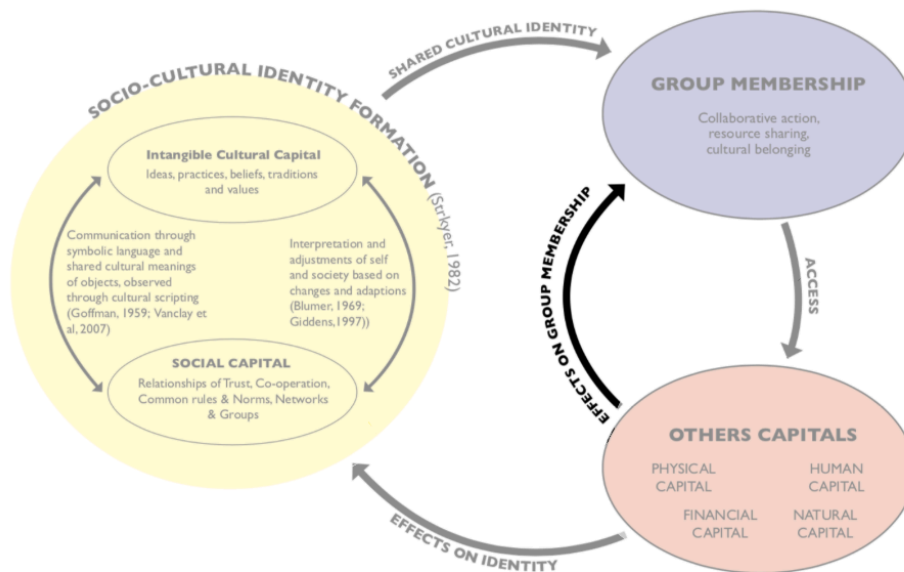
Based on the data, it appears that farmers prioritise their cultural desires over financial capital accumulation, although they still need to make a living. This may lead to the diversification of their business, but they are hesitant as it can divert from their core activity of livestock production.

Additionally, they are able to use their cultural knowledge of livestock and the demand for certain animals within their community to increase their financial capital. Overall, it appears that cultural identity and traditions play a significant role in the decisions and actions of farmers, even when it comes to financial considerations.

6.11.5 Other Capitals Conclusion

The farmers in this study perceive natural capital as a product of their community's cultural practices and thus assign it both tangible natural and cultural values. Human capital, in the form of knowledge, is acquired through long-term immersion in the cultural way of life, and intergenerational transfer of knowledge is highly valued. While farmers may increase their access to financial capital through leveraging their cultural knowledge, they are suspicious of activities that take them away from their core livestock production. They prioritise maintaining traditional cultural activities over accessing additional financial capital. Other types of capital become intertwined with cultural capital due to their connection with the community's socio-cultural beliefs and practices, which can affect group membership. As identified earlier the intangible cultural capital underpinning these processes were seen to be broadly homogeneous across all three areas. However, the cultural nature of physical capitals such as livestock did appear to be especially strong in the most traditional farming system researched, for example, Herdwick sheep in the English Lake District. The relationship between these capital types and the wider community's cultural practices is explored further in the following section.

6.12 Other Capitals Effects on Group Membership



The effects of capitals on Group membership were mostly seen with regards to physical capitals, unsurprisingly with regards to previous sections' livestock being a key conduit. Often participants' data on the effects of physical capitals on membership was weighted towards the negative effects rather than the positive.

NP Farmer 1 outlines what aspects of physical capital have a positive effect on group membership:

“Tidiness, everything in place, you know, clean and tidy and no mess anyway. And if there is a place for that sort of thing, it's there in one area. It's not all over the farm, because, you know, 'a tidy mind'. You know, you've got a tidy farmer who, you know, people who have time to do that. They've obviously got it sorted, They're doing it right.”

Whilst NW farmer 4 picks up on this point while also outlining the potential negative implications:

“Possibly seeing tidy operation, seeing livestock that are fit and healthy. And if half of them got dirty backsides and limping, then obviously somebody isn't dedicated to what he's doing.”

This issue of poor livestock impacting how a farmer is viewed and how others will accept them within the group was also raised:

“Animal welfare is a major part because where you've got poor animal welfare. There's obviously problems on the farm. Some people will have sympathy but most won't want anything to do with you.”

NP Farmer 5

Even if a farmer had good quality of livestock, the visible nature of the industry requires them to display them to the group correctly or risk damage to group membership. NP Farmer 10 outlines how difficult choices have to be made about what livestock is taken to different auction:

“If you take your good ones to Kirkby Stephen (main regional sale). So what you have left to take to St John (NP Farmer 10's local sale), you've just sort of made your pen look worse if you've taken the pen leaders out. So some of your neighbours, who have brought off you for years think your

taken your best elsewhere, so they stop buying off yer. Not everyone does this but I take all mine to one sale.”

The farmer wants to spread his livestock across different sales to reduce the risk of a poor sale return but the perceived reduction in quality of his pen (group of livestock for sale) can affect his status within the group. NP Farmer 10's solution was to take all his best to his local sales and maintain his standing within the local group rather than take some to a bigger auction and potentially get increased prices.

A subcategory to the effects of livestock of group membership is the specific micro groups created by specific breed ownership. LD Farmer 3 explains how depending on which breeds a farmer breeds affects the group events they will attend:

“Different kind of people go to different things depending on the breeds, you've got different breeders there, owners of different breeds. So you shepherds meets, now more than they ever were. I remember when it was quite a few Swaledale, there's not now. The Swaledale aren't shown to the same extent as they were in north west Cumbria, you know, even in my memory. Buttermere used to have Swaledale classes it doesn't anymore. It's just a Herdwick show now, Wasdale was always just a Herdwick event.”

So, depending on which hill sheep breed a farmer owns within their geographic region, different sub groups and activities for them to attend are created. The impact of alternative breed ownership can have a substantial

impact on group access. LD Farmer 4 had chosen to enter an agri-environmental scheme changing his livestock to a conservation grazing breed of cattle, he explains the impact this has on his involvement with community activities and access to the group:

“I don't get involved in the gathering because I have no sheep. Cattle kind of just stay in their own patches, sort of thing and socialise. So when I want to go and bring them in, I've got to go and find them and bring them. So its just a solo gathering exercise.”

A point re-enforced by LD Farmer 7 who discussed their decision to adopt the existing Herdwick sheep flock when taking on a new farm:

“I was saying to my husband, wouldn't it be funny if we'd moved here and we didn't have the sheep and we weren't part of the group. Our neighbours wouldn't necessarily have spoken to us, they probably wouldn't have spoken to us as quickly as they did or offered us help with different things.”

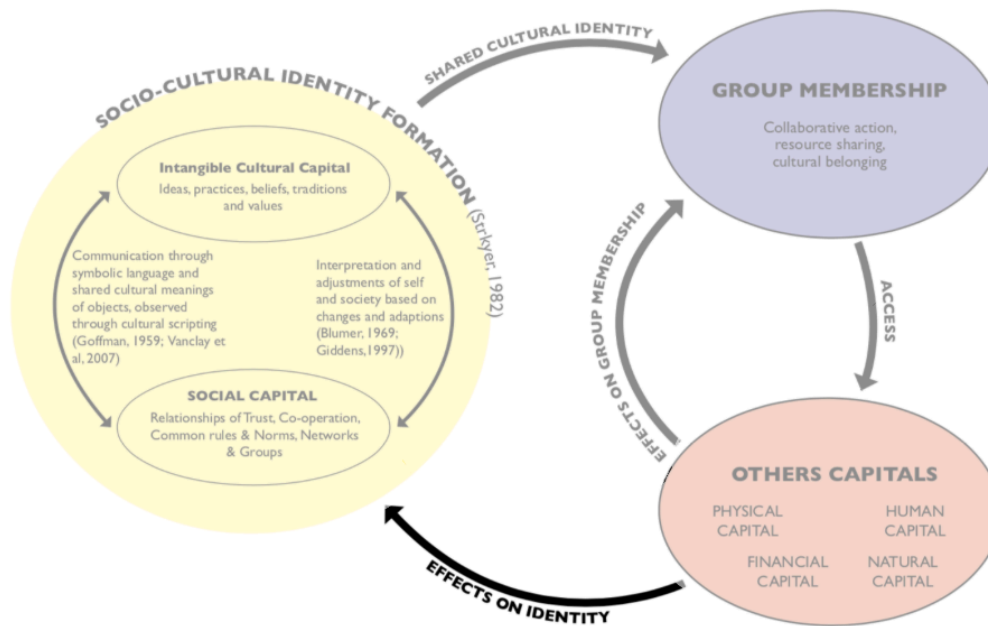
This highlights the very real significance of specific breeds to the potential access to the group.

In conclusion, the data indicates that physical capitals, particularly livestock, play a significant role in access to cultural groups in rural communities. The quality and appearance of a farmer's livestock is often seen as a reflection of their dedication and competence, and poor animal welfare can lead to exclusion from the group. Furthermore, the ownership

of specific breeds can create subgroups within the community, with different events and activities associated with different breeds. This highlights the importance of breed ownership in accessing the local group, and the potential impact of changing one's livestock on social connections within the community.

The available data suggests a clear correlation between livestock and group membership, while there is a dearth of information linking other forms of capital to group membership. This issue warrants further examination and critique of the data collection methods in the ensuing discussion. The next section delves into an aspect of the conceptual framework that lacks substantial data to support it.

6.13 Effects on identity



The effects of capitals other than social and cultural were identified in a number of cases. Although, it may be argued that these capitals caused this effect on identity due to their conversion into being cultural capitals, this was particularly in the case of physical capitals which as discussed in earlier chapter is seen to also act as cultural capitals e.g breeding livestock. The ownership of culturally embedded physical capitals was one of the capitals identified as affecting identity. The others were human capitals in the form of cultural knowledge, financial capitals in the form of money used to buy culturally significant objects and natural capitals in the form of participants' interactions with the cultural landscape of the uplands.

During previous analysis sections the importance of physical capitals especially livestock to identity has been indicated :

“Our flocks are our identity.” NW Farmer 11

How these physical capitals affect identity are illuminated in a negative example offered by participants. They highlighted the effect on a neighbouring farmer when he decided to sell his culturally significant hill flock of sheep.

“Well, he said to me, ‘Have I sold the crown jewels?’” LD Farmer 2

Another farmer talking about the same person. :

“He’s sold his hill flock. I think he misses them, he’s not involved with things like he was.” LD Farmer 3

Several interview participants identified that the farmer who had sold his hill flock had been changed by the sale. He was not the same person.

These examples demonstrate that physical capital, such as livestock, can have a profound effect on the identity of hill farming communities.

Livestock was also identified in playing a significant part in the effects of human capitals on farmer identity. Knowledge particularly in the form of skills related to livestock management and breeding were identified as affecting identity:

“The skills to work those sheep, it’s central to who we are.” NW Farmer 5

This was specifically identified with children within the community. Through induction into the skills needed to show livestock participants noted a change:

“If kids start showing livestock and get the buzz. They want to learn more, it becomes part of who they are, I guess.” NP Farmer 11

By learning the skills needed to show livestock, they experience a sense of pride and belonging, which becomes an integral part of their identity. This, in turn, encourages them to learn more and perpetuate this knowledge within the community. Identity change doesn’t just have to be achieved through learning but can also be brought.

Participants indicated during ethnographic activities that the purchase of cultural significant objects could affect identity. For example, those who had brought high value breeding rams were affected by this. The ownership of the object didn’t just change how they were perceived by others but their own sense of self. However, this process was often viewed with suspicion, as outlined by LD Farmer 7:

“You see some people spending crazy money on tups. And you wonder if it’s worth it, will it make that much difference to ‘em.”

Although, the purchase of the item might change people, there appeared to be a doubt whether this change, not earned was of real value. If the evidential support for the ability of financial capital to affect identity might be slight, a more clear case was made for the effects of natural capital.

Living within the cultural landscape of the uplands was identified by several participants as central to their identity and sense of self. LD Farmer 5 provides a clear statement on this matter:

“Living here this last few years has changed us. Being in this landscape, doing this work, it affects who you are.”

Based on the data, various forms of capital, including physical, human, financial, and natural, can have a significant impact on the identity of hill farming communities. Physical capital, especially livestock, was identified as a key cultural capital that can shape one's identity. Human capital, in the form of cultural knowledge and skills related to livestock management and breeding, was also found to be a central factor in shaping identity.

Furthermore, financial capital, in the form of purchasing cultural significant objects, can also influence identity, although this process was viewed with suspicion by some. Finally, the natural capital in the form of living within the cultural landscape of the uplands was found to be a critical element in shaping one's identity. The data highlights the importance of understanding the interplay between different forms of capital and their effects on identity in hill farming communities.

6.14 Data Analysis Conclusion

In conclusion, the data collected from farm visits, interviews, and other activities from all three study areas suggests that hill farmers possess a strong sense of identity built around their vocation of livestock production and deep connection to the fell landscape. The hill farming culture is characterised by collaboration, humility, and self-reliance, supported by a strong sense of community and intergenerational knowledge transfer. The data indicate that all aspects of social capitals, including trust, reciprocity, and co-operative activities, are critical to the running of the hill farming system. Access to group membership is established through a shared set of values and practices, with farmers having a keen sense of who belongs to the group and who does not. The key aspect of group membership is the adherence to the core socio-cultural identity of hill farming, specifically as vocational livestock producers.

The data suggest that the hill farming community places great importance on cultural status, which is closely linked to the quality of livestock, successful business practices, and commitment to the farming lifestyle. Group membership allows farmers to share resources, knowledge, and emotional support, improving their access to financial, human, and social capitals. By working together, farmers are able to reduce costs, improve profits, and innovate in their farming practices.

Overall, the data highlights the complexity and interconnectedness of the hill farming culture and the importance of social and cultural capitals in sustaining their way of life. The hill farming community's connection to

place and way of life is a common theme among participants, who identify themselves more as a tribal group than just a farming community. This connection to the working tasks of hill farming allows individuals to build or lose cultural status through the undertaking of these tasks.

Adjustments in hill farmers' identities do occur, generally due to changes in farming practices, but the core identity of vocational livestock production remains stable. The continuation of people within the landscape and the shared way of life, built around the day-to-day vocation of livestock production, bonds the members to the group. The public nature of hill farming means that peers are constantly assessing each other's adherence to shared values and practices, making it easy for status to be lost if farmers fail to align with these standards.

In the upcoming discussion chapter, the key findings will be examined and analysed in relation to existing literature and theoretical concepts.

Specifically, the focus will be on the aspects of CF weaknesses to evidence and a new concept that emerged in the data but was not previously included in established frameworks. The implications of this research will also be discussed.

Chapter 7: Discussion

7.1 Introduction

In this chapter, the focus will be on the major themes that have emerged in the field of data analysis. To begin, a concise overview will present the main discoveries derived from data analysis. Next, an examination will be conducted to determine how these themes relate to existing academic research, identifying areas of alignment or divergence. Furthermore, the study will explore findings that originated from the data but were not initially included in the conceptual framework. This exploration will involve incorporating new scholarly sources to support these newly uncovered findings. Additionally, a revised conceptual framework will be introduced and discussed, accounting for the insights obtained from the data analysis, including the development of any novel concepts. Finally, the chapter will conclude by summarising the key points of discussion and establishing links to the concluding chapter.

7.2 Key points overview

The section will review the six main points raised by the data analysis section and their relationship. First, the shared socio-cultural identity as vocational livestock producers. Second, the importance of cultural and social capitals within this shared identity's formation. Third, how the interactions of SC and CC are facilitated by cultural communication and adjustments. Fourth, the role of the shared socio-cultural identity in

accessing the group. Fifth, the benefits of membership of the socio-cultural group. Sixth, the feed back loops within the framework borne of cultural permeation within the other capitals. Finally, a brief summary and conclusion of these points. The relationship of these six points is shown in Figure 63 below.

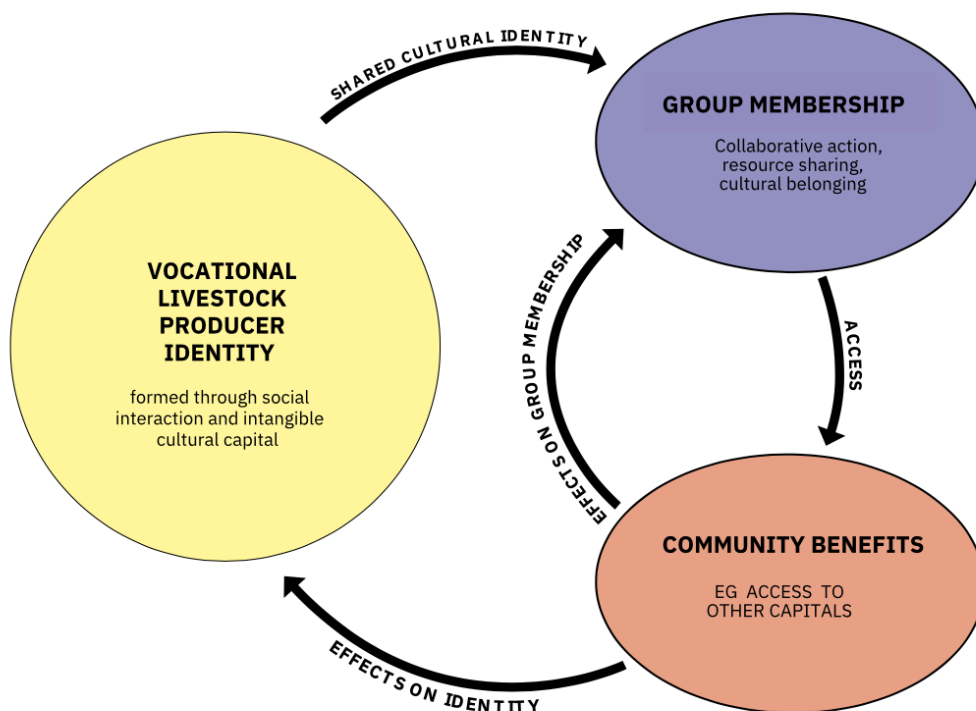


Figure 63 Diagrammatic relationship of key points

7.2.1 Vocational Livestock Producer identity

The central finding is that all participants have a shared socio-cultural identity, that of the vocational livestock producer. This identity is built upon three pillars borne out of the data, that of the vocational way of life, skilled livestock person and food producer. According to the data, hill farmers view farming as a calling that they pursue throughout their lives.

For them, it's more about finding fulfilment and preserving a way of life, than about making money.

Based on the data, it appears that farmers connect their identity with that of their livestock. This deep connection often leads them to prioritise their animals over economic gain, and to maintain their livestock in a way that aligns with their personal values. The importance of livestock was often intertwined with the third pillar of farmers' identity: their role as food producers. The focus on food production was particularly important to the older generation of farmers who were brought up during the post-war and Common Agricultural Policy era, but it also continued to be significant for the new generation. Although some farmers expressed an interest in producing other products, such as natural capital, the conversation and focus remained largely on how to produce food.

The centrality of food production in combination with the lifelong commitment to a vocational way of life built around working with livestock, forms hill farmers shared socio-cultural identity, that of vocational livestock producers (VLP). The second key finding of this study is how this shared identity is formed.

7.2.2 Importance of CC and SC to Identity formation

This study suggests that the distinct identity of vocational livestock producers (VLPs) shared among hill farmers in this study emerges through the interaction of intangible cultural capitals (ICC) and social capital (SC).

Analysis of the ICC data reveals that hill farming communities possess a strong sense of identity, which revolves around their livelihood of livestock production and deep connection to the fell landscape. Their work ethos is characterised by collaborative and humble practices, balanced with individuality and self-reliance. This culture is supported by a robust sense of community and the transfer of knowledge across generations. Livestock management occupies a central role, with a reverential position for livestock within their way of life, giving rise to strong beliefs and traditions. Overall, the hill farming culture is a complex and interconnected system of practices, beliefs, and values that sustains their way of life and connection to the landscape.

The data also indicate the critical importance of all facets of social capital in the functioning of the hill farming system. Trust emerges as a vital component within hill farming communities, permeating various practices such as collaborative land management, livestock trade, and resource sharing. Reciprocity and exchange within these communities are deeply rooted in trust and fair resource allocation, with labour being the predominant form of exchange. These exchanges adhere to unwritten

cultural rules and norms that are widely understood and accepted within the community.

Co-operative activities and livestock transactions offer opportunities for individuals to demonstrate their understanding and adherence to these rules within the broader group. Generally, groups coalesce around the core interests of the hill farming community, such as livestock production and farming practices, with friendships and networks forming over time through collaborative endeavours.

The study highlights that the unique identity of VLPs shared among hill farmers is shaped through the interplay of ICC and SC. The data underscore the significance of livestock production, a strong work ethic, trust-based interactions, and collaborative efforts in sustaining their way of life and fostering connections within the community.

7.2.3 Interaction SC and CC facilitated by cultural communication and adjustments

Cultural communication was seen to play a crucial role in allowing farmers to compare experiences, discuss challenges, and share problems they encounter. Interestingly, these discussions extend beyond social events, as farmers continue to engage in conversations about livestock and farming-related issues even while working or being in social settings. This form of

cultural communication serves not only as a means of information exchange but also strengthens social connections among farmers.

Exploring the adaptability of intangible cultural capitals and social capital in response to changes is an important aspect of this study. The data indicate that adjustments in hill farmers' identities do occur, primarily in response to changes in farming practices. The core identity as vocational livestock producers generally remains stable, while some adjustments are identified, particularly in the increased emphasis on natural capitals driven by agri-environmental schemes. Participants have shown a willingness to adopt more nature-friendly approaches without compromising their central identity as livestock producers.

Overall, the data suggest that farmers' identities can evolve and adapt within the context of changing farming practices, for example the adoption of new livestock breeds or changes to their farming system. The study highlights the resilience of the core identity as vocational livestock producers while demonstrating the capacity of farmers to incorporate new elements, such as a focus on natural capitals, into their identities. This adaptability showcases the dynamic nature of their cultural practices and values.

7.2.4 Access to the group

Group membership and access are heavily influenced by the shared cultural identity of vocational livestock production (VLP) within the community. This shared identity is built upon the values and beliefs associated with VLP practices, which form a central pillar of group cohesion. In order to be considered a part of this community, individuals are expected to demonstrate their alignment with these values and beliefs. This strong adherence to shared values and beliefs makes it challenging for outsiders to be accepted and trusted, as the socio-cultural groups are tightly-knit and intimately acquainted with each other.

The data indicate that the foundation of group unity and inclusion is established through the collective embrace of socio-cultural values, particularly centred around the identity of livestock producers. Departing from these values and beliefs was found to be the quickest route to losing membership in the group. Such deviations were primarily observed in three forms: mishandling of livestock, disengagement from collaborative livestock management activities, and transitioning the farming business away from the traditional production model, namely, breeding of hill specific livestock within the UK sheep stratification system.

Access to group membership is established through a shared framework of values and practices. Farmers possess a strong awareness of who belongs to the group and who does not. However, this relationship is not fixed and can

be gained or lost depending on individual behaviours and the degree of alignment with the shared values and identity. The fundamental element of group membership lies in the adherence to the core socio-cultural identity of hill farming, specifically as vocational livestock producers.

7.2.5 Benefits of group membership

The four beneficial aspects of group membership illustrated by the data were: collaborative action, resources sharing, cultural belonging and group status.

Collaborative action and resource sharing are fundamental aspects of upland farming communities. The benefits of these collaborative processes are clear, allowing farmers to access natural capital assets of large areas of semi-natural vegetation, which would be otherwise impossible to exploit. In addition, the tradition of helping each other, or sharing equipment, allows farmers to work together effectively and efficiently, saving time and money.

The day-to-day tasks of a hill farmer are not seen as an isolated endeavour, but as part of a wider group working within a continuous cultural landscape. Due to cultural belonging and connection to the working tasks of hill farming, individuals are able to build or lose cultural status through

the undertaking of these tasks. Those who are regarded as "good farmers" or have "proven achievement" within the community are seen as having higher status. Additionally, the public nature of hill farming means that peers are constantly assessing each other's adherence to shared values and practices, making it easy for status to be lost if farmers fail to align with these standards.

Group membership allows farmers to share resources, knowledge, and emotional support. This collaboration is particularly important in times of crisis, where farmers need the support of their peers to overcome challenges such as weather or disease. By working together, farmers are able to effect financial capital through the reduction in costs and improve profits. Additionally, group membership improves farmers access to human capitals in the form of knowledge, allowing farmers to learn from each other's experiences and innovate in their farming practices. Beyond financial and human capital, group membership provides emotional support to farmers, who often face isolation and stress in their work.

7.2.6 Feedback loops

The intricate relationship between possession of key capitals, access to group membership, and the formation of individual identity within rural communities is evident from the data collection. The possession of physical

capitals, particularly culturally significant livestock, plays a pivotal role in determining an individual's access to the cultural group. The quality and appearance of livestock are seen as reflections of dedication and competence, while specific breeds can create subgroups within the community, e.g Swaledales within the Lake District. This underscores the importance of breed ownership and the potential impact of changing livestock on social connections.

Furthermore, various forms of capital, including physical, human, financial, and natural, significantly shape the identity of hill farming communities. Physical capital, exemplified by livestock, can take on a role as prominent cultural capital which influencing identity. Human capital, encompassing cultural knowledge and skills related to livestock management and breeding, also plays a central role in shaping identity. Financial capital, such as the acquisition of culturally significant objects e.g breeding rams, can impact identity, although it may be viewed skeptically by some community members. Additionally, natural capital, through living and working within the cultural landscape of the uplands, is a critical element in shaping identity.

Understanding the interplay between different forms of capital and their effects on identity is crucial in comprehending the dynamics of hill farming communities. The data suggests that possession of key capitals, particularly culturally significant livestock, can create feedback loops that influence

access to group membership and shape individual identities within these communities.

7.2.7 Key points conclusion

In conclusion, the data reveals that hill farmers share a socio-cultural identity as vocational livestock producers (VLPs). This identity is built upon three pillars: the vocational way of life, being a skilled livestock person, and serving as a food producer. Farming is viewed as a lifelong calling and a means to find fulfilment rather than purely a means of making money.

The formation of the shared socio-cultural identity of VLPs among hill farmers is influenced by the interaction of intangible cultural capitals (ICC) and social capital (SC). The ICC data indicates a strong sense of identity revolving around livestock production and a deep connection to the landscape. Collaborative practices, individuality, and self-reliance are embedded in their work ethos, supported by trust-based interactions and the transfer of knowledge across generations.

Cultural communication plays a vital role in allowing farmers to compare experiences, discuss challenges, and strengthen social connections.

Farmers' identities exhibit adaptability, particularly in response to changes in farming practices. While the core identity as vocational livestock

producers remains stable, adjustments occur, including an increased emphasis on natural capitals driven by agri-environmental schemes.

Group membership and access are closely tied to the shared cultural identity of VLPs within the community. Adherence to shared values and beliefs is essential for inclusion, making it challenging for outsiders to be accepted and trusted. The benefits of group membership include collaborative action, resource sharing, cultural belonging, and status within the community.

Possession of key capitals, particularly cultural significant livestock, creates feedback loops that influence access to group membership and shape individual identities. Physical capital, exemplified by livestock, can take on a role as prominent cultural capital, while the interplay of different forms of capital and their effects on identity are essential to understanding the dynamics of hill farming communities.

Overall, the findings underscore the interconnectedness of cultural practices, values, and social dynamics within hill farming communities. The shared socio-cultural identity of VLPs emerges through the interplay of various capitals and is sustained through collaborative efforts, trust-based interactions, and cultural communication.

In the following section how these findings relate back to the literature and theory outlined in Chapter 1 and 2 will be discussed, providing an exploration of the effectiveness of the existing conceptual framework.

7.3 Data relationship to literature

In this section the relationship of the data to the literature will be discussed, following the CF as in the analysis section. First, looking at how the data relating to socio-cultural identity (SCid) formation relates to the literature. Second, exploring the role of SCid in cultural communication. Third, the role of SCid and access to the cultural group. Fourth, the benefits of group membership, including : collaborative action, sharing of resources, cultural belongings and cultural status. Fifth, how socio-cultural identity and group membership proved access to other capitals. Sixth, the cultural manifestation within other capitals, particularly physical, and finally a conclusion linking these themes together.

7.3.1 Socio-cultural identity (SCid) formation

This study has been built upon the notions outlined in Mansfield (2019a), which highlights the significance of social and cultural capitals in hill farming communities, particularly in shaping their collective cultural heritage. The findings of this research confirm the validity of this idea, as the data collected indicate that intangible cultural capitals (ICC), such as values, traditions, and beliefs, form the foundation of the shared identity among hill farmers and play a central role in their ability to come together as a community (see section 6.3 and 6.7). The process through which these cultural values are transmitted and shared is attributed to social capital,

which manifests in the form of trust, cooperation, and other relational dynamics (Section 6.4).

Previous studies (Burton, 2004; Sutherland and Burton, 2011) have suggested the importance of intangible cultural capitals (ICC) in social relations within agricultural communities. However, the specific connection between social capitals and ICC had not been thoroughly explored. This study aimed to investigate this relationship and developed a framework to illustrate it. The collected data support the existence of a relationship, where ICC provides the value system that guides social interactions (section 6.3 and 6.5). The theoretical framework used in this study draws on Symbolic Interactionism (SI), particularly the ideas of Blumer and Mead (Powell, 2013). These theories propose that an individual's inner identity is interconnected with the social actions of their community (Reck, 1964). The shared socio-cultural identity (SCid) identified in this study aligns with these theoretical concepts. The participants share a SCid that revolves around the vocational lifestyle of the community and their primary concerns related to livestock rearing for food production (Section 6.2).

The vocational livestock producer identity proposed by the data analysis provides a shared set of values which permeates the whole system, a concept to be explored in the following section. However, in the context of its formation, the relationship of ICC and SC appears critical. The data analysis outlines the ICC of participants (section 6.3), which appear to

provide the cultural underpinning of this shared identity. This generation of cultural meaning borne from a way of life lived within a specific landscape and undertaking specific practices is a phenomenon identified in several studies of farming communities (Gray, 1999; Dalby and Mackenzie, 1997). However, this study goes further, to look at how this shared cultural value system goes on to create social connection within the wider community.

In this study, the mechanism that fosters community connection is identified as social capital, specifically characterised by relationships of trust, reciprocity, norms, and group dynamics. The study emphasises the significance of intangible cultural capitals (ICC) in reinforcing strong bonding ties within the community, a factor recognised as beneficial to farming communities (Bodin and Crona, 2009). The strong bonds formed around shared cultural values and beliefs are manifested through social capitals, particularly trust, and the resulting social cohesion it enables (section 6.4.5). This finding is not unique to this study, as previous research has also acknowledged the critical role of these aspects of social capital in farming communities (Alló *et al.*, 2015). However, this study goes a step further by beginning to identify the specific shared cultural values that underpin social cohesion and examines the mechanisms through which trust can be developed. The participants' examples indicate that trust is built by embodying the role of a competent hill farmer based on their shared cultural values and identity. A concept explored in a number of studies within the broader 'Good Farmer' construct (Burton *et al.*, 2021).

Trust is observed to develop through fair practices in livestock buying/selling (6.4.1), collaborative work (section 6.4.2), diplomatic approaches (section 6.3.1), and maintaining high-quality livestock (section 6.3.8). Indeed, trust exhibits a dual nature, with the potential for loss and its impacts on individuals being a significant phenomenon (Fukuyama, 1994). This aspect was captured in the data, revealing that hill farmers were at risk of losing social capital, particularly trust and willingness to cooperate, if they deviated from the shared values, practices, and beliefs stemming from their collective socio-cultural identity. The loss of social capitals was associated with several factors directly related to the shared social capital identity (SCid). For instance, farmers would experience a decline in social capital if they produced poor quality livestock, failed to engage in collaborative activities, or demonstrated a lack of humility by behaving undiplomatically (6.4.5). Such actions would result in reduced collaboration and a decreased willingness to share among other group members, ultimately eroding the critical resource of trust. Farmers who deviated from the traditional cultural identity and its values ran the risk of becoming socially isolated, a concept recognised by other studies (Burton and Sutherland, 2012; Meinzen-Dick *et al.*, 2014).

The findings align with theoretical frameworks of symbolic interactionism (SI), highlighting the interconnection between an individual's inner identity and their social actions within the community. The shared social capital

identity (SCid) identified in this study revolves around the vocational lifestyle of the community, specifically in livestock rearing for food production. Another aspect of symbolic interactions that emerged from the findings and supports the interplay between ICC and SC is the concept of cultural communication and adaptation. These findings, along with their connection to existing literature, will be further explored in the subsequent section.

7.3.2 Cultural communication and adjustments

The cultural communication observed in this study was found to be aligned with the core cultural beliefs and practices of hill farmers discussed in the previous section. It was through these shared interests that communication within social networks was established and expressed. Participants engaged in cultural communication centred around common beliefs and values, which resonates with the existing literature on the nature of cultural communication. According to Joas (1993), cultural communication involves meaningful words, gestures, and actions that are mutually understood by both parties. In this study, the most prevalent forms of cultural communication revolved around the quality of livestock, livestock management practices, and food production issues related to livestock.

The identified cultural scripting in this study pertained to the day-to-day work life and shared concerns of the community, particularly in relation to

livestock production. This theme aligns with findings from other studies exploring cultural communication among farmers (Vanclay *et al.*, 2007). These cultural scripts were often reiterated during interactions, reinforcing shared values and reminding farmers of their collective commitment to a vocational way of life centred around livestock production.

While cultural communication in this study largely aligned with the relatively homogeneous nature of participants' shared social capital identity (SCid), the analysis also revealed the presence of subgroups within the broader identity. This concept resonates with the existing literature, which recognises that specific communities or subcultures develop unique shared symbolic meanings that enable effective communication and understanding among their members (Cast and Burke, 2002). In the context of this study, these subgroups were not based on spatial groupings but rather specific aspects of the farming system, such as particular sheep breeds.

Farmers who raised specific sheep breeds engaged in distinct cultural communication related to the unique characteristics of those breeds. For example, a breeder of North of England Mules might say to another breeder, "It'll never throw you a white lamb." This statement holds significance only within the specific cultural context of Swaledale sheep breeder and would be meaningless to a Herdwick sheep breeder. This appears to demonstrate the existence of specific cultural scripts and communication patterns within subgroups of farmers. A similar concept

was identified by Vanclay and Enticott (2011), who found that farmer scripts responded to locally specific socio-cultural factors. However, their study primarily focused on spatial considerations, which are of lesser significance in this current study, where the livestock and farming system takes precedence over geographic locality.

The cultural communication observed in this study not only originates from the shared cultural values and beliefs of the community, but also serves as a mechanism to internalise, reinforce, and support culturally acceptable forms of behaviour. The scripting observed within the interactions of participants was firmly rooted in their central role as livestock producers. Each interaction with their peers served as a reaffirmation of this shared mindset and an opportunity to demonstrate alignment with it. This level of scripting, in line with socio-cultural theory, suggests that these scripts function as mental maps that guide behaviour along culturally and socially defined pathways of appropriate action (Money, 1993). By repeatedly emphasising these key cultural themes, participants reinforce the extent of culturally appropriate behaviour and actions. This is significant because participants recognised the potential consequences of saying or doing "the wrong thing" and how it could impact how they were perceived (section 6.9.4). This finding aligns with other studies on farmers' cultural scripting, which have identified the influence of cultural scripts on the values and behaviour of farmers, with regular reinforcement of key ideas helping to internalise shared cultural norms e.g Silvasti (2003a).

Contrary to the notion of fixed cultural norms, this study revealed that the interaction between beliefs, norms, traditional values, and the ever-changing social world of farmers led to adjustments in socio-cultural identity and, consequently, scripting. The traditional understanding of agricultural identities often portrays them as static, focused solely on maintaining existing systems (Vanclay *et al.*, 2007). This perspective was partially supported by the findings of this study, as participants emphasised the importance of traditional systems, traditional livestock breeds, intergenerational knowledge exchange, and the central role of the traditional hill farm in their beliefs (sections 6.3.9). However, the study also identified instances of adjustment to these values and, subsequently, the socio-cultural identity of farmers (Table 5 on following page). These observations align with Identity Theory, which posits that identities are not static but rather exist within a dynamic interactive dialectic between individuals and society (Giddens, 1999).

Traditional	Adjustments
Diplomacy/Humility	Importance of hay meadows
Rightness of system for place	Significants of cross breeds/mules
Custodianship of the land	Status linked to diversifications
Self reliance	On Farm Wildlife
Supporting others	
Hard work	
Intergenerational cultural	
knowledge	
Centrality of livestock	

Table 5 Traditional versus adjustment values and beliefs

The analysis of the data indicates that the majority of adjustments to socio-cultural identity occurred through engagement in activities beyond the traditional livestock production model followed by most participants. Two main activities stood out: participation in agri-environmental schemes involving collaboration with non-farmers, and off-farm work. These activities had slightly different effects on identity adjustment. Agri-environmental schemes were found to increase farmers' interest in new areas and introduce new cultural beliefs, such as the importance of high-quality hay meadows (section 6.6). On the other hand, off-farm work seemed to distance farmers from the core shared values and, to some extent, socially isolate individuals. Together, these findings bear resemblance to other studies in the farming domain that explore identity adjustment, highlighting that farmers' identities are not static but rather

adaptable through interactions with different social groups and activities (Little & Panelli, 2003; Burton, 2004; Burton and Wilson, 2008).

Engagement in agri-environmental systems was found to have an impact on cultural scripting and the conversations among farmers involved in such schemes. Participants highlighted that these conversations expanded beyond traditional livestock-related topics and incorporated aspects of conservation management (section 6.6). This observation lends support to Burton's (2004) notion of the significance of the development of cultural and symbolic meaning within farming communities and its potential influence on the successful transition to agri-environmental farming. This theme will be further explored and addressed in the conclusion.

This PhD study sheds light on the cultural communication and scripting among hill farmers, highlighting the alignment of communication patterns with shared cultural beliefs and practices. The participants engaged in communication centred around common values and beliefs related to livestock production, which resonates with existing literature on cultural communication. The study also uncovered the presence of subgroups within the broader farmer identity, with distinct cultural communication patterns associated with specific aspects of the farming system, such as particular sheep breeds.

The cultural communication observed in this study not only reflected shared cultural values but also served as a mechanism for internalising and

reinforcing culturally acceptable behaviour. The scripting observed among participants demonstrated the role of cultural scripts as mental maps that guide behaviour along socially defined pathways. Repeated emphasis on key cultural themes served to reinforce culturally appropriate behaviour and actions. Adjustments to socio-cultural identity were found to occur in response to the interaction between beliefs, norms, traditional values, and the changing social context of farmers, contradicting the notion of fixed cultural norms.

Scripting and adjustments have a crucial impact on the formation and maintenance of individual and group identity within hill farming communities, a concept echoed in prior research. Through the recitation of scripts, members of a group can engage in communication on a specific cultural level, signifying their inclusion within the group (Becker, 1963). The subsequent section will delve into how socio-cultural identity and its expression through cultural communication provide access to the group.

7.3.3 Socio-cultural identity and access to the cultural group

As discussed in previous sections, members of the hill farming community share a socio-cultural identity characterised by common values, beliefs, and modes of cultural communication. Blumer (1969) proposed that in a community where individuals possess a unified socio-cultural identity, they not only communicate with one another, but also coordinate their actions as

a cohesive group. Therefore, in the context of this study, the shared socio-cultural identity described in sections 6.2 to 6.7 serves as the means through which farmers gain entry into the broader group. The data strongly support this assessment, as key elements of the shared socio-cultural identity are instrumental in successfully negotiating group membership. In section 6.8, it is highlighted that shared values, involvement in breeding specific sheep breeds, participation in communal work, and a commitment to the vocational lifestyle of the community are all crucial factors in communicating an individual's membership within the group. These aspects can be seen as manifestations of a shared socio-cultural perspective, a concept central to identity theory as identified by Stryker and Serpe (1982).

The analysis suggests that access to group membership is established through a shared set of values and practices, with farmers possessing a keen sense of who belongs to the group and who does not. This aligns with theories positing that individuals can perform behaviours that position them within the group and grant access to group actions by understanding how meaning and actions are interpreted by other group members (Cast and Burke, 2002). However, this relationship is not static and membership can be gained or lost based on their behaviours and level of adherence to shared values and identity. Participants provided examples of how access to the group can be diminished or revoked, particularly when behaviours deviate from the expected norms (section 6.9.4). Instances such as producing poor quality livestock, failing to collaborate, or not adhering to prescribed cultural norms regarding livestock sales were seen as detrimental to group

membership. All of this appears to indicate the central aspect of group membership lies in the commitment to the core socio-cultural identity of hill farming, particularly as vocational livestock producers.

The topic of farmers aligning with socio-culturally informed behaviours has not been extensively explored in previous studies. However, Burton (2004) made a noteworthy observation regarding group membership, stating, "Membership of the group in the eyes of others is developed and maintained through displaying commitment to the same symbolic meanings through, for example, financial investment in significant symbols or the display of socially appropriate behaviours." The data from this study align with this statement, as the understanding and ability to exhibit appropriate socio-cultural behaviour emerge as significant factors in hill farmers' access to the wider cultural group. This is particularly relevant in key areas concerning the core concerns of the community, such as livestock production, where the production of high-quality livestock and adherence to cultural norms regarding its sale to other group members are crucial for group access. The second concept raised by Burton (2004), the ability to acquire this access through investment in culturally significant objects will be further discussed in a later section on other forms of capital.

The findings support the notion that a unified socio-cultural identity enables effective communication and coordination of actions within the group. The shared values, participation in specific farming practices (such as breeding specific sheep breeds), engagement in communal work, and a strong

commitment to the vocational lifestyle of the community are key factors in communicating and establishing membership within the group. Thus access to group membership is based on adherence to the shared set of values and practices, with farmers demonstrating an understanding of the expectations and behaviours that are recognised by other group members. This aligns with theories suggesting that individuals can strategically perform behaviours that position themselves within the group and grant them access to group actions. However, membership is not fixed and can be gained or lost based on behaviours and level of adherence to shared values and identity. In the next section the benefits of group membership to the individual will be discussed. Exploring the value that social and cultural capitals bring to the community through formation of a shared socio-cultural identity which facilitates groups membership and its potential advantages.

7.3.4 Benefits of Group Membership

As a starting point and building on the previous section a major benefit of group membership is the stable framework it provides within which the individual can operate. Through the socio-culturally shared meaning, interpretation and understanding of objects an individual can access the benefits of the group, which appears to connect to literature relating to the value of shared cultural identity and the group (Douglas, 1993).

The data analysis indicates that there were four forms of benefits for a hill farmer relating to group membership, these were identified as collaborative action, sharing of resources, cultural belongings and cultural status. Below these will be explored in two clusters, first, collaborative action and resource sharing; and second cultural belonging and status.

7.3.5 Collaborative action and resource sharing

Collaborative action and the sharing of resources were recognised as fundamental aspects of hill farming communities. This aligns with current literature on farming, which considers these forms of cooperation crucial, especially in terms of innovation and adaptability (Meert *et al.*, 2005; King *et al.*, 2019). Even though the traditional nature of the farming system examined in this study limited its potential for adaptability and innovation, the system was not entirely static. Innovations were closely tied to farmers working together and sharing resources. The success of diversification activities relied heavily on cooperation, with farmers collaborating and sharing resources for the benefit of the wider group e.g tourist accommodation. These beneficial behaviours, originating from group members, have been observed in several studies (Árnason *et al.*, 2004; Burton *et al.*, 2005), and when combined with the findings of this study, indicate significant advantages for farmers who engage in collaborative

work. The study reveals that such a process is only possible due to the sharing of a socio-cultural identity, as will be illustrated below.

The collaboration and resource sharing identified in this study were observed at both macro and micro levels, spanning from communal land management and regional livestock movements to interactions between individual farms. These actions could involve hundreds of farmers participating in regional sales events or simply occur between close friends and neighbours. These findings support Uphoff's theory (1993), which suggests that connections within groups can be established at both macro and micro levels.

Regardless of whether collaboration occurred on a small or large scale, it was rooted in shared objectives and values, such as the belief in practical husbandry and management techniques passed down through generations. This sharing of socio-cultural beliefs fostered trust among farmers (as discussed earlier). The significance of trust in resource sharing is a well-established theme in sociological theory (Pretty and Ward, 2001) and has been explored in previous studies of resource sharing in farming communities (Burton and Sutherland, 2012). What this study potentially contributes to this concept is the strong link between intangible cultural capitals (beliefs, values, etc.) and the formation of trust through a shared socio-cultural identity. Trust is argued to be key to collaborative action and resource sharing, and social and cultural capitals play a crucial role in this process, although the specific mechanism of how identity formation

influences this has received less attention. The study utilises symbolic interactionism as an alternative approach to examining these issues, in line with recent recommendations from other academics e.g Burton *et al.* (2021).

The benefits of this collaborative process are evident, as it enables farmers to access the natural capital assets of extensive areas of semi-natural vegetation that would otherwise be impossible to exploit, for example, in the communal system of hefts and gathers operated on common land. It also facilitates the movement of large numbers of livestock within the sheep stratification system. These themes have been addressed in numerous previous studies. Mansfield (2006, 2011, 2019), argues in various literature that collaborative work is central to hill farming and the overall resilience of the system, thereby emphasising the importance of social and cultural capitals within the broader context. This PhD research seeks to expand on these notions and has begun to provide empirical support for these concepts by demonstrating how social and cultural capitals underpin the system through the formation of a shared identity and its access to the benefits of the group. Through the combination of social, and cultural capitals, the community is able to utilise other resources effectively, particularly the natural capitals present in the landscape and vegetation, thus creating a resilient farming system (section 6.10.2). This concept extends beyond UK hill farming communities, as the combination of social, cultural, and natural capitals has been recognised as vital for the resilience of farming communities worldwide (Muhar *et al.*, 2018, Reid *et al.*, 2014).

These examples above discuss some of the social benefits of group membership to hill farmers and how they are underpinned by a socio-cultural identity. The next section will look at cultural benefits derived from the group, again looking to connect this to the broader socio-cultural context of the PhD study.

7.3.6 Cultural belonging

The analysis section reveals that hill farming communities possess a strong sense of cultural identity, which revolves around their deep connection to the land and the distinct environment in which they farm. This aligns with previous studies in the field, which have highlighted the close bond between farmers and the landscape they inhabit, as well as the farming way of life e.g Bailey *et al.* (2006). Participants in this study specifically emphasised the significance of cultural belonging in relation to their attachment to a particular place and their way of life. Many even considered themselves more as a tribal group rather than solely a farming community. Similar themes regarding the intimate connection between the community and its landscape have been identified in numerous other studies conducted in hill farming communities in Scotland (Gray, 1996; 1999). Nevertheless, this study expands upon these earlier findings by demonstrating that cultural belonging not only emerges from the phenomenological engagement with the landscape and the community's

working life, but also originates from shared cultural values. These additional insights do not dismiss the previous findings, but rather potentially contribute an extra dimension to the existing knowledge regarding the socio-cultural foundations of hill farming in the UK.

Expanding on these socio-cultural foundations, the data analysis revealed two significant advantages of cultural belonging. Firstly, it fostered a strong sense of community that helped alleviate social marginalisation among individuals. The hill farmers in the study demonstrated strong social connections based on their shared socio-cultural identity, which provided them with a sense of belonging even when geographically isolated. These findings diverge slightly from the existing literature on farming and social isolation, which suggests that many farming communities are becoming increasingly isolated (Lobley *et al.*, 2002). This isolation has given rise to severe issues such as farmer mental health concerns and the real threat of suicide (Hounsome *et al.*, 2012). However, the data in this study indicate that farmers in the hill farming sector are at a reduced risk of experiencing these issues, partially due to their strong cultural bonds and the supportive nature of their cultural beliefs.

The second benefit arising directly from cultural belonging was the provision of a structured cultural community within which individuals could operate. This framework offered a set of known rules, beliefs, and values to navigate social interactions. Consequently, farmers were able to engage within the socio-cultural community by adhering to culturally

acceptable actions, such as fairness in livestock selling, reciprocity in labour exchange, and communal livestock management. This aligns with Coleman's (1988) concept of community construction and the mechanisms for navigating social interactions. Furthermore, these findings establish connections to additional socio-cultural theories and academic research that explore the significance of cultural status within socio-cultural groups.

7.3.7 Cultural status

The data reveal that cultural status holds significant importance within the hill farming community, and this status is closely tied to factors such as the quality of livestock, successful business practices, and dedication to the farming lifestyle. As mentioned earlier, these practices that support cultural status are aligned with the shared socio-cultural identity of vocational livestock producers. Consequently, farmers can gain or lose status within a domain defined by these shared values. Although it plays a minor role in the theoretical backdrop of the conceptual framework of this study, the data regarding cultural status bears similarities to the ideas put forth by Bourdieu (1986; 1991; 2014). In some ways, the data aligns with Bourdieusian notions of the role of cultural values, knowledge, and achievements in determining an individual's position within their cultural group's social field.

The data on cultural status also establish connections with existing socio-cultural studies on farming and farmer behaviour (Burton *et al.*, 2021). At the core of this connection is the finding that individuals who are perceived as "good farmers" or have demonstrated significant achievements within the community are considered to have higher status, which corroborates the findings of several other studies (Sutherland and Burton, 2011; Sutherland, 2013; Riley, 2016). Moreover, the data suggest that cultural capitals, developed through the cultivation of shared socio-cultural identity, play a crucial role in fostering social connections and serve as keystones in social networks, partially aligning with Burton (2008). However, the reinforcing effect of shared socio-cultural identity on the community resonates closely with the work of Sutherland (2013).

Furthermore, the public nature of hill farming means that peers are constantly evaluating each other's adherence to shared values and practices, making it easy for individuals to lose status if they deviate from these standards. This was particularly evident in cases where farmers departed from the core shared vocational livestock production identity. Farmers who moved away from traditional sheep breeds or became closely associated with conservationist organisations were observed to experience a loss of cultural status. This context may provide valuable insights into previous studies, particularly those investigating the reasons for the lack of success of agri-environmental schemes (Burton, 2004; Burton *et al.*, 2008; Riley, 2016). The findings of this study suggest that farmers may lose cultural status if they join schemes that distance them too much from the core

values of the cultural community. This may help explain farmers' resistance to adopting schemes that require significant changes to traditional management strategies.

Overall, group membership in hill farming communities provides a stable framework, collaborative action, resource sharing, cultural belonging, and cultural status. These benefits contribute to the resilience, social connections, and effective resource utilisation within the community, showcasing the socio-cultural foundations of hill farming in the UK and their broader implications. Expanding on the exploration of the advantages of group membership, the following section will delve into the accessibility of additional capital resources that come with being part of the group.

7.3.8 Access to other capitals

The previous sections of this discussion have outlined how hill farming communities rely on a collective socio-cultural identity to facilitate group access and its associated benefits. The social and cultural capital of the community, particularly the intangible cultural elements such as shared beliefs, values, practices, and traditions, play a central role in this. The accessibility of other forms of capital, which will be discussed in this section, is also influenced by the socio-cultural identity, particularly through aspects of social capital.

Social capital is widely recognised as a support system for communities, especially within the framework of multiple capital community theory, which forms the basis of certain aspects of this study's conceptual framework (Emery and Flora, 2006; Guitierrez-Montez, 2005). The findings of this study generally align with the notion that social capital is crucial for community functioning, with all aspects of social capital being essential for the operation of the hill farming system. Trust is a vital component within hill farming communities and is integral to various practices, including collaborative land management, livestock transactions, and resource sharing. The concept of reciprocity and exchange within these communities is deeply rooted in trust and a fair exchange of resources, with labor being the most common form of exchange. These exchanges follow cultural norms and rules that are not explicitly written but are generally understood and accepted within the community. Cooperative activities and the sale of livestock provide opportunities for individuals to demonstrate their understanding and adherence to these rules to the wider group. These findings are consistent with previous research on hill farming (Ponder and Hindley, 2009) and closely correlate with the results of Rose Regeneration's study (2013), which identified social capital as a gateway to accessing other forms of capital. **However, the findings of this study indicate that the gateway is only accessible through an interactive relationship between cultural and social capitals, with the shared socio-cultural identity being the key component that unlocks communal resources.**

A shared socio-cultural identity and group membership enables farmers to share resources, knowledge, and emotional support. This collaboration is particularly crucial during times of crisis when farmers rely on the support of their peers to overcome challenges such as adverse weather or disease. By working together, farmers can achieve financial benefits through cost reduction and improved profitability. Additionally, group membership enhances farmers' access to human capital in the form of knowledge, allowing them to learn from each other's experiences and innovate in their farming practices. Beyond financial and human capital, group membership provides emotional support to farmers who often experience isolation and stress in their work.

The data pertaining to shared socio-cultural identity and access to human capital closely align with other farming research. The study participants who possessed strong networks and connections in the form of social capital were more likely to access knowledge systems within the community, which aligns with Kilpatrick (2007). On the other hand, those with high levels of cultural knowledge received cooperation and support from other community members, consistent with Burton *et al.*'s (2005) study on social capital in hill farming. However, the findings of this PhD study provides additional explanatory elements on how this social position is generated by farmers demonstrating a close association with the shared cultural values of the community.

A crucial factor in accessing these networks of capital is the level of human capital possessed by individual participants. This finding aligns with Blåka and Filstad's (2007) research on Swedish farmers. **The results of this PhD study indicate that farmers with extensive cultural knowledge, particularly in livestock production, such as ram breeding, are more likely to access other forms of capital.** This can be observed in the sharing of physical capital, such as livestock or machinery. When there is equality in human capital, such as knowledge, between friends or experienced farmers, a higher level of sharing of capital, such as high-quality breeding rams, is evident. This finding closely corresponds with Hansen and Greve's study (2015), where comparable levels of human capital, especially in the form of knowledge, lead to better sharing within farming communities.

Trust plays a central role in most of the studies mentioned above, as well as in the findings of this study, regarding the sharing of resources and access to other forms of capital, particularly physical assets like livestock and machinery. These findings mirror those of Burton and Sutherland (2012), who identified trust as critical in the sharing of material, knowledge, and support, with farmers demonstrating high levels of trust more likely to cooperate. Burton and Sutherland established a connection between the development of trust and cultural capital, a theme that this PhD study has expanded upon by exploring the mechanisms through which cultural capital underpins social cohesion and community membership through a shared socio-cultural identity.

In conclusion, this discussion has highlighted the significance of a collective socio-cultural identity in hill farming communities. The social and cultural capital, including shared beliefs, values, practices, and traditions, play a central role in facilitating group access and its associated benefits. The accessibility of other forms of capital is influenced by this socio-cultural identity, particularly through social capital. The study further explores the connection between trust and cultural capital, highlighting the mechanisms through which cultural values underpin social cohesion and community membership through a shared socio-cultural identity. This socio-cultural identity permeates the whole hill farming system and in the following section, a discussion of how other capitals become cultural due to their valuation by the community will be carried out.

7.3.9 Cultural manifestation in other capitals

As explored in the above sections, the capitals based system of hill farmers are seen to be underpinned by a shared socio-cultural identity. This identity seems to facilitate individuals' membership in the group and enhance their access to different forms of capital. This section examines the process through which other capitals, particularly physical capitals, become cultural as a result.

Analysis of the data suggests that physical capitals encompass more than just farming necessities; they represent a crucial part of the community's cultural heritage and identity. Livestock, especially hill sheep, were commonly recognised as a type of physical capital that also served as tangible cultural capital. This concept aligns with existing literature, as Brown (2009) highlights the significance of high-quality livestock as cultural capital within the HFC (hill farming community), attributing cultural status to the owners. The data supports this notion, with numerous participants acknowledging the cultural importance of livestock and their role in establishing individuals' socio-cultural standing (section 6.9.4). The findings particularly emphasise the cultural value of key livestock, such as breeding rams, which hold substantial significance within the community. These findings corroborate anecdotal evidence in the broader hill farming literature, suggesting that possessing culturally valuable objects like prize-winning breeding rams enhances a farmer's cultural status (Walling, 2015; Rebanks, 2015). There may be a connection here to Bourdieu's socio-cultural theories, which argue that both tangible forms of cultural capital (e.g, livestock) and intangible forms (e.g, shared beliefs) are critical for an individual's social capital within a community (Bourdieu, 1986; 1991). Although this study avoids directly incorporating Bourdieu's theoretical approach due to conflicts in definitions of cultural capital with the economic perspective (Throsby, 1991), it is a theory that has been applied in other farming studies (Burton *et al.*, 2021), and warrants consideration in future research.

Based on the data, it appears that farmers prioritise their cultural aspirations over accumulating financial capital, although they still need to make a living. This may lead to business diversification, but farmers hesitate due to potential diversion from their core activity of livestock production.

However, they can leverage their cultural knowledge of livestock and the demand for specific animals within their community to increase their financial capital. This was particularly observed in the breeding, showcasing, and sale of breeding rams within the broader study data.

Farmers utilised their cultural expertise to breed rams that would be desirable for purchase, thereby elevating the cultural status of the buyers (section 6.9.4). Through this process, farmers were able to convert their cultural knowledge into financial capital by commanding higher prices for these culturally desirable livestock. This process was also identified by Gray (2010) in a study of Scottish hill farmers, although his focus was more on the cultural exchange value rather than the economic exchange value. Nevertheless, both observations seem to stem from the shared cultural identity among community members, where the increased value of livestock, whether cultural or financial, arises because they align with the cultural values of the community.

Overall, cultural identity and traditions appear to significantly influence farmers' decisions and actions, even when considering financial aspects. Participants provided numerous examples of farmers forgoing financial gains, such as declining payment for removing livestock from common land, due to conflicts with their cultural beliefs and values (section 6.10.4).

This finding correlates with Burton *et al.* (2008) findings on agri-environmental uptake, which identified a poor uptake due to schemes' failure to align with the cultural values of farming communities. The findings of this PhD study echo these assertions, as farmers are unwilling to participate in schemes that could improve their financial situation because doing so would require them to deviate from key objectives rooted in their identity as livestock producers. These findings underscore the crucial role of social and cultural capitals in underpinning the system by shaping behaviour and choices through the formation of a socio-cultural identity.

The process by which cultural and social capitals form the foundation for community development and economic sustainability aligns with themes identified in the literature (Flora, 2004; Emery and Flora, 2006). The analysis chapter broadly supports this theory, particularly the idea of overlapping and interacting capitals. In the case of hill farming communities, this interaction appears to be primarily cultural, as evidenced by the impact of the socio-cultural identity outlined in the analysis and discussion sections. Although this study examines the micro details of this formation process, it aligns with macro-level frameworks observed in other social-ecological systems (Matthews & Selman, 2016). The common thread is that cultural capitals play a significant role in the system's functioning, whether through shared beliefs, values, etc or access to the group and other capitals. The findings also provide evidential support for Mansfield's (2019a) proposition that cultural capitals underpin and permeate all other capitals in the hill farming system. Through the formation of a shared

socio-cultural identity resulting from the interplay of social and cultural capitals, these capitals become central to accessing all other capitals through cultural interactions. Overall, in summary, the research indicates that socio-cultural identity could be playing a significant role in shaping the cultural dimension of other capitals. Aspects of these capitals acquire cultural significance and value by aligning with the socio-cultural identity of hill farmers as livestock producers. This is why physical capitals, such as breeding rams, assume tangible forms of cultural capital.

7.3.10 Conclusion

In conclusion, this study highlights the formation and significance of socio-cultural identity in hill farming communities. The findings underscore the foundational role of intangible cultural capitals, such as values, traditions, and beliefs, in shaping the shared identity of hill farmers and fostering community cohesion. Social capital, characterised by trust, cooperation, and relational dynamics, facilitates the transmission and sharing of these cultural values. The study also explores the connection between social capital and intangible cultural capitals, emphasising the role of cultural communication and adaptation in shaping the shared identity of participants. Trust, developed through fair practices and adherence to shared values, emerges as a key element in fostering strong bonds and social cohesion within the community.

Group membership in hill farming communities offers numerous benefits, including collaborative action, resource sharing, cultural belonging, and cultural status. The shared socio-cultural identity enables effective communication, coordination, and resource utilisation within the group, thereby contributing to the resilience of the farming system. Access to other forms of capital, such as human and natural capital, is influenced by the interactive relationship between cultural and social capitals. The shared socio-cultural identity acts as a key component that unlocks communal resources, and trust plays a crucial role in accessing and sharing resources within the community.

Furthermore, the study highlights the cultural significance of livestock beyond their practical value, representing tangible cultural capital and contributing to individuals' socio-cultural standing within the community. Farmers prioritise their cultural aspirations over financial gains, leveraging their cultural knowledge to increase their financial capital while aligning with the community's cultural values.

Overall, the interplay between social and cultural capitals forms the foundation for community development and economic sustainability in hill farming communities. The socio-cultural identity of hill farmers shapes the cultural dimension of other capitals, and cultural considerations strongly influence farmers' decisions and behaviours. By understanding and appreciating the importance of socio-cultural identity, communities can

foster cohesion, effectively utilise resources, and sustain their agricultural practices in the face of evolving challenges.

The data collection and analysis conducted provide substantial support for the conceptual framework, particularly in relation to the formation of socio-cultural identity. However, supplementary data were gathered pertaining to this formation, which went beyond the scope of the predefined framework. This additional data highlights an additional mechanism by which the shared socio-cultural identity of vocational livestock production was examined and evolved. The next section will showcase these data and explore its relation to current literature and its potential impact of the framework diagram utilised in this study.

7.4 New concepts evolved from the data collection

7.4.1 Introduction

During the literature review and development of the conceptual framework for this study, the concept of "the other" in relation to identity formation was identified (Saugeres, 2002). However, it received only minor attention during the conceptual development and was not incorporated into the original framework, except for a brief mention in the discussion of identity theory. Similarly, the literature review acknowledged that farmers often find themselves in an antagonistic or "other" relationship with segments of society, particularly conservationists, but the extent of this aspect was not deemed significant enough to be included in the conceptual framework at that point.

However, during the data collection phase, specifically through semi-structured interviews, participants spontaneously brought up the concept of "the other", individuals or groups who held opposing identities, values, and beliefs compared to hill farmers. These discussions were not prompted by the researcher but were deemed important by the participants and were recorded accordingly. As the coding and analysis process unfolded, it became evident that the theme of "the other" emerged prominently and comprised a substantial number of coded items. This finding prompted a

reevaluation of the literature and a deeper consideration of the concept and its relevance to the research.

In this section, the data related to the concept of "the other" will be presented, followed by a discussion that establishes connections between the data analysis and existing as well as new literature. This analysis will serve as the theoretical foundation for incorporating "the other" into the revised conceptual framework. Initially, the data will be analysed by focusing on the four identities of "the other" identified by participants, which were in conflict with their own vocational livestock producer identity.

7.4.2 The 'other'

The participants in the study identified three primary "other" identities: conservationism, different backgrounds, spatially distinct and veganism. These identities were perceived as being diametrically opposed or in conflict with the core identity of hill farmers, who primarily saw themselves as vocational livestock producers. The following subsections will outline these "others" as described by the farmers during the interviews.

7.4.2.1 Conservation and environment movements

As a collective, many participants expressed a sense of threat or opposition towards conservation groups, environmentalists, and ‘rewilders’. They viewed these groups as entities that stood in contrast to their own beliefs and practices. A common sentiment was summarised by LD Farmer 1:

“No one recognises the fact that farmers have anything to offer in terms of knowledge, not in environmental terms. I think farmers suffer quite badly. We're an easy target, fell farmers are a very easy target. If someone wants to justify some of the problems with climate change or greenhouse gases or whatever, it's dead easy to just target the uplands.”

These concerns were often aligned with the idea that these groups want to see hill farmers eradicated or removed from the land:

“But they (conservationists) won't compromise, you know, what they want is a public good and completely eradicate half the hill farmers.”

NW Farmer 8

“This seems to be very little empathy with farming or wanting to understand farming from conservationists.”

NP Farmer 2

These perceived attacks on way of life/identity where often most vicious when related to social media:

“But I've had some horrendous attacks on social media. Somebody had a real attack on me for something do with river pollution.” NW Farmer 10

Throughout the ethnographic study, a prevalent apprehension towards social media was frequently expressed. Hill farmers voiced concerns about sharing information on social media platforms due to a fear of being targeted or attacked. This fear stemmed from the belief that certain segments of the online community would not comprehend their perspectives or hold vastly different views, values, and beliefs. Participants particularly keenly felt a perceived opposition from certain factions within the conservation and environmentalist movements towards livestock:

“I think people don't appreciate the value of the sheep flocks. They're just an easy target for somebody to get rid of because of methane or something.” NW Farmer 10

A particular figure head for this was author and journalist George Monbiot, he was reference as an ‘other’, in 30% of all interviews. NP Farmer 5 provides a common narrative to this:

“He'd attacked us in the papers, that these woolly maggots (sheep) were running around on hills, it was all their fault. Without having a real understanding of exactly what went on on the hills. I think he just was still living in the 80s when, the government were paying us headage payments.”

NP Farmer 9

Concern over this antagonism between farmers and conservationists was repeated by a number of participants who sit outside the community. An employee of a hill farming support charity group explained their experiences:

“I have problems with Natural England and RSPB because they're quite arrogant, there's a lot of telling farmers what to do and the tone of language can often be quite awful.”

Whilst, a farming support worker, recounted an experience they had witnessed:

“This Natural England person was just berating the farmers. And his language is like, ‘Look at that land, it’s been totally over grazed.’ And I just thought, how dare you for a start? I was just absolutely shocked that they felt that they could talk to people like that. You know, treating these grown up people as if they’re children.”

Similar incidents were raised by several participants, which support a broad feeling among those interviewed that conservationists and those working in that sector were opposed to hill farmers and manifest beliefs and attitudes quite opposite to those of farmers. This opposition in attitudes, values and beliefs, was raised by nearly all participants. Leading to a coded theme of 'different background' which will be explored next.

7.4.2.2 Different background

During almost all interviews participants raised the notion of those who were different or opposite to hill farmers, those who didn't share their core values or beliefs. This section will explore the collection of these identities all under the broad banner of 'different background'. All of these are set in opposition to the proposed shared cultural identity of vocational livestock producer.

As introduced in a previous section, staff from governmental agencies particularly those related to environmental work (e.g Natural England) were regularly cited as being opposite to those of farmers.

LD Farmer 11 brings some context to these oppositions when talking about hill farmers in relation to agency staff:

'They [hill farmers] haven't been brought up with the idea to leave and go to university, do public speaking and all that side of it. You know they're somebody who's just left school gone to work at home and just got their heads down with everyday work. Yeah, and the big difference between the likes of people that work for National Trust, RSPB, United Utilities you can go on, Natural England. It's a job. And once they retired they most probably will never think about it again.'

This not only highlights the opposing background of farmers and agency staff but also how farmers view them as professional career workers in opposition to the vocational nature of the hill farmer identity. This interpretation was supported by NW Farmer 4:

"It's a difference between being a passionate human being with a vocation basically to a job, isn't it? You know, I say this about most of the people that work for the agencies. It's a job when they're retired, you never see them again."

This distance in identity leads many farmer's to express the notion that agencies don't care and cannot relate to farmers. LD Farmer 8 explained:

"With ELMs there has been all this dialogue between farmers and agencies. But I still think they'll carry on and do what they were gonna do"

anyway. And then, you know, you get that little tap on the head again and they can say we consulted with all these different groups.”

A more extreme reaction to this distance in perception and its ramification was outlined by NP Farmer 2:

‘It feels like the government and agencies are involved in a cultural cleansing of the uplands.’

This was a fear voiced by a number of participants, even those outside of the community. A Farmer support work put it like this:

“Natural England don’t get the hill farmers and are engaging in a silent clearance of them from the land.”

The notion of "different background" emerged as a significant aspect during the interviews with participants. They consistently raised the issue of individuals who were different or opposed to hill farmers, those who did not share their core values or beliefs. Specifically, participants frequently cited staff from governmental agencies, particularly those related to environmental work such as Natural England, as being in opposition to farmers. Farmers often viewed agency staff as professional career workers, whereas farming was seen as a vocational pursuit rooted in a different upbringing and way of life.

Overall, the data collected from participants' interviews sheds light on the significant conflicts and oppositions arising from the notion of "different background" in relation to hill farmers. These insights provide valuable theoretical underpinnings for incorporating "the other" into the revised conceptual framework of the study. Expanding upon these findings, the subsequent section examines the concept of "otherness" in relation to spatially distinct segments of society in relation to hill farmers.

7.4.2.3 Geographic 'others'

The identity of hill farmers was firmly embedded within place, namely the rural, uplands of Northern Britain. The natural opposite to this identity factor was people from urban, lowland and Southern Britain. During ethnographic visits to sales and auctions, this opposition was stark. Hill farmers would not countenance buying lowland farmers stock. They viewed them as being too soft, not from the hard hills which gave their stock its authentic hill quality. The same appeared to be felt about the people:

“People from a non hill farming background just don’t understand the 24/7 commitment it requires.”

LD Farmer 11

Participants identified themselves as being different and removed from urban dwellers. As LD Farmer 4 puts it:

“It's just the perception because there's just too much distance now between what goes on in the rural life and what goes on in with the city dwellers. And I think there's just too much of a perception now that the countryside is a playground, rather than a living working environment?”

A position upheld by an example given by NP Farmer 9:

“We had a guy moved into the village and he complained that the tractors were making too much noise and going too quickly through the village at hay time. He wanted them to stop by six o'clock. He just had no idea of the time constraints, weather limitation on getting in that hay or silage.”

The rural-urban divide and contrasting values were apparent, leading several participants to express a strong yearning for distance from urban communities. NP Farmer 7, for instance, articulated his motivation for relocating to a secluded hill farming community, highlighting the following sentiment:

“We were just conscious that we wanted to be out of the towns and cities, as far away from them as possible really!”

While NF Farmer 3 relates a supporting experience when visiting suburban southern Britain:

“I just can't cope with that way of life. It's awful. If you walk into a shop in Banbury and you open the door for somebody, they don't say, thank you.”

The participant appears to identify the urban way of living as incompatible with his identity underscoring the stark contrast and "otherness" between hill farmers and urban communities, both in terms of their way of life and values. These insights contribute to a deeper understanding of the concept of "the other" within the context of spatially distinct sections of society from hill farmers. A theme widely reported in the final form of “other”, veganism, to be explored in following section.

7.4.2.4 Veganism

The last dimension of the "other" in this data analysis can be seen as an existential threat. Although the majority of participants probably had no personal experience with vegans, the considerable number of mentions referring to them as a whole indicates that they embody a conceptual identity that poses a challenge for hill farmers to comprehend. This response is to be expected, given that the hill farmers' collective sense of

self revolves around the professional practice of raising livestock for consumption.

A sample of quotations will provide a sense of feeling, particularly regarding the opposite views around the nature and ethics of production:

"I don't mind using his name, Monbiot. Yeah, I'm sorry. He's a fool. It won't work. You know, factory farming. What do they call it? Where it's industrialised, producing food off bacteria? Oh, please give me strength! You produce food out there on a farm, like you're looking at out that window now and by helping to support them farmers to produce the food that you need to support your country."

LD Farmer 6

"The (vegan) sources of protein are probably doing, in my opinion, more harm to this planet than the guys that are farming red meat."

NP Farmer 3

"I have no problem with people choosing to be vegan. But I choose to eat meat. I don't go around telling vegans that they should eat meat, so I don't expect them to go around telling me that I shouldn't. You know, it's personal. I make a very educated choice about what I eat."

NW Farmer 7

“How is not ethical for us to kill one lamb, put it in our freezer to feed us for six months? I think that if vegan food was made absolutely vegan, you know, with no animals at all have being harmed in the making of it. Well, we would have a massive food shortage in the world.”

NP Farmer 9

The overriding sense farmers gave for the mention of veganism was the fear or threat they felt they posed to the hill farming way of life, built around the production of livestock. In many cases veganism and climate arguments were conceived of as a dual threat or means by which to attack farmers:

“You know, the vegans are after us again or the climate change lot are after us again. And the news is the same. It's all like 'all farming is destroying the world.' And you know what. It's feeding the world.”

NP Farmer 8

The ethnographic evidence broadly supported the sense of threat, as farmers being criticised by vegans was a frequent topic of discussion. The magnitude of this threat or intimidation becomes evident when considering the participants who mentioned veganism, but were unwilling to openly express their views about them. It appeared that they were concerned about facing criticism themselves, having witnessed others becoming targets of attacks on social media or at livestock events. In addition to these fears of

being attacked, farmers perceive vegans as completely opposed to their deeply held values and beliefs, particularly in relation to their role as producers of livestock for consumption.

The preceding section aimed to utilise the dataset to highlight the shared socio-cultural identity of hill farmers and examine how it is challenged by perceived "others." The data revealed that the identity of hill farmers is rooted in being vocational livestock producers, characterised by three interconnected pillars: a vocational lifestyle, expertise in livestock management, and being involved in food production. This identity undergoes scrutiny when confronted with various "others," such as conservationists, vegans, and individuals from diverse educational and geographical backgrounds. These "others" serve as conceptual opposites, challenging the VLP identity. The subsequent section aims to establish connections between the aforementioned data and the existing literature, as well as introduce new insights.

7.4.3 The 'other' in literature

As stated earlier and in the conceptual framework chapter, the concept of the 'other' plays a significant role in the development of identity (Saugeres, 2002). This idea is closely linked to the theory of symbolic interactionism, which is employed in this study. Goffman (1971) suggests that an individual's socio-cultural identity does not develop in isolation but gains

meaning through interactions with the contrasting role of the 'other' (Burke and Tully, 1977). The participants in this study have developed a shared socio-cultural identity, which provides them with a sense of belonging to an in-group. This concept aligns with existing literature on the self and the 'other' (Tajfel 1981; Eriksen 1993; Hogg and Terry 2000). The role of the 'other' in this process appears to be to facilitate differentiation between groups, distinguishing the 'us' from the 'them' (also known as the Other), as observed in previous research and theories on the influence of the 'other' (Barth 1971; Brubaker 2002; Jenkins 2014).

The specific 'others' identified in the previous section include conservationists, government agency staff from different backgrounds, individuals from different geographic regions (such as urbanites from Southern England), and vegans. The participants perceive these 'others' as having some common characteristics that oppose the three core elements of the vocational livestock producer (VLP) identity explored in this study. This binary opposition between the 'other' (them) and the group (us) has been examined in literature on the 'other' (Zevallos, 2011). The contrasting nature of the identified 'others' in relation to the VLP identity of farmers will be further examined in the subsequent discussion. However, before exploring this, it would be beneficial to discuss the issue of power in relation to the 'other' and how it manifests through the process of 'othering'.

The creation of the 'other' is a discursive process through which the in-group constructs one or multiple out-groups, often viewing them negatively

or discriminating against them (Staszak, 2008). In this study, participants identified four 'others' that they felt opposed their own socio-cultural identity, and they generally held negative views towards these groups. The creation of a negative or inferior 'other' is closely intertwined with power dynamics both within and outside the social group (Lyon, 2006). The perceived superiority and inferiority of the positions in question appear to be related to their relationship with the VLP identity described in the previous chapter. The idea of a superior VLP identity and the resulting inferiority of these 'others' seem to stem from the unique socio-cultural environment in which these identities are developed, as outlined by Okolie (2003).

Traditionally, the creation of an inferior 'other' is a process employed by a dominant cultural group. This could involve the dominance of males over females in a patriarchal society or the dominance of white individuals over Black individuals in racist colonial systems (Beauvoir, 2015; Fanon, 1963). In such systems, power remains within the dominant group as long as they remain united against the inferior 'other' (Essed, 1991). However, in the context of the hill farming community, they are not a dominant cultural group. They are a marginalised group socially, culturally, and economically, with a way of life that exists on the fringes of contemporary Western neoliberal society (Mansfield, 2011; 2019). This marginalisation is evident in their limited control over their destiny or the future of their specific socio-cultural community. In fact, the groups identified as the 'other' in many ways hold power over them in modern life. Government agencies, for

example, control financial support, urbanites hold the purse strings for supporting their diversification activities through tourism, and vegans have an influential voice in the current media debate surrounding the future of livestock production. It could be argued that members of the hill farming community are predominantly white, male, and over forty years old, which traditionally places them in a dominant social classification on national and global scales (Etchells, *et al.*, 2017). However, it can be countered by the fact that the outlined 'others' also predominantly fall within privileged groups. Moreover, they are predominantly university-educated, middle-class, and affluent, potentially outweighing the relative privileged position of hill farmers as white males in contemporary society.

Given that the hill farming community is not culturally dominant in relation to the 'other' groups identified in this study, it is worth considering the benefits they derive from this process and the underlying social mechanisms at play. The advantages they gain may parallel those of a dominant group. By creating a 'Them' in the form of the 'other' against whom the 'us' of the group can unite, they establish stronger connections and social cohesion (Shucksmith & Chapman, 1998). This social cohesion, identified as critical to the community throughout the analysis and discussion chapters, revolves around a shared socio-cultural identity.

Since hill farmers are not engaging in the conventional process of 'othering' a subordinate group from a position of dominance, an alternative process may be occurring. The concept of counter-othering is gaining recognition in

sociological research, particularly in relation to marginalised groups (Roman-Alcalá, 2022). Counter-othering refers to the actions of individuals or groups who aim to challenge their own marginalisation by dominant sectors of society (Roman-Alcalá, 2021). In the context of hill farming communities, the 'othering' of the groups identified in the data may be an attempt by the community to counteract their marginalisation within broader society while fostering intracommunity solidarity based on a strong shared socio-cultural identity. Similar actions have been observed in other areas of agricultural research, such as the cooperation and collective action among migrant farm workers in the United States, who have historically been subjected to 'othering' by dominant sectors of US politics and media (Alkon and Guthman, 2017). This situation bears resemblance to UK hill farmers, who have increasingly found themselves marginalised economically and socially, often facing negative portrayals by sections of the government, media, and wider society. This sentiment was expressed by numerous participants, who often felt that dominant sections of society were against them and that they were being victimised by the media. In particular, hill farmers felt overlooked or undervalued in their interactions with UK government agencies, where their knowledge and perspectives on the systems they operated were undervalued. Agency staff were often seen as condescending toward farmers and prioritising conventional empirical data over the farmers' lived experiences. This may partially explain the occurrence of counter-othering in the interviews, a phenomenon also observed in research by Rip (2019) examining Indigenous communities in

the US. These communities engaged in counter-othering behaviour in response to the marginalisation of their knowledge systems by government agencies and scientists. Both the US communities and UK hill farmers have developed negative 'othering' of groups they perceive as central to the marginalisation and repression of their communities, often focusing on 'others' that are in direct contrast to their group identities or the 'us' around which they build their community. In the context of this study, that 'us' is built on the shared socio-cultural identity as vocational livestock producers.

The concept of the 'other' holds significant importance in shaping identity development, as discussed throughout this section. The participants in this research have formed a shared socio-cultural identity as vocational livestock producers, which provides them with a sense of belonging to an in-group. This identity is constructed in relation to the contrasting role of the 'other,' who are perceived as having characteristics that oppose the core elements of the VLP identity. The creation of the 'other' involves a discursive process rooted in power dynamics, with the dominant group traditionally constructing an inferior 'other' to maintain their position. However, in the case of the marginalised hill farming community, they engage in counter-othering as a means to challenge their own marginalisation and foster intracommunity solidarity. This process allows them to establish social cohesion and address their sense of being overlooked or undervalued by dominant sectors of society. The groups identified as the 'other' share a common characteristic that links them to

sectors of society perceived by participants as marginalising or repressing their way of life. The upcoming section, will examine the specific 'others' that have been identified, examining their connection to existing literature and exploring how the process of 'othering' these groups is related to the formation of hill farmer identity.

7.4.3.1 Specific others

The 'others' revealed by analysis of the data, and discussed above, appear to fall into two distinct groupings. The first category comprises individuals with whom farmers had direct physical interactions, often in antagonistic or conflicting ways. These include government agency staff and urbanite tourists. The second category consists of groups that are perceived as being in abstract opposition. For instance, although none of the participants reported having interacted with vegans, they viewed their beliefs as contradictory to their own identities, particularly regarding livestock production for consumption. In either case, these 'others' provide as a set of qualities and attributes, against which the hill farming community can assess and define their own identity. This process involves establishing a boundary between the "us" of the in-group and the "them" of the out-groups, as described by Lamont and Molnar (2002). This perspective also aligns with Barth's (1971) concept of "othering," where the creation of boundaries is sustained through micro-cultural processes that uphold and reproduce these divisions. This connection can be seen in relation to the

earlier discussion on the cultural formation of identity, wherein hill farmers construct their us/them boundary by comparing their shared cultural beliefs to those of the conflicting ‘other’. This section will explore the two forms of ‘others’ mentioned previously: firstly, those that are known and secondly those that are abstract.

7.4.3.2 Known ‘others’

The known ‘others’, who farmers within the study identified as having had physical interaction with were mainly conservationist and environmentalist, predominately those working for government agencies and NGO’s (section 7.4.2.2). As mentioned earlier, conflicts between farmers' identities and these known ‘others’ revolve around differing perspectives on landscape, production, and livestock, which are central to the shared socio-cultural identity of hill farming communities (previous section). Similar issues have been documented in numerous studies examining the tensions between farmers and individuals with environmental beliefs (McEachern, 1992; Leeuwis, 2000; Kächele & Dabbert, 2002; Ravnborg & Westernman, 2002; Henle *et al.*, 2008; DePoe, 2011).

One common consequence of these differing beliefs and cultural backgrounds is a breakdown in communication. The data analysis revealed several examples of poor communication and misunderstandings between participants and the known ‘others’, particularly concerning key areas of

conflict, such as livestock grazing on semi-natural vegetation (section 7.4.2.1). Both parties exhibited prejudiced views towards one another, further exacerbating the situation (previous section). Similar issues have been identified in other agricultural studies (Ramisch, 2014; Ingram *et al.*, 2016), and Peterson *et al.* (2018) expanded on this by highlighting the role of media presentations in failing to reduce these prejudices between farmers and environmentalists. There is supporting evidence for this assertion, as participants often referred to media content when discussing the identification of 'others' or relaying information they had acquired through media sources.

The earlier sections provide some contextual understanding of the issue of poor communication. The concept of cultural communication, as outlined in a previous section, serves as a mechanism through which farmers are able to maintain their shared beliefs. However, 'others', such as government agency workers, are unable to participate in this form of cultural communication due to their different backgrounds and conflicting values and beliefs. This is critical because, as explored earlier, cultural communication plays a significant role in fostering trust within the farmers' in-group. The inability of 'others' to engage in these forms of communication, which are built around the shared values, livelihoods, and practices (VLP) identity, hinders the development of trust with farmers. This lack of trust only reinforces the boundaries between these groups and strengthens the narrative of "them" versus "us."

Another factor that intensifies tensions between farmers and known ‘others’ is the perception that they obstruct the farmers' way of life. Participants felt that ‘others,’ particularly government agency staff, impeded the work they considered most important, namely the production of livestock on the culturally significant landscape of the fells. Although specific to this community, these findings align with other agricultural studies where similar issues have been identified. In these studies, individuals advocating for nature conservation, whether from state administration, universities, or NGOs, are often described by farmers in informal interviews as obstacles that limit progress and disrupt their routine work (Meierová, 2020). The implication of this obstruction and its manifestation as ‘othering’ of conservationists and others stems from the fact that such interference directly affects a key mechanism through which hill farmers generate cultural meaning and develop trust in their shared cultural identity, namely their working life as livestock producers (section 6.2.1).

The conflicts with these known ‘others’, as discussed above, primarily arise from direct interactions between hill farmers and the identified ‘others’.

These interactions are generally perceived as negative, especially when the ‘others’ interfere with processes that are central to the farmers' identity. The next section, will explore a slightly different form of ‘othering’, one that is based more on an existential threat perceived by participants from abstract others.

7.4.3.3 Abstract ‘other’

The abstract ‘other’ identified in the data appears to be predominately located around those in conflict with the core production of the system i.e livestock (section 6.3.7). Participants' perceptions of these identities seem to stem not from real-world interactions, but rather from theoretical impressions gained through media and other sources. The resulting ‘other’ identities, especially those of vegans and urbanites, often appear to be stigmatising and overly simplistic stereotypes, aligning with the concept of ‘othering’ (Staszak, 2008).

However, despite the stigmatising and simplistic nature of the existential fear associated with the abstract ‘others’, it does seem to be grounded in reality. The rise of veganism has been viewed as a tangible threat to the livestock production sector in agriculture (FT, 2023). Participants expressed fears about veganism, perceiving it as a growing movement away from meat consumption and a genuine threat to their way of life. On the other side, there is direct hostility towards livestock farmers from vegan activists (Hill, 2022). These conflicts were salient in participants' minds, with some citing personal experiences of peers or media reports (previous section). The tension primarily focused on cultural differences, as vegans' opposition to livestock production directly challenged the central tenet of hill farmer identity, namely the vocational production of livestock for consumption.

The clash between hill farmers' identity and the 'other' of veganism represents a classic clash of cultural beliefs and values. There is an increasing body of literature supporting the notion of veganism as its own cultural belief system (Sexton, Garnett, and Lorimer, 2022), built upon shared beliefs regarding the ethical treatment of all animal life and opposition to their exploitation in various forms (Dorgbetor *et al.*, 2022). These deep-rooted beliefs develop over time as part of a chosen lifestyle (Bryant, Prosser, and Barnett, 2022). The central defining tenet of vegans, especially in the minds of hill farmers, appears to be their opposition to livestock production for consumption. This creates a strong testing ground for alternative identities, as many participants hold firm beliefs in the validity of their livestock production system and meat consumption (previous section). Other studies have identified this relationship to animal and consumption to be very strong in farmers (Crawshaw and Piazza, 2022). Livestock farmers are seen to have complex system of emotions about animals, but one that ultimately sees them as subservient to human needs, with their ultimate role in the food system (Wilkie, 2010). These beliefs are closely associated with the core identity of hill farmers and stand in binary opposition to veganism, thereby establishing a naturally conflict-ridden relationship and providing an ideal abstract 'other' to define the boundaries of the hill farming community (Zevallos, 2011).

The testing of identity against both known and abstract "others" appears to significantly contribute to the formation and maintenance of the socio-cultural identity of hill farmers. However, this relationship is not fixed, and

the testing process against the ‘other’ extends beyond the continuation of a traditional identity. The data analysis reveals adjustments to identity, and the next section will explore how the testing process against the ‘other’ can play a role in these adjustments to hill farmer identity.

7.4.3.4 Breaking down of boundaries/adaptations

As discussed earlier, the formation of identity is a dynamic process that involves interactions with other socio-cultural groups, whether through direct or indirect encounters. These interactions can be described as ‘intercultural encounters’ and are considered significant in conceptualisations of the role of the ‘other’ in identity formation (Chapman, 2013). In Section 7.4, the data from this study demonstrated interactions between individuals with different cultural value systems, a concept that has been explored in the literature, particularly in the context of conflict resolution (Frenkel, Lyan, and Drori, 2015; Holmes, 2020). This literature suggests that while these interactions can be challenging and negative, they also present opportunities for the adaptation of cultural identities and individual mobility (Özkazanc-Pan, 2015).

The section on adjustments to socio-cultural identity provided several examples of this process in action, where members of the Hill Farming Community (HFC) displayed signs of adaptation to their socio-cultural identity (section 6.6). These adjustments often occurred in relation to

encounters with ‘others’ from different backgrounds. The data indicated that these encounters frequently revolved around nature conservation programs and agri-environmental schemes. Hill farmers exhibited increased interest in these areas, leading to changes in cultural practices and communication, such as in hay meadow production (previous section). Similar phenomena of identity adaptation resulting from cross-cultural interactions related to nature conservation activities between farmers and ‘others’ have been identified in other studies (Rientjes, 2000; Bonar, 2007; Van Bommel *et al.*, 2009; Cox & Pezzullo, 2016). These studies emphasised the significant impact of communication between farmers and conservation groups or NGOs and the positive outcomes achieved through collaborative nature conservation efforts.

The findings in Section 7.4 and the preceding discussion on the ‘other’ shed light on the concepts explored in the Conceptual Framework chapter regarding farmer engagement with agri-environmental schemes. Burton and Wilson (2006) argue that changes in farmers' views of the ‘other’, facilitated by engagement in formalised conservation projects, are a result of structured social interactions with counter-role players e.g. collaboratively working on land management projects (Pretty & Ward, 2001). The data suggests that this is indeed possible within the hill farming community, as positive engagements with ‘others’ can lead to adjustments in their socio-cultural identity. This aligns with other contemporary studies that identify adaptations to farmer identities through engagement with ‘others’, in the form of new entrants (Xie, 2021), resulting in more

effective and positive interactions with individuals and groups outside their cultural in-group. This concept will be further discussed in the concluding chapter, particularly in terms of recommendations and the potential impact of this study.

In conclusion, the analysis of data has revealed two distinct categories of 'others' that impact the formation of socio-cultural identity among hill farmers. The first category includes known 'others' with whom farmers have direct physical interactions, such as government agency staff and urbanite tourists. The second category consists of abstract 'others', primarily associated with vegans and urbanites, whose identities are formed through theoretical impressions gained from media and other sources. However, despite the conflicts and challenges posed by these 'others', there is evidence of adaptations and adjustments to socio-cultural identity through intercultural encounters, particularly in relation to nature conservation activities. Positive engagements with 'others' have the potential to foster more effective and positive interactions, leading to changes in farmers' socio-cultural identities.

7.4.4 The other conclusion

In summary, this study highlights the significance of the concept of the 'other' in shaping the socio-cultural identity of hill farmers. Although initially overlooked in the conceptual framework, the concept emerged prominently during data collection, prompting a reevaluation of its importance. The participants' shared identity as vocational livestock producers is constructed in opposition to the characteristics and beliefs of the identified 'others'. This process of 'othering' is influenced by power dynamics and serves as a means for the marginalised hill farming community to challenge their own marginalisation and foster solidarity within their community.

The analysis reveals two categories of 'others'. The first category comprises known 'others' with whom farmers have direct physical interactions, such as government agency staff and urbanite tourists. Conflict and poor communication often arise in these interactions, hindering trust and reinforcing boundaries between groups. The second category consists of abstract 'others,' including vegans and urbanites, whose identities are formed through theoretical impressions gained from media and other sources. The clash between hill farmers' identity and these abstract 'others' arises from cultural differences, particularly in relation to livestock production.

However, the study also highlights the potential for adaptations and adjustments to socio-cultural identity through intercultural encounters. Positive engagements with ‘others’, especially in the context of nature conservation activities, can lead to changes in farmers' practices, communication, and beliefs. These adaptations offer opportunities for more effective and positive interactions with individuals and groups outside their cultural in-group.

Overall, understanding the dynamics of the ‘other’ and its impact on identity formation is crucial for addressing conflicts, fostering intercultural understanding, and promoting sustainable agricultural practices. By recognising the complexities of the ‘other’ and exploring opportunities for positive engagements, it is possible to support the formation of inclusive and adaptive socio-cultural identities among hill farmers. Given the importance of the concept of the ‘other’ in shaping socio-cultural identity in hill farming communities, it becomes necessary to incorporate it into the diagram of socio-cultural formation. In the upcoming section, the revised conceptual framework will be presented, emphasising its alignment with the evidence obtained from the data collected in this study.

7.5 Revised/Adapted Framework

Based on the data collection, analysis, and its integration with existing literature, it becomes necessary to revise the original conceptual framework diagram. The findings from the study support the overall structure of the original diagram, but the additional data provided by participants highlights the significance of the ‘other’ in the formation of hill farming identity. Therefore, the integration of this concept is warranted (Fig 64).

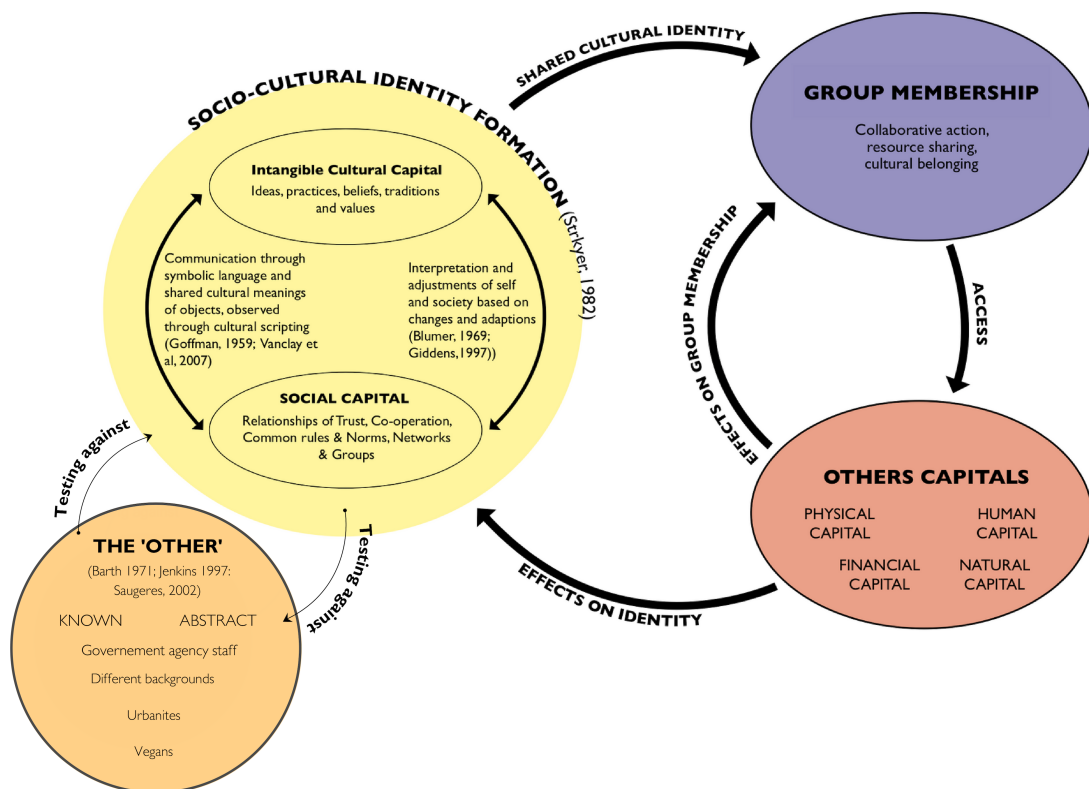


Figure 64 Revised conceptual framework

The inclusion of the ‘other’ is an important addition to the original, as it strengthens the modelling by incorporating a key concept derived from the data. However, it does not alter the functioning or interaction of the other

components within the framework. The data provided supports all other aspects of the framework, and the addition of the 'other' provides further validation and support for the shared socio-cultural identity of vocational livestock producers (VLPs).

The central finding remains that participants share a socio-cultural identity as vocational livestock producers, which is constructed upon three pillars identified through the data: the vocational way of life, being a skilled livestock person, and serving as a food producer. The inclusion of the 'other' concept does not impact this finding but rather provides additional support for the notion. The 'others' against whom the VLP identity is tested appear to arise from this core identity. The 'other' serves as a mirror against which the shared vocational livestock producer identity is examined. These 'others' include professional career-oriented agency staff who contrast the vocational nature of hill farming practices, individuals practicing veganism opposing livestock production, and environmentalists prioritising landscape conservation over production.

While this testing process may lead to some adjustments in identity, the overall stability of the shared socio-cultural identity remains prominent. This finding aligns with the general structure of the diagram, where a stable shared cultural identity is central to the functioning of the community. The shared cultural identity acts as a mechanism through which individuals gain access to group membership by adhering to shared values and beliefs. Once accepted as part of the group, individuals can benefit from the advantages it

offers. However, the shared cultural identity remains significant, as the retention and quality of group membership are contingent upon individuals' adherence to cultural values. Deviation from shared cultural values and beliefs can result in the loss of group membership or reduced benefits.

One of the benefits of group membership is the ability to access other forms of capital through sharing and exchange, e.g the sharing of breeding livestock. This process is mediated by the shared socio-cultural identity, where individuals who exemplify these values are more likely to engage in sharing practices. The interconnection of other capitals with the socio-cultural identity leads to elements of these capitals becoming culturally significant. This can manifest in various ways, such as the cultural status attributed to livestock as a physical form or the cultural significance of human knowledge.

Finally, this process of other forms of capital becoming culturally significant completes the loop within the conceptual framework. Cultural aspects of other capitals were found to have effects on group membership and individual identity. This is particularly evident in the case of livestock, which remains a central cultural concern and reinforces the core VLP identity.

Overall, the revised conceptual framework encompasses the interplay between socio-cultural identity, the concept of 'the other', group membership, and the culturalisation of other capitals. These findings contribute to a comprehensive understanding of the dynamics within hill

farming communities and highlight the pivotal role of social and cultural capitals in shaping the community's functioning and interactions, through a shared socio-cultural identity. It may also go some way to rationalise the resistance of farmers to take up agri-environmental schemes, as these programs require them to move far away from their core socio-cultural identity. These themes will all be tied up in the following concluding section to the discussion chapter.

7.6 Discussion conclusion

This study provides a comprehensive understanding of the formation and significance of socio-cultural identity among hill farmers. The data reveals that hill farmers share a socio-cultural identity as vocational livestock producers (VLPs), which is built upon three pillars: the vocational way of life, being a skilled livestock person, and serving as a food producer. The formation of this shared identity is influenced by the interaction of intangible cultural capitals (ICC) and social capital (SC). The ICC data indicates a strong sense of identity revolving around livestock production and a deep connection to the landscape. Collaborative practices, individuality, and self-reliance are embedded in their work ethos, supported by trust-based interactions and the transfer of knowledge across generations.

Cultural communication plays a vital role in allowing farmers to compare experiences, discuss challenges, and strengthen social connections. Cultural communication within these communities primarily revolves around the core aspects of their work life, with livestock, the weather and shared beliefs playing a central role. The adaptability of farmers' identities, particularly in response to changes in farming practices, is evident. While the core identity as vocational livestock producers remains stable, adjustments occur, including an increased emphasis on natural capitals driven by agri-environmental schemes.

In addition to the main findings, this study also explores the concept of the 'other' and its impact on the socio-cultural identity of hill farmers. The participants' shared identity as vocational livestock producers is constructed in opposition to the characteristics and beliefs of the identified 'others'. This process of 'counter othering' is influenced by power dynamics and serves as a means for the marginalised hill farming community to challenge their own marginalisation and foster solidarity within their community.

The analysis reveals two categories of 'others'. The first category comprises known 'others' with whom farmers have direct physical interactions, such as government agency staff and urbanite tourists. Conflict and poor communication often arise in these interactions, hindering trust and reinforcing boundaries between groups. The second category consists of abstract 'others', including vegans and urbanites, whose identities are formed through theoretical impressions gained from media and other

sources. The clash between hill farmers' identity and these abstract "others" arises from cultural differences, particularly in relation to livestock production.

However, the study also highlights the potential for adaptations and adjustments to socio-cultural identity through intercultural encounters. Positive engagements with 'others', especially in the context of nature conservation activities, can lead to changes in farmers' practices, communication, and beliefs. These adaptations offer opportunities for more effective and positive interactions with individuals and groups outside their cultural in-group.

Even though adjustments to identity is possible access to the wider cultural groups is still closely tied to the shared cultural identity of VLPs within the community. Adherence to shared cultural values and beliefs is essential for inclusion, making it challenging for outsiders to be accepted and trusted. This is made especially difficult for outsiders and the mechanisms for building trust and acceptance are often tied directly to livestock and traditional collaborative working. Those not already working within the system lack a route to develop trust through this mechanism. This also has implications for the farmers themselves, by shunning outsiders they limit their own opportunities to learn and develop skills.

Upon attaining group membership, individuals in hill farming communities experience a range of benefits, including collaborative action, resource sharing, a sense of cultural belonging, and elevated status within the

community. The shared socio-cultural identity facilitates effective communication, coordination, and optimal utilisation of resources within the group, thereby enhancing the resilience of the farming system. These factors are vital as hill farming relies heavily on collaborative and interconnected practices, which are made more efficient through a shared sense of purpose and cultural values. The sharing of cultural values has been observed to influence the cultural dimension of other forms of capital within the system. Key capitals, particularly culturally significant livestock, play a crucial role in shaping individual identities and determining access to group membership. Among these, physical capital in the form of livestock holds significant cultural value.

Understanding the interplay between different forms of capital and their impact on identity is crucial for comprehending the dynamics of hill farming communities. The study underscores the interconnectedness of cultural practices, values, and social dynamics within hill farming communities. The shared socio-cultural identity of VLPs emerges through the interplay of various capitals and is sustained through collaborative efforts, trust-based interactions, and cultural communication. Furthermore, the study highlights the cultural significance of livestock beyond their practical value, representing tangible and intangible cultural capital that contributes to individuals' socio-cultural standing within the community. Farmers prioritise their cultural aspirations over financial gains, leveraging their cultural knowledge to increase their financial capital while aligning with the community's cultural values.

Finally, the interplay between social and cultural capitals forms the foundation for community development and economic sustainability in hill farming communities. The socio-cultural identity of hill farmers shapes the cultural dimension of other capitals, and cultural considerations strongly influence farmers' decisions and behaviours. By understanding and appreciating the importance of socio-cultural identity, communities can foster cohesion, effectively utilise resources, and sustain their agricultural practices in the face of evolving challenges. Overall, this study contributes to the existing literature by shedding light on the formation and significance of socio-cultural identity in hill farming communities. It emphasises the interplay of cultural and social capitals, the role of cultural communication, and the impact of 'the other' on identity formation. The findings have implications for promoting social cohesion, sustainable agricultural practices, and intercultural understanding within these communities.

In the final section, we will examine the implications of these findings. First by examining the alignment between the study's outcomes and its initial aims and objectives. Gaining a deeper understanding of how the research has successfully addressed its intended goals and objectives. Furthermore, it will provide an opportunity to identify any potential recommendations, gaps or areas that require further investigation for a more comprehensive understanding of the subject matter.

8. Conclusion Chapter

In this chapter, the thesis will reach its conclusion by addressing five pivotal themes. First, an evaluation will be conducted to compare the study's findings with the aims and objectives initially outlined in the literature review. Second, any constraints or limitations encountered during the study will be highlighted. Third, an exploration will take place to discuss the significance of the research within the study area and its relevance in the present context. Fourth, based on the significance of the findings, a set of recommendations will be presented. Lastly, potential avenues for further research that could contribute to the knowledge derived from the findings will be outlined.

8.1 Achievement of Aims and Objectives

Through a comprehensive review of existing scholarly literature, several prominent themes pertaining to hill farming have been identified.

Firstly, it is evident that the hill farming community comprises a wide range of capital assets, which possess interactive and overlapping characteristics. These assets, encompassing various forms of capital, are currently facing considerable pressures primarily due to the marginality of the community's core farming practices. Furthermore, the anticipated increase in such pressures can be attributed to ongoing changes in the agricultural subsidy environment and the ageing population of farmers.

Secondly, social and cultural capitals have emerged as crucial factors in facilitating the community's capacity to adapt and diversify in response to the challenges imposed by the evolving agricultural landscape. These forms of capital are recognised as playing critical roles in the community's ability to address and overcome such challenges successfully.

Moreover, the non-monetary value of social and cultural capitals within farming communities lies in their ability to foster social cohesion through shared socio-cultural identity. This cohesion serves as a vital mechanism for enhancing community resilience and facilitating collective efforts to tackle agricultural uncertainties and transitions.

Drawing upon the insights obtained from the literature, an area of inquiry has been identified, centred on the significance of social and cultural capitals within the hill farming community. This identification paved the way for the formulation of specific aims and objectives for the present study.

8.1.1 Aims

Critically investigate the hill farming community through its capitals and explore the value of social and cultural capitals.

Based on the concept of multiple capital community frameworks, build a conceptual framework to explore the non-monetary value of social and cultural capitals to hill farming communities.

8.1.2 Objectives

1. Critically evaluate the current position of hill farming within academic literature.
2. Develop and test the conceptual framework to explore the non-monetary value of Social and Cultural Capital to the hill farming community.
3. Collaborate with members of the hill farming community to examine the socio-cultural values.
4. Examine the role of social and cultural capital in the formation of farmer identity and the value this brings to community.
5. Explore the role of social and cultural capitals in underpinning the hill farming community.

8.1.3 Addressing objectives

Objective 1:

The hill farming community was identified as being made up of a wide variety of capital assets, which are interactional and overlapping in nature. Many of these capitals are under pressure due to the marginality of the core

farming practices of the community. This pressure is only likely to increase with current changes to the agricultural subsidy environment and an ageing farmer population.

The literature review chapter underscored the significance of socio-cultural factors in any study of community or economics. Social and cultural capitals were seen as pivotal to community sustainability and successful economic performance. Valuation was identified as fundamentally a socio-cultural practice, where an object or aspect gains value when it aligns with society and culture's values and perceptions. As such, understanding and appreciating the socio-cultural foundations of value are vital for comprehending the dynamics of hill farming communities and their economic endeavours.

Objective 2:

A conceptual framework was established to serve as the foundation for investigating the aforementioned aims and objectives. Within this framework, Mansfield's (2019a) model was identified as the most suitable basis for building upon, as it incorporates the standard five capitals of economic development while also highlighting the significance of cultural capitals as a central component within hill farming communities. With this selected framework as the basis, an appropriate socio-cultural theory was sought, one that could facilitate the exploration of the micro-level interactions between social and cultural capitals and their contribution to community value.

Symbolic interactionism (SI) and its application in Identity Theory were chosen as they presented a specific mechanism for examining these interactions and provided compatible definitions of social and cultural capitals. By combining the theoretical foundations outlined in the conceptual framework chapter with the findings of the literature review, a conceptual framework diagram was developed. This diagram served as a testable mechanism through which social and cultural capitals generate value for the hill farming community by establishing a shared socio-cultural identity.

Objective 3:

A rigorous methodology was developed to empirically test the conceptual framework and gather substantial evidence to support its validity. The data collection process was conducted in accordance with social constructivist methodologies, aligning with the symbolic interactionist foundation of the framework. Specifically, ethnographic participant observation and semi-structured interviews were employed as the primary data collection techniques. The data collection process embraced a collaborative approach, allowing for the active involvement and input of participants. For instance, the selection of sites for ethnographic activities was adapted based on the advice and perspectives of participants, considering their perceived socio-cultural significance. This collaborative approach ensured that the research process was responsive to the feedback and inputs provided by the participants.

Ultimately, the implementation of this methodology in data collection activities yielded a comprehensive and intricate set of qualitative data. Through the analysis conducted using NVivo software, several findings directly aligned with and provided evidence for the conceptual framework diagram. The key findings derived from this data analysis process are as follows:

Objective 4:

The primary finding indicates that participants in the study share a collective socio-cultural identity as vocational livestock producers (VLPs). The study also suggests that the distinct identity of vocational livestock producers (VLPs) within the hill farming community arises from the interplay between intangible cultural capitals (ICC) and social capital (SC).

The data suggests that cultural communication plays a crucial role in enabling farmers to compare experiences, discuss challenges, and share encountered problems. This finding aligns with the principles of symbolic interactionist theory and resonates with the results of previous agricultural studies utilising similar theoretical frameworks.

The findings provide support for the conceptual framework diagram. The data revealed a shared socio-cultural identity among participants as vocational livestock producers (VLPs), shaped by the interaction between intangible cultural capitals and social capital. Cultural communication was found to play a crucial role in enabling knowledge sharing, problem-solving, and fostering a sense of community. The shared cultural identity of VLPs influenced group membership and facilitated resource sharing,

knowledge exchange, and emotional support within the community. Ownership of key capitals, particularly culturally significant livestock, created feedback loops that influenced access to group membership and shaped individual identities.

Objective 5:

Group membership and access to resources are heavily influenced by the shared cultural identity of vocational livestock production (VLP) within the community. This finding provides substantial support for the value of social capital (SC) and cultural capital (CC) in the context of the hill farming community. Through the shared socio-cultural identity resulting from SC and CC, individuals gain entry into the group and can access its associated benefits.

Group membership facilitates resource sharing, knowledge exchange, emotional support, and access to other forms of capital. This finding aligns with the hypothesis of the multiple capital framework in hill farming (Mansfield, 2019a), whereby SC and CC facilitate access to other capitals within the system.

The data suggests that ownership of key capitals, particularly culturally significant livestock, can create feedback loops that influence access to group membership and shape individual identities within these communities. This finding further supports the pervasive influence of cultural capitals throughout the system and their role in underpinning other forms of capital, including the critical social capitals.

Summary:

These findings highlight the value of social and cultural capitals in the hill farming community, contributing to community resilience and the ability to adapt to challenges. The study contributes to the understanding of the multiple capital framework in hill farming and emphasises the permeating influence of cultural capitals throughout the system, enabling access to other forms of capital. The study achieved its broad objectives and successfully explored the aims established at the outset. Nonetheless, like any study, it encountered a few limitations that need to be acknowledged. These limitations primarily relate to the regional focus of the study and the constraints of the socio-cultural theory employed. These limitations will be discussed in the subsequent section.

8.2 Limitations

Although the study has effectively investigated the key aims and objectives identified in the literature, there are a few potential limitations to the findings. Firstly, there is a limitation in terms of the regional specificity of the data collection. The majority of participants were located in Cumbria, with none from outside the wider North Western UK region. As discussed in site overview chapter, this region serves as a useful microcosm for the broader UK hill farming community. While the diverse farming systems operated by participants offer a cross-section of the wider community, the regional specificity of the data might not provide enough spatial variety to serve as a framework for the entire UK farming community. Anecdotal

evidence from both the literature and data collection suggests that the findings of this study may be broadly applicable to the wider UK hill farming community, but further research is needed to confirm this assessment.

A second potential limitation is the socio-cultural theory employed in developing the conceptual framework. Symbolic Interactionism (SI) and its application in identity theory provided a strong theoretical foundation for the study. Both theories offered a robust mechanism to explore the formation of socio-cultural identity, and they aligned well with the definition of social and cultural capital, as identified in the conceptual framework section. The findings derived from these theories are robust and appear to effectively address the set objectives.

However, SI as a theoretical framework, lacks the ability to fully engage with certain additional themes that emerged from the data collection process, particularly regarding the role of other-than human elements within hill farming communities. The data indicates that animals, such as livestock, and the upland landscape play active roles in the community beyond being mere objects. These aspects are not as effectively addressed by SI as they could be by more contemporary theories like actor-network theory or assemblages. These alternative theoretical frameworks were considered in the conceptual framework chapter, but were ultimately not chosen for various reasons. The selection of SI and identity theory for this study remains valid, but it would be interesting to explore these themes using other socio-cultural theories.

The exploration of these limitations and the investigation of the wider applicability of the findings to the broader UK farming community represent crucial directions for future research. This will be explored in a subsequent section but first the significance of the findings will be explored in the following section.

8.3 Significance of study findings

As discussed in the literature review, the farming landscape in the UK is undergoing substantial changes, including post-Brexit transitions towards a public goods agenda, increased pressures on global food systems, climate action and biodiversity loss. The current socio-economic drivers in UK agriculture revolve around environmental land management and the diversification of farming activities. However, the findings of this study indicate a misalignment between these drivers and the socio-cultural identity and community objectives of hill farmers. Their identity and community cohesion are centred around cultural values associated with livestock production, with economic gain being of secondary importance.

The implications of this misalignment between hill farmers' cultural identity and the economic drivers of contemporary agriculture could potentially lead to further marginalisation of the community. While some sectors of society might perceive a benefit in the further reduction of the community's numbers, it is important to recognise that experienced and motivated land managers, who operate at a landscape scale driven by

shared socio-cultural objectives, are valuable assets in addressing current and future challenges in the upland regions of the UK.

This study contributes to a better understanding of the values and motivations of hill farmers (what makes them tick), enabling outsiders to comprehend the implications of changes within the community. This knowledge can be used to inform more acceptable strategies and initiatives. By comprehending the cultural drivers focused on livestock production within the community, collaboration between hill farmers and external agencies can be facilitated. This increased understanding can aid in targeting new programs and support that engage farmers rather than act as catalysts for community breakdown.

The findings, particularly those derived from ethnographic activities, underscore the significance of social and cultural aspects within the community. Traditional support for the hill farming community has primarily focused on economic aspects. However, this study aligns with the perspective of multiple capital community frameworks, suggesting that the social and cultural dimensions of the community are crucial for its long-term sustainability. These findings provide empirical support for the calls made by community members for increased recognition and support for their cultural capitals, rather than solely relying on economic support systems.

Utilising these significant findings, a set of recommendations emerges from the study, which will be explored in the subsequent section.

8.4 Recommendations -

Based on the findings and discussion of this study, several recommendations can be proposed:

1. Future research within the field should consider utilising the findings of this study to build a richer picture of the socio-cultural underpinnings of the community. As this study examined non-monetary value of social and cultural capitals, a natural extension of this would be to explore the monetary values these capitals and their manifestation in shared identity bring to the communities.
2. Government policymakers should acknowledge the importance of farmers' identity and cultural heritage, as indicated by the study's findings. Enhancing the alignment between governmental policies and farmers' identity can increase the successful uptake and implementation of these policies. For instance, careful consideration should be given to the impact of livestock reduction on farmers' cultural and social worlds.
3. Landowners, local authorities, and NGOs working in hill farming regions should pay closer attention to the significant impact of farm sales and stock reductions on the community. These actions can have a direct negative effect on community cohesion and cultural connections, undermining the overall effectiveness of the community. Efforts should be made by all parties to protect the delicate socio-cultural fabric of the hill farming community.

4. Local government, including county councils, unitary authorities and national park authorities should consider providing increased support for social and cultural activities that are central to the social cohesion and functioning of the community. Supporting these activities would foster cultural interactions and enhance community cohesion, contributing to the sustainability of the community. Certain hill farming events, such as shepherds' meets, heavily rely on private funding and sponsorship. During periods of economic pressure and cost-of-living crises, additional financial support may be necessary to ensure the continuation of these events.
5. Governmental and non-governmental agency staff should receive additional training to enhance their understanding of hill farmers' identity and motivations. This would facilitate productive and respectful conversations on sensitive topics, including changes to landscape management, for example, stock reductions. With better-informed positions, agency staff can navigate conflicts more effectively while maintaining open and respectful dialogues with members of the hill farming community.
6. Leaders in the hill farming community should consider organising social learning sessions for community members with outsiders. As identified in the study, engaging with individuals holding alternative views provides an opportunity for mutual learning and potential adjustments to identity that benefit all parties involved. These sessions can also help farmers overcome abstract fears and misconceptions arising from indirect contact and media-filtered

narratives about alternative social and cultural groups. This could be supported by improved advocacy via social media channels.

8.5 Further Research

The initial study has sparked several areas of further research, which can be broadly categorised into two groups. The first group involves addressing the limitations discussed in the previous section. The study was conducted based on data collected from the North West region of the UK, a region known for its concentration of hill farming. However, there are other clusters of hill farming communities throughout the UK. It would be valuable to test the findings of this study against these other communities to gather additional data and create a more comprehensive framework for the UK hill farming community as a whole.

Another limitation identified is the use of socio-cultural theory, which does not fully consider the impacts of non-human actors. Although this limitation did not have a negative impact on the study's findings, expanding the application of socio-cultural theories could enhance the initial findings. Utilising actor network theory or exploring the community as an assemblage would offer a means to integrate other than human components more effectively.

Furthermore, there are specific elements of the findings that can be examined from different perspectives to enhance the conceptual

framework. Firstly, the findings indicate a significant impact on an individual's cultural status and social position within the group based on their possession of significant cultural capital. While the study employed qualitative data to explore this assertion, it could be further investigated using quantitative data, such as social network analysis. This analysis could assess the social positions of individuals within the group based on their possession of cultural capital as identified in this study.

Secondly, the study revealed the concept of adjustments to socio-cultural identity through engagement with alternative farming practices. However, conducting a separate study specifically exploring this phenomenon would be beneficial. For example, examining identity changes in farmers who adopt specific practice changes, such as participating in new agri-environmental schemes, would provide valuable real-world data to further explore the concepts presented.

Pursuing these avenues of further research, can deepen the understanding of the concepts explored in the initial study and strengthen the overall framework for studying hill farming communities in the UK. Ultimately, this research will contribute to the development of more comprehensive theories and strategies that can better support and sustain the UK hill farming community as a whole.

8.6 Concluding comments

In conclusion, this chapter has summarised the main themes and findings of the study, addressing the aims and objectives set forth in the literature review. The study focused on the significance of social and cultural capitals within the hill farming community, highlighting their role in the formation of a shared socio-cultural identity. The conceptual framework developed for the study integrated multiple capital community frameworks and symbolic interactionism, providing a robust foundation for investigating these dynamics.

The research methodology employed ethnographic participant observation and unstructured interviews, resulting in a comprehensive set of qualitative data. The analysis of the data supported the conceptual framework, revealing a shared socio-cultural identity among participants as vocational livestock producers (VLPs) and emphasising the importance of cultural communication and ownership of key capitals. This was seen to permeate over all three study areas, providing evidence for a shared identity within the broader UK hill farm community. These findings contribute to a better understanding of the values and motivations of hill farmers, particularly in relation to economic drivers and the need for cultural recognition and support.

The study's findings hold significant implications for various stakeholders. Landowners, local authorities, and NGOs should be aware of the impact of farm sales and stock reductions on community cohesion and cultural connections, while policymakers should consider the alignment of policies

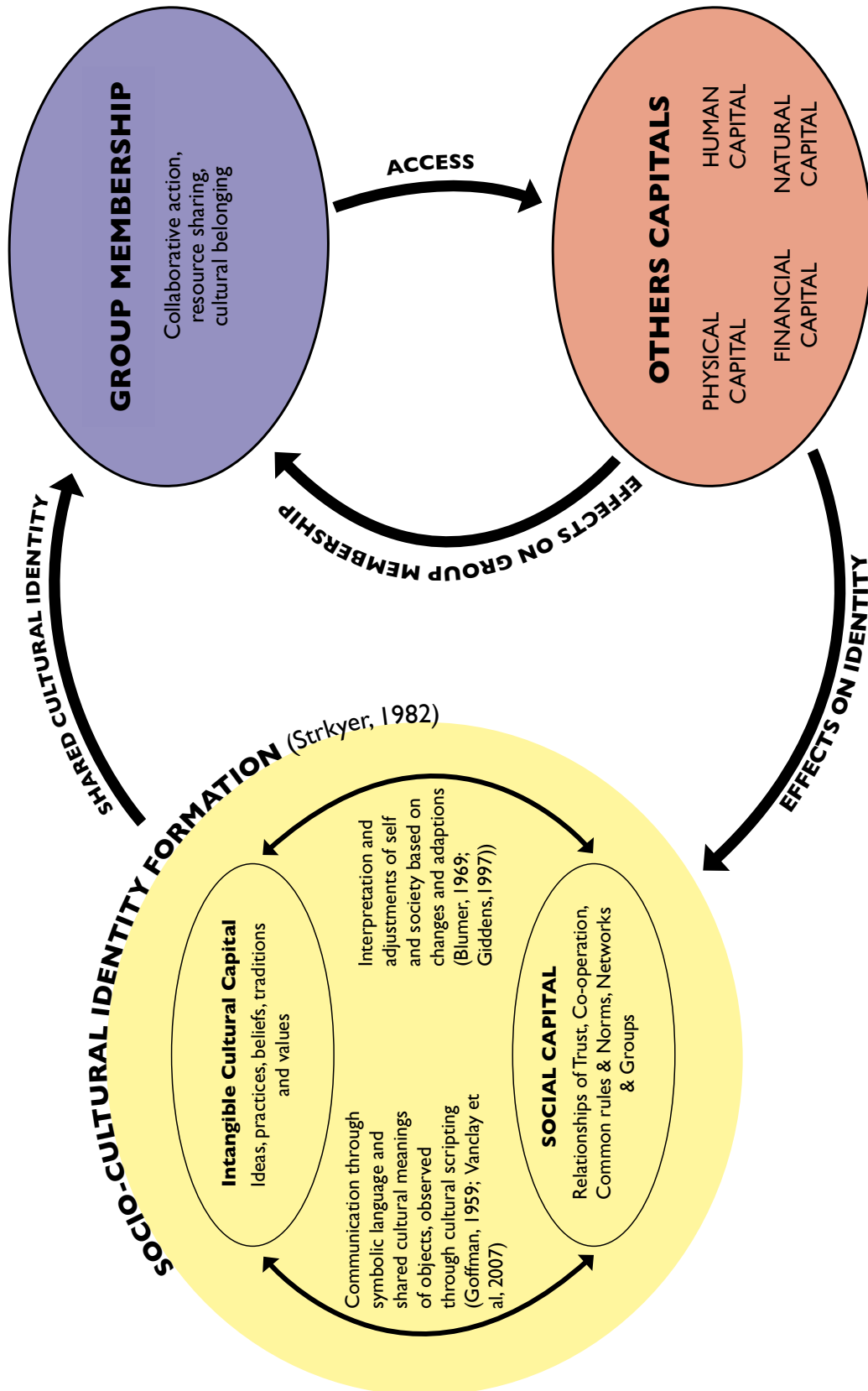
with farmers' identity and cultural heritage. Local governments can provide support for social and cultural activities that enhance community resilience, and governmental agency staff should receive training to better understand hill farmers' identity and motivations. Additionally, engagement sessions with outsiders can foster mutual learning and identity adjustments.

The study acknowledges some limitations, such as the regional focus of the data collection and the need for alternative socio-cultural theories to address non-human actors. These limitations suggest avenues for further research, including testing the findings against other hill farming communities, exploring the integration of other than human components, investigating the impact of cultural capital through quantitative analysis, and conducting studies on identity changes resulting from engagement with alternative farming practices.

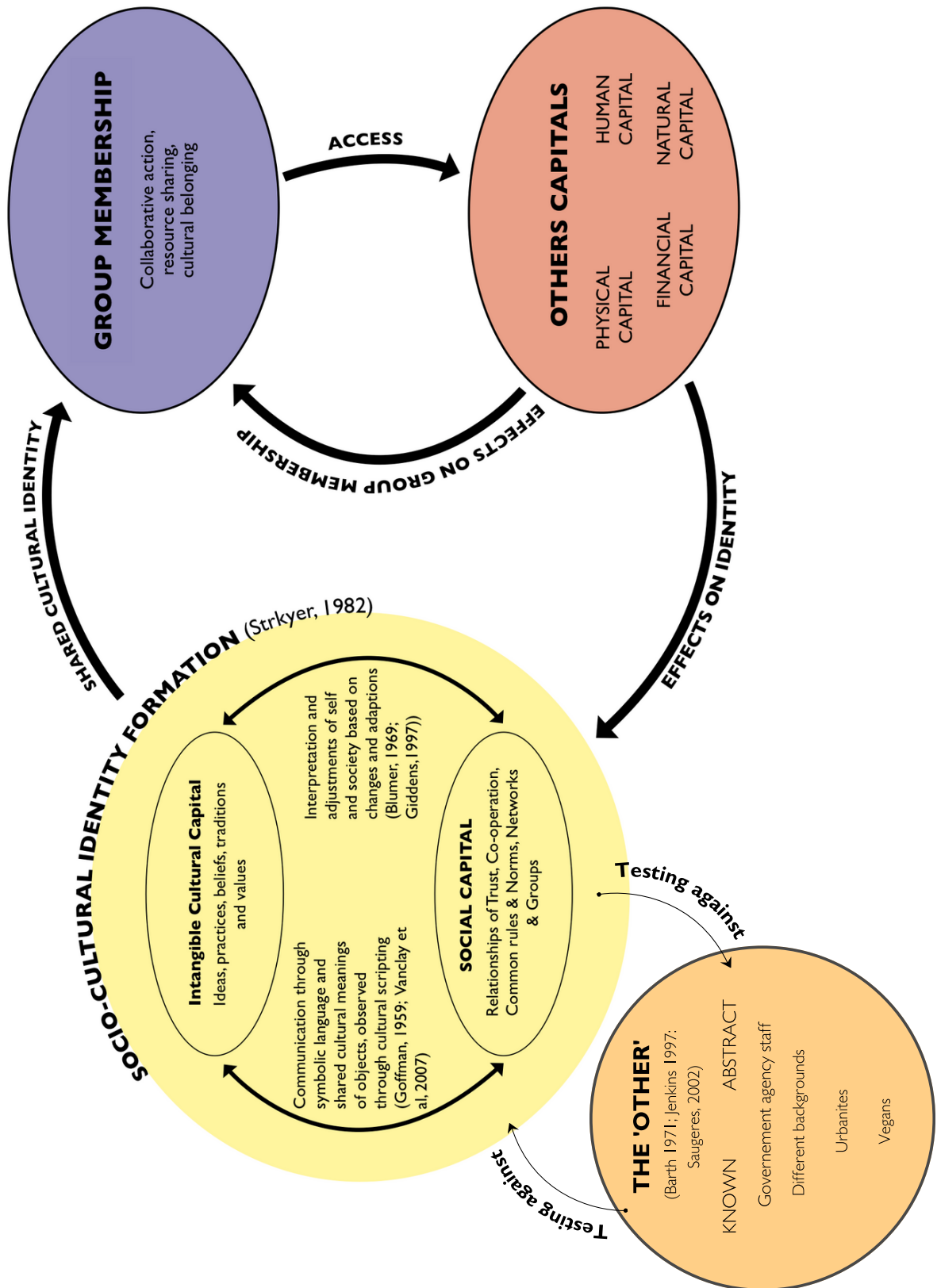
By pursuing these areas of further research, a deeper understanding of hill farming communities can be achieved, leading to more comprehensive theories and strategies that support and sustain these communities.

Ultimately, this research contributes to the broader knowledge base on hill farming, informing decision-making processes and facilitating collaborations between stakeholders to ensure the long-term viability of these communities.

Appendix 1: Original Conceptual Framework



Appendix 2: Revised Conceptual Framework



Reference List

- Adato, M. and Meinzen-Dick, R.S. (2002) 'Assessing the impact of agricultural research on poverty using the sustainable livelihoods framework'. *Research in agriculture and applied economics* (No. 581-2016-39396).
- Adger, W. N. (2003) Social aspects of adaptive capacity. In *Climate change, adaptive capacity and development* (pp. 29-49) in. London: Imperial College Press.
- Agovino, M., Crociata, A., Quaglione, D., Sacco, P., and Sarra, A. (2017) 'Good Taste Tastes Good. Cultural Capital as a Determinant of Organic Food Purchase by Italian Consumers: Evidence and Policy Implications.' *Ecological Economics*, 141, pp. 66–75. Available at: <http://doi: 10.1016/j.ecolecon.2017.05.029>.
- Aigner, S.M., Flora, C.B. and Hernandez, J.M., (2001) 'The premise and promise of citizenship and civil society for renewing democracies and empowering sustainable communities.' *Sociological Inquiry*, 71(4), pp.493-507.
- Aitchison, J., & Gadsden, G. (1992) 'Common land. Agriculture, Conservation and Land Use'. *Law and Policy Issues for Rural Areas*, pp. 165-185.
- Aitchison, J. W., Crowther, K., Ashby, M., & Redgrave, L. (2000) *The common lands of England: a biological survey*. University of Wales Rural Surveys Research Unit.
- Akgün, A. A., van Leeuwen, E. and Nijkamp, P. (2012) 'A multi-actor multi-criteria scenario analysis of regional sustainable resource policy.' *Ecological Economics*, 78, pp. 19–28. Available at: <http://doi: 10.1016/j.ecolecon.2012.02.026>.
- Alfranca Burriel, Ò., Maldonado Rius, L., & Recasens Gracia, F. J. (2013). Cultural landscape in periurban territories: The case of Baix Llobregat (Spain). Available [https://www.researchgate.net/publication/320596404 CULTURAL LANDSCAPE IN PERIURBAN TERRITORIES THE CASE OF BAIX LLOBREGAT/citation/download](https://www.researchgate.net/publication/320596404_CULTURAL_LANDSCAPE_IN_PERIURBAN_TERRITORIES_THE_CASE_OF_BAIX_LLOBREGAT/citation/download)
- Alkon, A., & Guthman, J. (2017) *The new food activism: Opposition, cooperation, and collective action*. University of California Press.
- Allardt, E. (1990) 'Challenges for Comparative Social Research', *Acta Sociologica*, 33(3), pp. 183–193. Available at: <https://doi.org/10.1177/000169939003300302>.
- Allen, J. (2011) 'Powerful assemblages?', *Area (London 1969)*. Revised manuscript received 17 February 2011, 43(2), pp. 154–157. Available at: <https://doi.org/10.1111/j.1475-4762.2011.01005.x>.
- Allen, M. (2017) *The sage encyclopedia of communication research methods* (Vols. 1-4). Thousand Oaks, CA: SAGE Publications,
- Allen, K. A., Denelle, P., Ruiz, F. M. S., Santana, V. M. and Marrs, R. H. (2016) 'Prescribed moorland burning meets good practice guidelines: A monitoring case study using aerial photography in the Peak District, UK', *Ecological indicators*. Elsevier Ltd, 62, pp. 76–85. Available at: <http://doi: 10.1016/j.ecolind.2015.11.030>.

Allen, S., & Terry, E. (2005) 'Introducing Relational Theory.' *Beginning Relational Data Modeling*, pp. 27-56.

Alló, M., Loureiro, M. L. and Iglesias, E. (2015) 'Farmers' Preferences and Social Capital Regarding Agri-environmental Schemes to Protect Birds,' *Journal of Agricultural Economics*, 66(3), pp. 672–689. Available at: <http://doi: 10.1111/1477-9552.12104>.

Alvesson, M. (2010) *Interpreting interviews*. London, Sage

Anderson, B. and McFarlane, C. (2011) 'Assemblage and geography', *Area (London 1969)*. Revised manuscript received 17 February 2011, 43(2), pp. 124–127. Available at: <https://doi.org/10.1111/j.1475-4762.2011.01004.x>.

Arias-Arévalo, P., Martín-López, B. and Gómez-Baggethun, E. (2017) 'Exploring intrinsic, instrumental, and relational values for sustainable management of social-ecological systems.' *Ecology and Society*, 22(4). Available at: <http://doi: 10.5751/es-09812-220443>.

Árnason, A.; Lee, J.; Shucksmith, M. (2004) *Restructuring in Marginal Areas: The Role of Social Capital in Rural Development*. Final Report to the European Commission. Arkleton Centre, Aberdeen.

Arnott, D., Chadwick, D. R., Wynne-Jones, S., & Jones, D. L. (2021) 'Vulnerability of British farms to post-Brexit subsidy removal, and implications for intensification, extensification and land sparing.' *Land use policy*, 107, pp 104-154.

Ashby, M. A., Whyatt, J. D., Rogers, K., Marrs, R. H., & Stevens, C. J. (2020) 'Quantifying the recent expansion of native invasive rush species in a UK upland environment.' *Annals of Applied Biology*, 177(2), pp. 243-255.

Atkinson, P. and Silverman, D. (1997) 'Kundera's Immortality: The Interview Society and the Invention of the Self', *Qualitative inquiry*, 3(3), pp. 304–325. doi:10.1177/107780049700300304.

Backshall, J., Manley, J., & Rebane, M. (Eds.). (2001) *The upland management handbook*. Peterborough: English Nature.

Bailey, A. P., Garforth, C. J., Angell, B., Scott, T., Beedell, J., Beechener, S., & Rana, R. B. (2006) 'Helping farmers adjust to policy reforms through demonstration farms: lessons from a project in England.' *Journal of Farm Management*, 12(10), pp. 613-625.

Bain, R. E., Gundry, S. W., Wright, J. A., Yang, H., Pedley, S., & Bartram, J. K (2012) 'Accounting for water quality in monitoring access to safe drinking-water as part of the Millennium Development Goals: lessons from five countries.' *Bulletin of the World Health Organization*, 90, pp 228-235.

Baland, J. M., & Platteau, J. P. (1998) 'Division of the commons: a partial assessment of the new institutional economics of land rights.' *American journal of agricultural economics*, 80(3), pp. 644-650.

Barth, F. (1971) 'Tribes and Intertribal Relations in the Fly Headwaters', *Oceania*, 41(3), pp. 171–191. Available at: <https://doi.org/10.1002/j.1834-4461.1971.tb01150.x>.

- Bateman, I. J., and Balmford, B. (2018) 'Public funding for public goods: A post-Brexit perspective on principles for agricultural policy.' *Land use policy*, 79, pp 293-300
- Battarbee, R. W., Shilland, E. M., Kernan, M., Monteith, D. T., & Curtis, C. J. (2014) 'Recovery of acidified surface waters from acidification in the United Kingdom after twenty years of chemical and biological monitoring (1988–2008)', *Ecological indicators*, 37, pp. 267–273. Available at: <https://doi.org/10.1016/j.ecolind.2013.10.011>.
- Bazeley, K., and Hayton, A. (2013). *Practical cattle farming*. Crowood. UK
- Beauvoir, S. de (2015) *Simone de Beauvoir: feminist writings*. Edited by M.A. Simons and M. Timmermann. Urbana, Illinois; University of Illinois Press.
- Bebbington, A. (1997) 'Social capital and rural intensification: local organizations and islands of sustainability in the rural Andes.' *Geographical Journal*, pp.189-197.
- Bebbington, A., (1999) 'Capitals and capabilities: a framework for analyzing peasant viability, rural livelihoods and poverty.' *World development*, 27(12), pp.2021-2044.
- Becker, G. S. (1964) *Human capital: A theoretical and empirical analysis, with special reference to education*. New York, NY: Columbia University Press.
- Beckerman, W. and Pasek, J. (1997) 'Plural Values and Environmental Valuation,' *Environmental Values*, 6(1), pp. 65–86. Available at: <http://doi: 10.3197/096327197776679202>.
- Bedate, A., Herrero, L. C. and Sanz, J. Á. (2004) 'Economic valuation of the cultural heritage: application to four case studies in Spain,' *Journal of Cultural Heritage*, 5(1), pp. 101–111. Available at: <http://doi: 10.1016/j.culher.2003.04.002>.
- Bell, M. M. (2010) *Farming for us all: Practical agriculture and the cultivation of sustainability*. Penn State press.
- Berkes, F. (2012) *Sacred ecology*. Routledge. UK
- Berry, H. L., Hogan, A., Owen, J., Rickwood, D., & Fragar, L. (2011) 'Climate Change and Farmers' Mental Health: Risks and Responses.' *Asia Pacific Journal of Public Health*, 23(2), pp. 119-132. Available at: <http://doi: 10.1177/1010539510392556>.
- Bicchieri, C., Muldoon, R., & Sontuoso, A. (2014). *Social norms*. The Stanford encyclopedia of philosophy.
- Blåka, G., & Filstad, C. (2007) 'How does a newcomer construct identity? A socio-cultural approach to workplace learning.' *International Journal of Lifelong Education*, 26(1), pp. 59-73.
- Blumer, H. (1969) *Symbolic interactionism: perspective and method*. Berkeley, Calif.: University of California Press.
- Bodin, Ö. and Crona, B. I. (2009) 'The role of social networks in natural resource governance: What relational patterns make a difference?.' *Global Environmental Change*, 19(3), pp. 366–374. Available at: <http://doi: 10.1016/j.gloenvcha.2009.05.002>.

- Bonar, S.A. (2007) *The conservation professional's guide to working with people*. Washington, DC: Island Press.
- Bonn, A., Allott, T., Hubacek, K., & Stewart, J. (2009) *Drivers of environmental change in uplands*. London: Routledge.
- Bostedt, G. and Lundgren, T. (2010) 'Accounting for cultural heritage — A theoretical and empirical exploration with focus on Swedish reindeer husbandry', *Ecological economics*, 69(3), pp. 651–657. Available at: <https://doi.org/10.1016/j.ecolecon.2009.10.002>.
- Bourdieu, P. 1986. 'The Forms of Capital.' pp. 241-58 in *Handbook of theory and research for the sociology of education*, edited by John G Richardson. New York: Greenwood Press.
- Bourdieu, P. (1991). *Language and symbolic power*. Harvard University Press.
- Bourdieu, P. (2014) *The logic of practice*. Cambridge: Polity Press.
- Brassley, P. (1996) 'Silage in Britain, 1880—1990: The Delayed Adoption of an Innovation.' *The Agricultural History Review*, pp 63-87.
- Brien, P. (2019) 'The UK Shared Prosperity Fund.' *House of Commons Library Briefing Paper*, (08527).
- Briggs, C.L. (2007) 'Anthropology, Interviewing, and Communicability in Contemporary Society', *Current anthropology*, 48(4), pp. 551–580. Available at: <https://doi.org/10.1086/518300>.
- Britton, A. J., Pearce, I. S. K., & Jones, B. (2005) 'Impacts of grazing on montane heath vegetation in Wales and implications for the restoration of montane areas.' *Biological Conservation*, 125(4), pp. 515-524.
- Brown, T. C. (1984) 'The Concept of Value in Resource Allocation.' *Land Economics*, 60(3), p. 231. Available at: <http://doi: 10.2307/3146184>.
- Brown, G. 2009. *Herdwicks: Herdwick Sheep and the English Lake District*. Hayloft: Kirkby Stephen.
- Brown, P.R., Nelson, R., Jacobs, B., Kokic, P., Tracey, J., Ahmed, M. and DeVoil, P., (2010) 'Enabling natural resource managers to self-assess their adaptive capacity.' *Agricultural Systems*, 103(8), pp.562-568.
- Brown, K. (2013, September 9). *Honey Bees Boles*. [Blog Post] retrieved from <https://northyorkmoorsnationalpark.wordpress.com/2013/09/09/honey-bee-boles/>
- Brubaker, R. (2002) 'Ethnicity without groups', *Archives européennes de sociologie. European journal of sociology.*, XLIII(2), pp. 163–189.
- Brunskill, R.W. (1987). *Traditional Farm Buildings of Britain*. Victor Gollancz, London. pp. 114–117.
- Bryant, C.J., Prosser, A.M. and Barnett, J. (2022) 'Going veggie: Identifying and overcoming the social and psychological barriers to veganism', *Appetite.*, 169. Available at: <https://doi.org/10.1016/j.appet.2021.105812>.

Bulmer, M. (1982) *Social research ethics: an examination of the merits of covert participant observation*. New York: Holmes & Meier Publisher.

Burke, P.J. (2009) *Identity theory*. New York; Oxford University Press.

Burke, P.J. and Tully, J.C. (1977) 'The Measurement of Role Identity', *Social forces*, 55(4), pp. 881-. Available at: <https://doi.org/10.2307/2577560>.

Burton, R. (2004) 'Seeing through the 'good farmer's' eyes: towards developing an understanding of the social symbolic value of 'productivist' behaviour.' *Sociologia Ruralis* 14 (2), pp. 195-216.

Burton, R. (2012) 'Understanding Farmers' Aesthetic Preference for Tidy Agricultural Landscapes: A Bourdieusian Perspective.' *Landscape Research*, 37(1), pp. 51–71. Available at: <http://doi:10.1080/01426397.2011.559311>.

Burton, R., Mansfield, L., Schwarz, G., Brown, K., & Convery, I. (2005) 'Social capital in hill farming.' *Report prepared for the International Centre for the Uplands by Macaulay Land Use Research Institute, Aberdeen & University of Central Lancaster, Penrith*.

Burton, R., Kuczera, C. and Schwarz, G. (2008) 'Exploring Farmers' Cultural Resistance to Voluntary Agri-environmental Schemes.' *Sociologia Ruralis*, 48(1), pp. 16–37. Available at: <http://doi:10.1111/j.1467-9523.2008.00452.x>.

Burton, R. and Paragahawewa, U. H. (2011) 'Creating culturally sustainable agri-environmental schemes,' *Journal of Rural Studies*, 27(1), pp. 95–104. Available at: <http://doi:10.1016/j.jrurstud.2010.11.001>.

Burton, R. J., & Schwarz, G. (2013) 'Result-oriented agri-environmental schemes in Europe and their potential for promoting behavioural change.' *Land Use Policy*, 30(1), pp. 628-641.

Burton, R. and Fischer, H. (2015) 'The Succession Crisis in European Agriculture', *Sociologia ruralis*. Wiley Subscription Services, Inc, 55(2), pp. 155–166. Available at: <http://doi:10.1111/soru.12080>.

Burton, R. J., Forney, J., Stock, P., & Sutherland, L. A. (2021) *The good farmer: culture and identity in food and agriculture*. London;: Routledge, Taylor & Francis Group.

Byrne, D. (2016) *Research Ethics*. Los Angeles, CA: SAGE Publications, Inc.

Carson, A., Elliott, M., Groom, J., Winter, A. and Bowles, D. (2009) 'Geographical isolation of native sheep breeds in the UK—Evidence of endemism as a risk factor to genetic resources', *Livestock science*. Elsevier B.V, 123(2), pp. 288–299. Available at: <http://doi:10.1016/j.livsci.2008.11.026>.

Casalichio, E. (2020) 'UK unveils post-Brexit plan to phase out current farm subsidies'. Politico. Published on November 30, 2020. <https://www.politico.eu/article/uk-farm-subsidies-post-brexit-plan/>

Cast, A.D. and Burke, P.J. (2002) 'A Theory of Self-Esteem', *Social forces*, 80(3), pp. 1041–1068. Available at: <https://doi.org/10.1353/sof.2002.0003>.

- Chan, K. M., Satterfield, T., & Goldstein, J. (2012) 'Rethinking ecosystem services to better address and navigate cultural values.' *Ecological economics*, 74, pp.8-18.
- Chan, K. M., & Satterfield, T. (2016) 'Managing cultural ecosystem services for sustainability.' In *Routledge handbook of ecosystem services* (pp. 343-358). Routledge.
- Chan, K. M., Balvanera, P., Benessaiah, K., Chapman, M., Díaz, S., Gómez-Baggethun, E., ... & Turner, N. (2016) 'Opinion: Why protect nature? Rethinking values and the environment,' *Proceedings of the National Academy of Sciences*, 113(6), pp. 1462–1465. Available at: [http://doi: 10.1073/pnas.1525002113](http://doi:10.1073/pnas.1525002113).
- Chan, K. M., Gould, R. K. and Pascual, U. (2018) 'Editorial overview: Relational values: what are they, and what's the fuss about?,' *Current Opinion in Environmental Sustainability*, 35, pp. A1–A7. Available at: [http://doi: 10.1016/j.cosust.2018.11.003](http://doi:10.1016/j.cosust.2018.11.003).
- Chandler, T. J., & Gregory, S. (1976) *The climate of the British Isles*. Addison-Wesley Longman Limited.
- Chapman, A. (2013) 'A (re)negotiation of identity: From “mature student” to “novice academic”', *Widening participation and lifelong learning*, 14(3), pp. 44–61. Available at: <https://doi.org/10.5456/WPLL.14.3.44>.
- Charmaz, K. (2006) *Constructing grounded theory: a practical guide through qualitative analysis*. London: SAGE.
- Charmaz, K. (2014) *Constructing grounded theory*. 2nd ed. London: SAGE.
- Charmaz, K. (2017) *The significance of symbolic interactionism for grounded theory*. London, United Kingdom: SAGE Publications Ltd.
- Choi, A. S., Ritchie, B. W., Papandrea, F., & Bennett, J. (2010) 'Economic valuation of cultural heritage sites: A choice modeling approach,' *Tourism Management*, 31(2), pp. 213–220. Available at: [http://doi: 10.1016/j.tourman.2009.02.014](http://doi:10.1016/j.tourman.2009.02.014).
- Clarke, A.E. (2005) *Situational analysis grounded theory after the postmodern turn*. Thousand Oaks, California.: SAGE.
- Clarke, A., Friese, C. and Washburn, R. (2015) *Situational analysis in practice: mapping research with grounded theory*. Walnut Creek: Left Coast Press.
- Clark, C., Scanlon, B., & Hart, K. (2019) 'Less is more: Improving profitability and the natural environment in hill and other marginal farming systems,' Report prepared for the RSPB and the National Trust and the Wildlife Trusts. *UK*, 35, 2019-11.
- Clark, C., Scanlon, B., & Hart, K. (2023) 'Farming at the sweet spot.' Report prepared for the Nature Friendly Framing Network and the Wildlife Trusts. *UK*.
- Cohen, N. and Arieli, T. (2011) 'Field research in conflict environments: Methodological challenges and snowball sampling', *Journal of Peace Research*, 48(4), pp. 423–435. Available at: [http://doi: 10.1177/0022343311405698](http://doi:10.1177/0022343311405698)

- Collier, M. J. (2013) 'Field boundary stone walls as exemplars of 'novel' ecosystems.' *Landscape Research*, 38(1), pp.141-150.
- Coleman, J. S. (1988) 'Social capital in the creation of human capital.' *American Journal of Sociology*, 94, S95-S120.
- Collingborn, J. (2023) 'Farmer Writes: family farm succession is a difficult business.' *Irish Farmers Journal*. March, 2023. <https://www.farmersjournal.ie/farmer-writes-family-farm-succession-is-a-difficult-business-755682>
- Colins, C. J., & Chippendale, P. J. (1991) *New wisdom: The nature of social reality*. Acorn Publishers.
- Collier, M. J. (2013) Field boundary stone walls as exemplars of 'novel' ecosystems. *Landscape Research*, 38(1), pp. 141-150.
- Conner, K. R., & Prahalad, C. K. (1996) 'A resource-based theory of the firm: Knowledge versus opportunism.' *Organization Science*, 7, pp477–501. Available at: <http://doi: 10.1287/orsc.7.5.477>
- Convery, I., Bailey, C., Mort, M., & Baxter, J. (2005) 'Death in the wrong place? Emotional geographies of the UK 2001 foot and mouth disease epidemic.' *Journal of Rural Studies*, 21(1), pp. 99-109.
- Conway, S. F., McDonagh, J., Farrell, M., & Kinsella, A. (2021) 'Going against the grain: Unravelling the habitus of older farmers to help facilitate generational renewal in agriculture.' *Sociologia Ruralis*, 61(3), pp. 602-622.
- Corbin, J. and Morse, J.M. (2003) 'The Unstructured Interactive Interview: Issues of Reciprocity and Risks when Dealing with Sensitive Topics', *Qualitative inquiry*, 9(3), pp. 335–354. Available at: <https://doi.org/10.1177/1077800403009003001>.
- Corbin, J.M. and Strauss, A.L. (2008) *Basics of qualitative research techniques and procedures for developing grounded theory*. 3e [ed.] / Juliet Corbin, Anselm Strauss. Los Angeles, [Calif.]: SAGE.
- Costanza, R. (1991) The ecological effects of sustainability: Investing in natural capital. *Environmentally Sustainable Economic Development Building On Brundtland. Environment Working Paper*, (46).
- Costanza, R., d'Arge, R., De Groot, R., Farber, S., Grasso, M., Hannon, B., ... & Van Den Belt, M. (1997). 'The value of the world's ecosystem services and natural capital.' *Nature*, 387(6630), pp. 253-260.
- Cotés Urquijo, L.M., (2020) *Alternativas de producción y comercialización desde la agricultura campesina, familiar y comunitaria en Sumapaz, Bogotá, Colombia* (Doctoral dissertation, CATIE, Turrialba (Costa Rica)).
- Coulson, A.B., Adams, C.A., Nugent, M.N. and Haynes, K. (2015) 'Exploring metaphors of capitals and the framing of multiple capitals: Challenges and opportunities for < IR >', *Sustainability accounting, management and policy journal (Print)*, 6(3), pp. 290–314. Available at: <https://doi.org/10.1108/SAMPJ-05-2015-0032>.

- Cox, J. R., and Ph. C. Pezzullo (2016) *Environmental Communication and the Public Sphere*. 4th edition. Los Angeles: SAGE.
- Craig, G. (2007) 'Community capacity-building: something old, something new...?' *Critical Social Policy*, 27(3), pp. 335-359.
- Crawshaw, C. and Piazza, J. (2022) How conflicted are farmers about meat? livestock farmers' attachment to their animals and attitudes about meat. *Psychology of Human-Animal Intergroup Relations*, 1, [10.5964/phair.8513](https://doi.org/10.5964/phair.8513)
- Critchley, C. N. ., Fowbert, J. and Wright, B. (2007) 'Dynamics of species-rich upland hay meadows over 15 years and their relation with agricultural management practices', *Applied vegetation science*. Oxford, UK: Blackwell Publishing Ltd, 10(3), pp. 307–314. Available at: [http://doi: 10.1111/j.1654-109X.2007.tb00429.x](http://doi:10.1111/j.1654-109X.2007.tb00429.x).
- Critchley, C. N. R., Adamson, H. F., McLean, B. M. L., & Davies, O. D. (2008) 'Vegetation dynamics and livestock performance in system-scale studies of sheep and cattle grazing on degraded upland wet heath.' *Agriculture, ecosystems & environment*, 128(1-2), pp. 59-67.
- Crofts, A., & Jefferson, R. G. (1999) *The Lowland Grassland Management Handbook*, English Nature/The Wildlife Trusts. English Nature, Peterborough, England.
- Curtis, C. J., Emmett, B. A., Grant, H., Kernan, M., Reynolds, B., & Shilland, E. (2005) 'Nitrogen saturation in UK moorlands: the critical role of bryophytes and lichens in determining retention of atmospheric N deposition.' *Journal of Applied Ecology*, 42(3), pp. 507-517.
- Cusworth, G. (2020) 'Falling short of being the “good farmer”: Losses of social and cultural capital incurred through environmental mismanagement, and the long-term impacts agri-environment scheme participation', *Journal of Rural Studies*, 75, pp. 164–173. Available at: <https://doi.org/10.1016/j.jrurstud.2020.01.021>.
- CYFC. (2023) Welcome to the Cumbria Federation of Young Farmers' Clubs. Available at <https://www.cumbriayfc.co.uk/> accessed 21/9/23
- Dadson, S. J., Hall, J. W., Murgatroyd, A., Acreman, M., Bates, P., Beven, K., ... & Wilby, R. (2017) 'A restatement of the natural science evidence concerning catchment-based 'natural' flood management in the UK.' *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 473(2199), 20160706.
- Dalby, S. and Mackenzie, F. (1997) 'Reconceptualising local community: environment, identity and threat', *Area (London 1969)*, 29(2), pp. 99–108. Available at: <https://doi.org/10.1111/j.1475-4762.1997.tb00012.x>.
- Danes, S. M., Stafford, K., Haynes, G., & Amarapurkar, S. S. (2009) 'Family capital of family firms: Bridging human, social, and financial capital.' *Family Business Review*, 22(3), pp. 199-215.
- Deleuze, G. and Guattari, F. (1988) *A thousand plateaus: capitalism and schizophrenia*. Translated by B. Massumi. London: Bloomsbury.

Department of Digital, Culture, Media & Sport.(2021) *Valuing Culture and Heritage Capital: A framework towards informing decision making*, London. retrieved 8/3/21 from <<https://www.gov.uk/government/publications/valuing-culture-and-heritage-capital-a-framework-towards-decision-making/valuing-culture-and-heritage-capital-a-framework-towards-informing-decision-making#fn:4>>

DEFRA, (2007) *Final Report. Assessment of the impact of Hefting*, Defra, London

DEFRA. (2010) *Farming in the English Uplands* Defra, London

DEFRA. (2015a) *Guidance Document - Set up a commons council*. Defra, London

DEFRA, (2015b). *Rural Development Programme for England: LEADER funding*. DEFRA, London.

DEFRA (2018a) 'Health & Harmony: the future of food, farming and the environment in a Green Brexit.' DEFRA, London

DEFRA. (2018b). *A green future: our 25 year plan to improve the environment*. DEFRA, London.

DEFRA, (2020). *Agriculture in the United Kingdom 2019*, DEFRA, London.

DEFRA, (2021). *Environmental Land Management scheme: overview* . DEFRA, London

DePoe, J.M. (2011) 'Defeating the self-defeat argument for phenomenal conservatism', *Philosophical Studies*, 152(3), pp. 347–359. Available at: <https://doi.org/10.1007/s11098-009-9482-7>.

DeWalt, K.M. and DeWalt, B.R. (2011) *Participant observation a guide for fieldworkers*. 2nd ed. Lanham, Md: Rowman & Littlefield.

DFID, U. K. (1999) Sustainable livelihoods guidance sheets. *London: DFID, 445*.

Dhakal, S. P., & Lilith, M. (2011) 'Exploring the viability of community-based sustainability initiatives in Perth with a lens of social capital.' In *3rd World Planning Schools Congress (Track 16: Environment, Sustainability, Social Justice and Resource Management)*.

Diamond, P. A. and Hausman, J. A. (1994) 'Contingent Valuation: Is Some Number Better than No Number?.' *Journal of Economic Perspectives*, 8(4), pp. 45–64. Available at: <http://doi:10.1257/jep.8.4.45>.

Díaz, S., Demissew, S., Carabias, J., Joly, C., Lonsdale, M., Ash, N., ... & Zlatanova, D. (2015) 'The IPBES Conceptual Framework—connecting nature and people.' *Current opinion in environmental sustainability*, 14, pp. 1–16.

Dorgbetor, I. K., Ondrasek, G., Kutnjak, H., & Mikuš, O. (2022) 'What If the World Went Vegan? A Review of the Impact on Natural Resources, Climate Change, and Economies', *Agriculture*, 12(10), p. 1518. Available at: <http://doi:10.3390/agriculture12101518>.

Douglas, Tom. (1995) *Survival in groups: basics of group membership*. Buckingham: Open University Press.

- Duffy, L.N., Kline, C., Swanson, J.R., Best, M. and McKinnon, H., (2017) 'Community development through agroecotourism in Cuba: an application of the community capitals framework.' *Journal of Ecotourism*, 16(3), pp.203-221.
- Eardley, F. (2022) 'Rising cost of agricultural fertiliser and feed: Causes, impacts and government policy.' House of Lords Library. Published Wednesday, 22 June, 2022.<https://lordslibrary.parliament.uk/rising-cost-of-agricultural-fertiliser-and-feed-causes-impacts-and-government-policy/>
- Egoz, S., Bowring, J.; Perkins, H. (2001) 'Tastes in tension: form, function, and meaning in New Zealand's farmed landscapes.' *Landscape and Urban Planning* 57, pp. 177-196.
- Emery, M., & Flora, C. (2006) 'Spiraling-up: Mapping community transformation with community capitals framework.' *Community Development*, 37(1), pp.19-35.
- Eriksen, T.H. (1993) 'Formal and informal nationalism', *Ethnic and Racial Studies*, 16(1), pp. 1–25. Available at: <https://doi.org/10.1080/01419870.1993.9993770>.
- Essed, P. (1991) *Understanding everyday racism: An interdisciplinary theory* (Vol. 2). Sage.
- Etchells, M.J. et al. (2017) 'White Male Privilege: An intersectional deconstruction', *Journal of ethnic and cultural studies*, 4(2), pp. 13–27. Available at: <https://doi.org/10.29333/ejecs/78>.
- Fanon, F. (1963) *The Wretched of the Earth*. Grove Press, New York.
- Fenichel, E., Abbott, J., Jude Bayham, Whitney Boone, Erin M. K. Haacker and Lisa Pfeiffer (2016) 'Measuring the value of groundwater and other forms of natural capital', *Proceedings of the National Academy of Sciences - PNAS*. United States: National Academy of Sciences, 113(9), pp. 2382–2387. Available at: <http://doi: 10.1073/pnas.1513779113>.
- Fernando, F.N. and Goreham, G.A., (2018) 'A tale of two rural cities: Dynamics of community capitals during a North Dakota oil boom.' *Community Development*, 49(3), pp. 274-291.
- Fish, R., Church, A. and Winter, M. (2016) 'Conceptualising cultural ecosystem services: A novel framework for research and critical engagement,' *Ecosystem Services*, 21, pp. 208–217. Available at: <http://doi: 10.1016/j.ecoser.2016.09.002>.
- Flora, C. B. (2000) 'Measuring the Social Dimensions of Managing.' p 83 In '*Human Dimensions of Natural Resource Management: Emerging Issues and Practical Applications: Workshop*,' February 1-3, 2000, Earle Brown Center, University of Minnesota, St. Paul Campus (p. 83). Minnesota Cooperative Fish and Wildlife Research Unit, Department of Fish and Wildlife, University of Minnesota
- Flora, C.B., (2004) Social aspects of small water systems. *Journal of Contemporary Water Research & Education*, 128(1), pp.6-12.
- Flora, C. B., Flora, J. L., Spears, J. D., & Swanson, L. E. (1992) *Rural communities: Legacy and change*. Westview Press.

- Folke, C., Colding, J. and Berkes, F., (2003) 'Synthesis: building resilience and adaptive capacity in social-ecological systems.' *Navigating social-ecological systems: Building resilience for complexity and change*, 9(1), pp.352-387
- Forney, J., Rosin, C., and Campbell, H. (Eds.). (2018) *Agri-environmental governance as an assemblage. Multiplicity, power, and transformation*. Abingdon, UK and New York: Routledge.
- Foucault, M. (1984) *The foucault reader*. Vintage.
- Fraser, M. D., Theobald, V. J., Griffiths, J. B., Morris, S. M., & Moorby, J. M. (2009) Comparative diet selection by cattle and sheep grazing two contrasting heathland communities. *Agriculture, ecosystems & environment*, 129(1-3), pp. 182-192.
- Fraser, M., Vale, J. and Dhanoa, M. (2013) 'Alternative upland grazing systems: Impacts on livestock performance and sward characteristics', *Agriculture, ecosystems & environment*. Oxford: Elsevier B.V, 175, pp. 8–20. Available at: <http://doi: 10.1016/j.agee.2013.05.002>.
- Fraser, M. D., Moorby, J. M., Vale, J. E. and Evans, D. M. (2014) 'Mixed grazing systems benefit both upland biodiversity and livestock production', *PloS one*. United States: Public Library of Science, 9(2), pp. e89054–e89054. Available at: <http://doi: 10.1371/journal.pone.0089054>.
- Fujita, N., (2007). 'Myrdal's theory of cumulative causation.' *Evolutionary and Institutional Economics Review*, 3(2), pp. 275-284.
- Frenkel, M., Lyan, I., & Drori, G. S. (2015) Reproducing self and the other: the role of cross-cultural management discourse and training in shaping Israeli–Korean collaborations. In *The Routledge Companion to Cross-Cultural Management* (pp. 399-408). London; Routledge.
- Fukuyama, F. (1996) *Trust: The social virtues and the creation of prosperity*. Simon and Schuster.
- Fukuyama, F. (2001) 'Social capital, civil society and development,' *Third World Quarterly*, 22(1), pp. 7–20. Available at: <http://doi: 10.1080/713701144>.
- Gao, J., Holden, J., & Kirkby, M. (2016). 'The impact of land–cover change on flood peaks in peatland basins.' *Water Resources Research*, 52(5), 3477-3492.
- Garmendia, E., & Pascual, U. (2013). 'A justice critique of environmental valuation for ecosystem governance.' *Justices and Injustices of Ecosystem Services*. Edited by Sikor T. Routledge, 161-186.
- Giddens, A. (1986) *The constitution of society: outline of the theory of structuration*. [First paperback edition]. Cambridge, England; Polity Press.
- Giddens, A. (1991) *Modernity and self-identity*. Cambridge: Polity.
- Giddens, A. (1999) 'Elements of the theory of structuration.' *Contemporary Social Theory*, pp. 119-130.
- Glover, J. (2014) 'Gender, power and succession in family farm business.' *International Journal of Gender and Entrepreneurship*, 6(3), pp. 276-295.
- Goffman, E. (1971) *The presentation of self in everyday life*. Penguin.

- Gould, R. K., Klain, S. C., Ardoin, N. M., Satterfield, T., Woodside, U., Hannahs, N., ... & Chan, K. M. (2015) 'A protocol for eliciting nonmaterial values through a cultural ecosystem services frame.' *Conservation Biology*, 29(2), pp. 575-586.
- Granovetter, M. (1983) 'The Strength of Weak Ties: A Network Theory Revisited.' *Sociological Theory*, 1, p. 201. Available at: <http://doi: 10.2307/202051>.
- Grant, D., & Hart, E. (1985) *Shepherds' crooks and walking sticks*. Dalesman Books, North Yorkshire.
- Gray, J. (1996) 'Cultivating Farm Life on the Borders: Scottish Hill Sheep Farms and the European Community', *Sociologia Ruralis*, 36(1), pp. 27–50. Available at: <https://doi.org/10.1111/j.1467-9523.1996.tb00003.x>.
- Gray, J. (1999) 'Open spaces and dwelling places: being at home on hill farms in the Scottish borders', *American ethnologist*, 26(2), pp. 440–460. Available at: <https://doi.org/10.1525/ae.1999.26.2.440>.
- Gray, J. (2000) 'The Common Agricultural Policy and the Re-Invention of the Rural in the European Community', *Sociologia ruralis*, 40(1), pp. 30–52. Available at: <https://doi.org/10.1111/1467-9523.00130>.
- Gray, J. (2010) 'Local agricultural shows in the Scottish Borders', *The Journal of the Royal Anthropological Institute*, 16(2), pp. 347–371. Available at: <https://doi.org/10.1111/j.1467-9655.2010.01629.x>.
- Gray, J. (2014) 'Hefting onto Place: Intersecting Lives of Humans and Sheep on Scottish Hills Landscape', *Anthrozoös*. Routledge, 27(2), pp. 219–234. Available at: <http://doi: 10.2752/175303714X13903827487520>.
- Grayson, B. (1997) Does conservation farming work?. *Enact*, Peterborough-, 5, 19-22.
- Grefe, X. (2010) 'Introduction : L'économie de la culture est-elle particulière ?,' *Revue d'économie politique*, 120(1), p. 1. Available at: <http://doi: 10.3917/redp.201.0001>.
- Greve, A. (2010) 'Absorptive capacity and social capital: Innovation and environmental regulation.' In E. Bjørndal, M. Bjørndal, P. Pardalos, & M. Rönnkvist (Eds.), *Energy, natural resources, and environmental economics* (pp. 381–395). Heidelberg: Springer.
- Grootaert, C. (2001) 'The missing link.' *Social capital and participation in everyday life*, 8.
- Gubrium, J.F. and Holstein, J.A. (2001) *Handbook of interview research: context and method*. London: SAGE.
- Guest, G., Namey, E. E., & Mitchell, M. L. (2013) *Collecting qualitative data: A field manual for applied research*. California; Sage.
- Guiso, L., Sapienza, P. and Zingales, L. (2004) 'The Role of Social Capital in Financial Development,' *American Economic Review*, 94(3), pp. 526–556. Available at: <http://doi: 10.1257/0002828041464498>.

- Gutiérrez-Montes, I.A., (2005). *Healthy communities equal healthy ecosystems? Evolution (and breakdown) of a participatory ecological research project towards a community natural resource management process*, San Miguel Chimalapa (Mexico).
- Gutierrez-Montes, I., Emery, M. and Fernandez-Baca, E., (2009a) 'The sustainable livelihoods approach and the community capitals framework: The importance of system-level approaches to community change efforts.' *Community Development*, 40(2), pp.106-113.
- Gutiérrez-Montes, I., Siles, J., Bartol, P. and Imbach, A.C., (2009b) 'Merging a Landscape Management Planning Approach With the Community Capitals Framework: Empowering Local Groups in Land Management Processes in Bocas del Toro, Panama:' *Journal of the Community Development Society. Community Development*, 40(2), pp. 220-230.
- Hahn, T., McDermott, C., Ituarte-Lima, C., Schultz, M., Green, T., & Tuvendal, M. (2015) 'Purposes and degrees of commodification: Economic instruments for biodiversity and ecosystem services need not rely on markets or monetary valuation,' *Ecosystem Services*, 16, pp. 74–82. Available at: <http://doi: 10.1016/j.ecoser.2015.10.012>.
- Haines-Young, R., Green, D. R., & Cousins, S. H. (Eds.). (2003). *Landscape ecology and geographical information systems*. CRC Press.
- Hanley, N., Colombo, S., Mason, P. and Johns, H. (2007) 'The Reform of Support Mechanisms for Upland Farming: Paying for Public Goods in the Severely Disadvantaged Areas of England', *Journal of agricultural economics*. Oxford, UK: Blackwell Publishing, 58(3), pp. 433–453. Available at: <http://doi: 10.1111/j.1477-9552.2007.00114.x>.
- Hansen, B. G., & Greve, A. (2015) 'The role of human and social capital in dairy farming.' *Rural Society*, 24(2), pp.154-176.
- Hart, E. (2004). *Hefting in Practice: The Ancient Craft of Grazing the Open Hills*. Edward W. Hart.
- Harrison, S. J., & Harrison, D. J. (1988). 'The effect of elevation on the climatically determined growing season in the Ochil Hills.' *Scottish Geographical Magazine*, 104(2), pp. 108-115
- Harvey, E. R. (1977) *La política cultural en Argentina*. Paris: Unesco.
- Haysom, K & Coulson, J. (2004) 'The Lepidoptera fauna associated with *Calluna vulgaris*: Effects of plant architecture on abundance and diversity.' *Ecological Entomology*. 23. pp. 377 - 385.
- Henle, K., Alard, D., Clitherow, J., Cobb, P., Firbank, L., Kull, T., McCracken, D., Moritz, R.F., Niemelä, J., Rebane, M. and Wascher, D. (2008) 'Identifying and managing the conflicts between agriculture and biodiversity conservation in Europe—A review', *Agriculture, ecosystems & environment*, 124(1), pp. 60–71. Available at: <https://doi.org/10.1016/j.agee.2007.09.005>.
- Higgins, S., Schellberg, J. and Bailey, J.S. (2019) 'Improving productivity and increasing the efficiency of soil nutrient management on grassland farms in the UK and Ireland using precision agriculture technology', *European Journal of Agronomy*, 106, pp. 67–74. Available at: <https://doi.org/10.1016/j.eja.2019.04.001>.

- Hijnen, W.A.M., Schurer, R., Bahlman, J.A., Ketelaars, H.A.M., Italiaander, R., Van Der Wal, A. and Van der Wielen, P.W.J.J. (2018) 'Slowly biodegradable organic compounds impact the biostability of non-chlorinated drinking water produced from surface water', *Water Research (Oxford)*, 129, pp. 240–251. Available at: <https://doi.org/10.1016/j.watres.2017.10.068>.
- Holden, J., Palmer, S. M., Johnston, K., Wearing, C., Irvine, B., & Brown, L. E. (2015) 'Impact of prescribed burning on blanket peat hydrology.' *Water Resources Research*, 51(8), pp. 6472-6484.
- Holmes, R. M. (2020) *Cultural psychology: Exploring culture and mind in diverse communities*. Oxford University Press.
- Holt, L. (2008) 'Embodied social capital and geographic perspectives: performing the habitus,' *Progress in Human Geography*, 32(2), pp. 227–246. Available at: <http://doi:10.1177/0309132507087648>.
- Hounscome, B., Edwards, R.T., Hounscome, N. and Edwards-Jones, G. (2012) 'Psychological Morbidity of Farmers and Non-farming Population: Results from a UK Survey', *Community mental health journal*, 48(4), pp. 503–510. Available at: <https://doi.org/10.1007/s10597-011-9415-8>.
- House of Commons: Environment, Food and Rural Affairs Committee, "Farming in the Uplands" 2011.
- HSBA. (2021) Events. Available at <http://www.herdwick-sheep.com/herdwicks/events/>. Accessed on 27/10/23
- Hubbard, C. E. (1968). *Grasses. A guide to their structure, identification, uses, and distribution in the British Isles*. London; Penguin.
- Huttunen, S. and Oosterveer, P. (2017) 'Transition to Sustainable Fertilisation in Agriculture, A Practices Approach', *Sociologia Ruralis*, 57(2), pp. 191–210. Available at: <https://doi.org/10.1111/soru.12118>.
- IIALE. (2017) *The biodiversity of a dry-stone wall*, International Association of Landscape Ecology Newsletter, Autumn 2017 retrieved 09/04/21 <<https://iale.uk/biodiversity-dry-stone-wall>>
- Ilbery, B. W. (1985) *Agricultural geography: a social and economic analysis* (No. 631.5 I5).
- Ilbery, B., Maye, D., Kneafsey, M., Jenkins, T., & Walkley, C. (2004) 'Forecasting food supply chain developments in lagging rural regions: evidence from the UK.' *Journal of Rural Studies*, 20(3), pp. 331-344.
- Ingram, J. (2018) 'Agricultural transition: Niche and regime knowledge systems' boundary dynamics', *Environmental innovation and societal transitions*, 26, pp. 117–135. Available at: <https://doi.org/10.1016/j.eist.2017.05.001>.
- Irvine, K.N., O'Brien, L., Ravenscroft, N., Cooper, N., Everard, M., Fazey, I., Reed, M.S. and Kenter, J.O. (2016) 'Ecosystem services and the idea of shared values,' *Ecosystem Services*, 21, pp. 184–193. Available at: <http://doi:10.1016/j.ecoser.2016.07.001>.
- Jeannotte, M. S. (2003) 'Singing alone? The contribution of cultural capital to social cohesion and sustainable communities,' *International Journal of Cultural Policy*, 9(1), pp. 35–49. Available at: <http://doi:10.1080/1028663032000089507>.

Jenkins, R. (1992) *Pierre Bourdieu*. London; Routledge

Jenkins, R. (2014) *Social identity*. London; Routledge.

Joas, H. (1993) *Pragmatism and social theory*. University of Chicago Press.

Jones, L., Heley, J. and Woods, M. (2019) 'Unravelling the Global Wool Assemblage: Researching Place and Production Networks in the Global Countryside', *Sociologia Ruralis*, 59(1), pp. 137–158. Available at: <https://doi.org/10.1111/soru.12220>

Jorgensen, D.L. (1989) *Participant observation: a methodology for human studies*. Newbury Park, California.; Sage.

Kächele, H. and Dabbert, S. (2002) 'An economic approach for a better understanding of conflicts between farmers and nature conservationists—an application of the decision support system MODAM to the Lower Odra Valley National Park', *Agricultural Systems*, 74(2), pp. 241–255. Available at: [https://doi.org/10.1016/S0308-521X\(01\)00087-7](https://doi.org/10.1016/S0308-521X(01)00087-7).

Kallis, G., Gómez-Baggethun, E. and Zografos, C. (2013) 'To value or not to value? That is not the question,' *Ecological Economics*, 94, pp. 97–105. Available at: <http://doi: 10.1016/j.ecolecon.2013.07.002>.

Kataria, K., Curtiss, J., & Balmann, A. (2012) Drivers of agricultural physical capital development: Theoretical framework and hypotheses (No. 545-2016-38708).

Kay, P., Grayson, R., Phillips, M., Stanley, K., Dodsworth, A., Hanson, A., ... & Taylor, S. (2012) 'The effectiveness of agricultural stewardship for improving water quality at the catchment scale: Experiences from an NVZ and ECSFDI watershed.' *Journal of Hydrology*, 422, pp. 10-16.

Kenny, D. C. (2017) 'Modeling of natural and social capital on farms: Toward useable integration.' *Ecological Modelling*, 356, pp. 1–13.

Kenter, J.O., O'Brien, L., Hockley, N., Ravenscroft, N., Fazey, I., Irvine, K.N., Reed, M.S., Christie, M., Brady, E., Bryce, R. and Church, A. (2015) 'What are shared and social values of ecosystems?,' *Ecological Economics*, 111, pp. 86–99. Available at: <http://doi: 10.1016/j.ecolecon.2015.01.006>.

Kilpatrick, S. (2007) 'Building Social Capital in Groups: Facilitating Skill Development for Natural Resource Management', *Rural society*, 17(3), pp. 248–257. Available at: <https://doi.org/10.5172/rsj.351.17.3.248>.

King, B., Fielke, S., Bayne, K., Klerkx, L., & Nettle, R. (2019) 'Navigating shades of social capital and trust to leverage opportunities for rural innovation.' *Journal of Rural Studies*, 68, pp.123-134.

Kinney, P. (2018) Walking interview ethics. In *The sage handbook of qualitative research ethics* (pp. 174-187). SAGE Publications Ltd, Available at: <https://www-doi-org.cumbria.idm.oclc.org/10.4135/9781526435446>

Kirkham, F. W., Tallowin, J. R. ., Sanderson, R. A., Bhogal, A., Chambers, B. J. and Stevens, D. P. (2008) 'The impact of organic and inorganic fertilizers and lime on the species-richness and plant functional characteristics of hay meadow communities', *Biological conservation*. Oxford: Elsevier Ltd, 141(5), pp. 1411–1427. Available at: <http://doi: 10.1016/j.biocon.2008.03.010>.

- Kirkham, F.W, Tallowin, J, Robert M. Dunn, Anne Bhogal, Brian J. Chambers and Richard D. Bardgett (2014) 'Ecologically sustainable fertility management for the maintenance of species-rich hay meadows: a 12-year fertilizer and lime experiment', *The Journal of applied ecology*. Oxford: John Wiley & Sons Ltd, 51(1), pp. 152–161. Available at: <http://doi: 10.1111/1365-2664.12169>.
- Kirwan, J. (2004) 'Alternative strategies in the UK agro–food system: interrogating the alterity of farmers' markets.' *Sociologia Ruralis*, 44(4), pp. 395-415.
- Kirwan, J. (2006) 'The interpersonal world of direct marketing: examining conventions of quality at UK farmers' markets.' *Journal of Rural Studies*, 22(3), pp. 301-312.
- Knappett, C. (2012) 'Meaning in miniature: semiotic networks in material culture. 'Excavating the mind', pp. 87-109.
- Koning, J., (2001) 'Social sustainability in a globalizing world: context, theory and methodology explored.' In *Proceedings of the UNESCO/MOST meeting, The Hague, The Netherlands* pp. 22-23.
- Lake, J. (1989) *Historic Farm Buildings: An Introduction and Guide in association with the National Trust*. Blandford Press, Cassell, London. pp. 99–101.
- Lamont, M. and Molnár, V. (2002) 'The Study of Boundaries in the Social Sciences', *Annual Review of Sociology*, 28(1), pp. 167–195. Available at: <https://doi.org/10.1146/annurev.soc.28.110601.141107>.
- Laycock, M. (2021) *MPs to probe Askham Bryan College's move to close Newton Rigg campus*. The Press, York. retrieved 28/4/21 <<https://www.yorkpress.co.uk/news/19173469.mps-probe-askham-bryan-colleges-move-close-newton-rigg-campus/>>
- Leach, M., Mearns, R. and Scoones, I., (1997) 'Challenges to community–based sustainable development: dynamics, entitlements, institutions.' *IDS bulletin*, 28(4), pp.4-14.
- Le Heron, R., Campbell, H., Lewis, N., and Carolan, M. S. (Eds.). (2016) *Biological economies: Experimentation and the politics of agrifood frontiers*. Abingdon, UK and New York: Routledge.
- Leonard, B., Kinsella, A., O'Donoghue, C., Farrell, M., & Mahon, M. (2017) 'Policy drivers of farm succession and inheritance.' *Land Use Policy*, 61, pp.147-159.
- Leeuwis, C. (2000) 'Reconceptualizing participation for sustainable rural development: towards a negotiation approach', *Development and change*, 31(5), pp. 931–959. Available at: <https://doi.org/10.1111/1467-7660.00184>.
- Lewis, M. and Conaty, P. (2012) *The resilience imperative : cooperative transitions to a steady-state economy*. Gabriola, Bc: New Society Publishers.
- Lewis, N., Le Heron, R., Campbell, H., Henry, M., Le Heron, E., Pawson, E., Perkins, H., Roche, M., and Rosin, C. (2013) 'Assembling biological economies: Region-shaping initiatives in making and retaining value.' *New Zealand Geographer*, 69(3), pp.180–196.
- Little, J. and Panelli, R. (2003) 'Gender research in rural geography', *Gender, place and culture: a journal of feminist geography*, 10(3), pp. 281–289. Available at: <https://doi.org/10.1080/0966369032000114046>.

Littlewood, N., Dennis, P., Pakeman, R. . and Woodin, S. (2006) 'Moorland restoration aids the reassembly of associated phytophagous insects', *Biological conservation*. Oxford: Elsevier Ltd, 132(3), pp. 395–404. Available at: <http://doi: 10.1016/j.biocon.2006.04.033>.

LDNPP. (2016). *Nomination of the English Lake District*, Vol1. Kendal, UK

LDNPA, (2023) 'Farming in the Lake District.' Available at <https://www.lakedistrict.gov.uk/caringfor/farming>. Accessed 28/10/23

Lobley, M., Baker, J. and Whitehead, I. (2010) 'Farm Succession and Retirement: Some International Comparisons', *Journal of agriculture, food systems, and community development*. Ithaca: New Leaf Associates, Inc, 1(1), pp. 49–64. Available at: <http://doi: 10.5304/jafscd.2010.011.009>.

Lobley, M. Errington, A. McGeorge, A. Millard, N. and Potter, C. (2002) Implications of Changes in the Structure of Agricultural Businesses, Final Report to DEFRA, University of Plymouth.

Longstreth, R.W. (2008) *Cultural landscapes balancing nature and heritage in preservation practice*. Minneapolis: University of Minnesota Press.

Lorenz, E., (1999) 'Trust, contract and economic cooperation.' *Cambridge Journal of Economics*, 23(3), pp.3 01-315.

Lowman, B. G., Hinks, C. E., Hunter, E. A., & Scott, N. A. (1996) 'Effect of breed type, sex, method of rearing and winter nutrition on lifetime performance and carcass composition in a 20-month beef system: grazing performance.' *Animal Science*, 63(2), pp. 215-222

Lupton, D. and Tulloch, J. (2002) "“Life would be pretty dull without risk”: Voluntary risk-taking and its pleasures', *Health, Risk & Society*., 4(2), pp. 113–124. Available at: <http://doi: 10.1080/13698570220137015>.

Lyon, F. (2006) 'Managing Co-operation: Trust and Power in Ghanaian Associations', *Organization Studies*, 27(1), pp. 31–52. Available at: <https://doi.org/10.1177/0170840605056392>.

Lyons, A.C. and Cromby, J. (2010) 'Social Psychology and the Empirical Body: Rethinking the Relationship: Social Psychology and the Empirical Body', *Social and Personality Psychology Compass*, 4(1), pp. 1–13. Available at: <https://doi.org/10.1111/j.1751-9004.2009.00219.x>.

McEachern, C. (1992) 'Farmers and conservation: conflict and accommodation in farming politics.' *Journal of Rural Studies*, 8(2), pp. 159-171.

Mack, N., Woodsong, C., MacQueen, K., Guest, G., & Namey, E. (2005) *Qualitative research methods: A data collector's field guide*. Research Triangle Park, NC: Family Health International.

Maier, D. S. and Feest, A. (2015) "The IPBES Conceptual Framework: An Unhelpful Start," *Journal of Agricultural and Environmental Ethics*, 29(2), pp. 327–347. Available at: <http://doi: 10.1007/s10806-015-9584-5>.

Matthews, R. and Selman, P. (2006). 'Landscape as a focus for integrating human and environmental processes.' *Journal of Agricultural Economics*, 57(2), pp. 199-212.

- Marrs, R. H., Lee, H., Blackbird, S., Connor, L., Girdwood, S. E., O'Connor, M., Smart, S. M., Rose, R. J., O'Reilly, J. and Chiverrell, R. C. (2020) 'Release from sheep-grazing appears to put some heart back into upland vegetation: A comparison of nutritional properties of plant species in long-term grazing experiments', *Annals of Applied Biology*. Oxford, UK: Blackwell Publishing Ltd, 177(1), pp. 152–162. Available at: <http://doi: 10.1111/aab.12591>.
- Martindale, J. G. (1955). 'Training for the Scottish Woollen Industry.' *Journal of the Textile Institute Proceedings*, 46(4), pp. 290-296.
- Manning, P. (1992) *Erving Goffman and modern sociology*. Cambridge: Polity Press.
- Mansfield, L. (2005) *Changes in upland agriculture and its effects on the environment: a case study from Cumbria, UK*. In: European Society for Rural Sociology XXI Congress: A common European countryside? Change and continuity, diversity and cohesion in the enlarged Europe, 22-27 August 2005, Keszthely, Hungary. (Unpublished)
- Mansfield, L. (2008) *The Cumbrian hill sheep initiative: a solution to the decline in upland hill farming community in England*. In: Robinson, Guy, (ed.) *Sustainable rural systems: sustainable agriculture and rural communities*. Perspectives on Rural Policy and Planning series . Ashgate, Aldershot, UK, pp. 161-184.
- Mansfield, L. (2011) *Upland agriculture and the environment* . Bowness-on-Windermere: Badger.
- Mansfield, L (2012) 'Hill farming identities and connections to place' in: Convery I, Corsane G & Davis P (eds) (2012) 'Making Sense of Place: Multidisciplinary Perspectives' The Boydell Press: Woodbridge
- Mansfield, L. (2014) *Upland farming and wilding*. *ECOS*, 35 (3/4). pp. 15-22.
- Mansfield, L. (2015) *Upland farming systems and wilding landscapes: a Cumbrian example*. In: *Wild Thing? Managing Landscape Change and Future Ecologies*, 9-11 September 2015, Sheffield, UK. (Unpublished)
- Mansfield, L. (2017) 'Upland resource management in Britain', *Geography*. Sheffield: Geographical Association (GA), 102(3), pp. 141–152. Available at: <http://doi: 10.1080/00167487.2017.12094024>.
- Mansfield, L. (2019a) *Gap analysis for Cumbrian upland farming initiatives post-Brexit*. (Unpublished) Available at : <http://insight.cumbria.ac.uk/id/eprint/4820/>
- Mansfield, L. (2019b) *Valuing cultural capital: place-based rural development for hill farming opportunities from Japan*. (Unpublished). Available at: <http://insight.cumbria.ac.uk/id/eprint/5214/>
- Mansfield, L., Burton, R., Schwarz, G., Brown, K., & Convery, I. (2006) 'The heft: a multifunctional management tool.' *The international journal of biodiversity science & management*, 2(3), pp. 238–241. Available at: <https://doi.org/10.1080/17451590609618133>.
- Manterys, A. (2019) 'Cultural capital and public relations' *Vestnik Instituta Sotziologii*, 30(3), pp. 33–43. Available at: <https://doi: 10.19181/vis.2019.30.3.586>.

- Markandya, A. and Pedroso-Galinato, S. (2007) 'How substitutable is natural capital?.' *Environmental and Resource Economics*, 37(1), pp. 297–312. Available at: <http://doi: 10.1007/s10640-007-9117-4>.
- McCallum, H. M., Wilson, J. D., O'Brien, M. G., Beaumont, D., Sheldon, R. and Park, K. J. (2018) 'Fodder crop management benefits Northern Lapwing (*Vanellus vanellus*) outside agri-environment schemes', *Agriculture, Ecosystems & Environment*. Elsevier B.V, 265, pp. 470–475. Available at: <http://doi: 10.1016/j.agee.2018.06.027>.
- Mead, G.H. (1967) *Mind, self and society from the standpoint of a social behaviorist*. Chicago: University of Chicago Press.
- Meert, H. van Huylenbroeck, G. Vernimmen, T. Bourgeois, M. and van Hecke, E. (2005) 'Farm household survival strategies and diversification on marginal farms,' *Journal of Rural Studies*, 21, pp. 81- 97.
- Meinzen-Dick, R., Kovarik, C., & Quisumbing, A. R. (2014). 'Gender and sustainability.' *Annual Review of Environment and Resources*, 39, pp. 29-55.
- Meierová, T. (2020) 'Conflicts Between Farmers and Conservationists: The Role of Communication in the Management of Natural Resources', *Journal of Landscape Ecology (Berlin, Germany)*, 13(2), pp. 129–149. Available at: <https://doi.org/10.2478/jlecol-2020-0013>.
- Milcu, A.I., Hanspach, J., Abson, D. and Fischer, J. (2013) 'Cultural Ecosystem Services: A Literature Review and Prospects for Future Research', *Ecology and Society*, 18(3), pp. 44-. Available at: <https://doi.org/10.5751/ES-05790-180344>.
- Miller, G. R., Miles, J., & Heal, O. W. (1984) *Moorland management: a study of Exmoor*. Institute of Terrestrial Ecology.
- Mills, A. J., Durepos, G., & Wiebe, E. (Eds.). (2010) *Encyclopedia of case study research*. California; Sage Publications
- Mills, J., Gibbon, D., Ingram, J., Reed, M., Short, C., & Dwyer, J. (2011) 'Organising Collective Action for Effective Environmental Management and Social Learning in Wales.' *The Journal of Agricultural Education and Extension*, 17(1), pp. 69–83. Available at: <http://doi: 10.1080/1389224x.2011.536356>.
- Meierová, T. (2020) 'Conflicts Between Farmers and Conservationists: The Role of Communication in the Management of Natural Resources', *Journal of Landscape Ecology (Berlin, Germany)*, 13(2), pp. 129–149. Available at: <https://doi.org/10.2478/jlecol-2020-0013>.
- Molnár, Z., & Berkes, F. (2018). 'Role of traditional ecological knowledge in linking cultural and natural capital in cultural landscapes', *Reconnecting Natural and Cultural Capital: Contributions from Science and Policy; Paracchini, ML, Zingari, PC, Blasi, C., Eds*, pp. 183-193.
- Money, J. (2012) *Lovemaps: Clinical concepts of sexual/erotic health and pathology, paraphilia, and gender transposition in childhood, adolescence, and maturity*. Prometheus Books.
- Mooney, P., & Tanaka, K. (2015) 'The family farms in the United States: social relations, scale and region.' *Wiś i Rolnictwo*, pp. 45-57.

Morgan, O. (2023) *Gathering the broken heft: the effects of climate change mitigation schemes on the traditional management systems of the Lake District World Heritage Site*. In: Royal Geographic Society Annual Conference: Climate Changed Geographies, 29 August - 1 September 2023, London, UK.

Moore and Smalley (2022) *Farming and Rural Business Report*. Available at: <https://mooreandsmalley.co.uk/sectors/farming-and-rural-business/>

Müller, M. (2015) 'Assemblages and Actor-networks: Rethinking Socio-material Power, Politics and Space', *Geography compass* 9, pp. 27–41. Available at: <https://doi.org/10.1111/gec3.12192>.

Müller, M. and Schurr, C. (2016) 'Assemblage thinking and actor-network theory: conjunctions, disjunctions, cross-fertilisations', *Transactions - Institute of British Geographers (1965)*, 41(3), pp. 217–229. Available at: <https://doi.org/10.1111/tran.12117>.

Mueller, D., Hoard, S., Roemer, K., Sanders, C. and Rijkhoff, S.A., (2020) 'Quantifying the community capitals framework: Strategic application of the community assets and attributes model.' *Community Development*, pp.1-21.

Muraca, B. (2011) "The Map of Moral Significance: A New Axiological Matrix for Environmental Ethics," *Environmental Values*, 20(3), pp. 375–396. Available at: <http://doi:10.3197/096327111x13077055166063>.

Muhar, A., Raymond, C.M., van den Born, R.J., Bauer, N., Böck, K., Braitto, M., Buijs, A., Flint, C., de Groot, W.T., Ives, C.D. and Mitrofanenko, T. (2018) 'A model integrating social-cultural concepts of nature into frameworks of interaction between social and natural systems.' *Journal of Environmental Planning and Management*, 61(5-6), pp.756-777.

Murphy, G., Hynes, S., Murphy, E., O'Donoghue, C., & Green, S. (2011) Assessing the compatibility of farmland biodiversity and habitats to the specifications of agri-environmental schemes using a multinomial logit approach. *Ecological Economics*, 71, pp. 111-121.

Murphy, T. R., Hanley, M. E., Ellis, J. S., & Lunt, P. H. (2021) Native woodland establishment improves soil hydrological functioning in UK upland pastoral catchments. *Land Degradation & Development*, 32(2), pp. 1034-1045.

Narayan, D., (1999) *Bonds and bridges: Social capital and poverty* (Vol. 2167). Washington DC: World Bank, Poverty Reduction and Economic Management Network, Poverty Division.

Nelson, D. R., Adger, W. N. and Brown, K. (2007) 'Adaptation to environmental change: contribution of a resilience framework.' *Annual Review of Environment and Resources*, 32, (11): pp.1-25.

Newton, I. (2004) 'The recent declines of farmland bird populations in Britain: an appraisal of causal factors and conservation actions', *Ibis (London, England)*. Received 27 April 2004; revision accepted 4 August 2004., 146(4), pp. 579–600. Available at: <https://doi.org/10.1111/j.1474-919X.2004.00375.x>.

North Pennines ANOB. (2023) *What's special*. Available at <https://www.northpennines.org.uk/> (Accessed 21/10/23)

- Oh, H., Labianca, G. and Chung, M.-H. (2006) 'A Multilevel Model of Group Social Capital', *The Academy of Management review*, 31(3), pp. 569–582. Available at: <https://doi.org/10.5465/amr.2006.21318918>.
- Okolie, A.C. (2003) 'Introduction to the Special Issue -- Identity: Now You Don't See It; Now You Do', *Identity (Mahwah, N.J.)*, 3(1), pp. 1–7. Available at: https://doi.org/10.1207/S1532706XID0301_01.
- Olsson, P., Folke, C. and Berkes, F. (2004) 'Adaptive comanagement for building resilience in social–ecological systems.' *Environmental management*, 34(1), pp.75-90.
- O'Reilly, K. and O'Reilly, K. (2009) *Key concepts in ethnography*. Los Angeles: SAGE.
- Orr, S., Brown, G., Smith, S., May, C., Waters, M. (2006) 'Assets, vulnerabilities and livelihoods: an analysis of households in Thornaby-on-Tees.' Church Action on Poverty, Manchester
- Ostrom, E. and Cox, M. (2010) 'Moving beyond panaceas: a multi-tiered diagnostic approach for social-ecological analysis.' *Environmental Conservation*, pp.451-463.
- Özkazanç-Pan, B. (2015) 'Postcolonial feminist contributions to cross-cultural management.' *The Routledge Companion to Cross-Cultural Management*, pp.371-379.
- Pakeman, R. J., Huband, S., Kriel, A. and Lewis, R. (2011) 'Changes in the Management of Scottish Machair Communities and Associated Habitats from the 1970s to the Present', *Scottish geographical journal*. Abingdon: Routledge, 127(4), pp. 267–287. Available at: <http://doi:10.1080/14702541.2012.666262>.
- Palmer, W. T. (1925) 'Shepherd's Meet', *Fortnightly review, May 1865-June 1934*. London: Chapman and Hall, 118(707), pp. 718–725.
- Paracchini, M. L., Petersen, J. E., Hoogeveen, Y., Bamps, C., Burfield, I., & van Swaay, C. (2008) 'High Nature Value farmland in Europe.' *An estimate of the distribution patterns on the basis of land cover and biodiversity data*, 23480.
- Parry, L. E., Holden, J., & Chapman, P. J. (2014) 'Restoration of blanket peatlands.' *Journal of Environmental Management*, 133, 193-205.
- Peterson, H. et al. (2018) 'Trends in the Use of New-Media Marketing in U.S. Ornamental Horticulture Industries', *Horticulturae*, 4(4), pp. 32-. Available at: <https://doi.org/10.3390/horticulturae4040032>.
- Perry, G. M. and Robison, L. J. (2001) 'Evaluating the Influence of Personal Relationships on Land Sale Prices: A Case Study in Oregon.' *Land Economics*, 77(3), pp. 385–398. doi: 10.2307/3147132.
- Pickert, J., Brüning, D., Mersch, F., Herrmann, A. and Weise, G. (2019) 'Field-related quality management system for grass silage production', *Grass and Forage Science*. Wiley Subscription Services, Inc, 74(2), pp. 314–319. Available at: <https://doi:10.1111/gfs.12428>.
- Pigg, K., Gasteyer, S. P., Martin, K. E., Keating, K., & Apaliyah, G. P. (2013) 'The Community Capitals Framework: an empirical examination of internal relationships', *Community Development (Columbus, Ohio)*, 44(4), pp. 492–502. Available at: <https://doi.org/10.1080/15575330.2013.814698>.

Platteau, J. P. (1997). 'Mutual insurance as an elusive concept in traditional rural communities.' *The Journal of Development Studies*, 33(6), pp. 764-796

Pla-Rabes, S., Flower, R. J., Shilland, E. M., & Kreiser, A. M. (2011) 'Assessing microbial diversity using recent lake sediments and estimations of spatio-temporal diversity', *Journal of Biogeography*, 38(10), pp. 2033–2040. Available at: <https://doi.org/10.1111/j.1365-2699.2011.02530.x>.

Ponder, V. and Hindley, A., (2009) *Farming Lives: Using the sustainable livelihoods Approach in the Peak district farming community*. Oxfam Policy and Practice: retrieved 3/2/21 from <<https://www.scribd.com/document/340863115/Farming-Lives-Using-the-sustainable-livelihoods-approach-in-the-Peak-District-Farming-Community#download>>

Ponthieux, S. (2004) The concept of social capital: a critical review. Paper presented at 10th CAN conference, Paris, 21–23 January.

Potter, J., & Hepburn, A. (2012) 'Eight challenges for interview researchers.' *Handbook of interview research*, 2(1), pp.541-570.

Powell, J. L. (2013). *Symbolic interactionism*. Novinka.

Powell, J. R., & Courtney, P. (2013) An assessment of the Social Return on Investment of Axes 1 and 3 of the Rural Development Programme for England.

Pretty, J. N. (1998) *The Living Land: Agriculture, Food and Community Regeneration in Rural Europe*. London: Earthscan Publications Ltd

Pretty, J. and Ward, H. (2001) 'Social Capital and the Environment', *World development*, 29(2), pp. 209–227. Available at: [https://doi.org/10.1016/S0305-750X\(00\)00098-X](https://doi.org/10.1016/S0305-750X(00)00098-X).

Priestley, M. (2017) 'Stratified sheep sector under threat unless producers change,' *Farmers Weekly*, 10 June 2017 <<https://www.fwi.co.uk/livestock/sheep/stratified-sheep-sector-under-threat-unless-producers-change>>

Putnam, R. (1993) *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press, Princeton, NJ

Putnam, R., Light, I., de Souza Briggs, X., Rohe, W.M., Vidal, A.C., Hutchinson, J., Gress, J. and Woolcock, M. (2004) 'Using Social Capital to Help Integrate Planning Theory, Research, and Practice: Preface.' *Journal of the American Planning Association*, 70(2), pp. 142–192. Available at: <https://doi.org/10.1080/01944360408976369>.

Queiroz, C., Beilin, R., Folke, C., & Lindborg, R. (2014) 'Farmland abandonment: threat or opportunity for biodiversity conservation? A global review.' *Frontiers in Ecology and the Environment*, 12(5), pp. 288-296.

Quist-Adade, C. (2019) *Symbolic interactionism: the basics*. Wilmington, Delaware: Vernon Press

- Raimi, M. O., Abiola, I., Alima, O., & Omini, D. E. (2021) 'Exploring how human activities disturb the balance of biogeochemical cycles: Evidence from the carbon, nitrogen and hydrologic cycles.' *Nitrogen and Hydrologic Cycles (July 30, 2021)*.
- Ramisch, J.J. (2014) "'They don't know what they are talking about': Learning from the dissonances in dialogue about soil fertility knowledge and experimental practice in western Kenya', *Geoforum*, 55, pp. 120–132. Available at: <https://doi.org/10.1016/j.geoforum.2014.05.009>.
- Ravnborg, H.M. and Westermann, O. (2002) 'Understanding interdependencies: stakeholder identification and negotiation for collective natural resource management', *Agricultural Systems*, 73(1), pp. 41–56. Available at: [https://doi.org/10.1016/S0308-521X\(01\)00099-3](https://doi.org/10.1016/S0308-521X(01)00099-3).
- Ray, C. (1999) 'Endogenous Development in the Era of Reflexive Modernity', *Journal of Rural Studies*, 15(3), pp. 257–267. Available at: [https://doi.org/10.1016/S0743-0167\(98\)00072-2](https://doi.org/10.1016/S0743-0167(98)00072-2).
- Rebanks, J. (2015). *The shepherd's life: A tale of the Lake District*. Penguin UK.
- Reck, A.J. (1964) 'Recent Interpretations of American Philosophy', *The Review of Metaphysics*, 18(2), pp. 334–355.
- Reckwitz, A. (2002) 'Toward a Theory of Social Practices: A Development in Culturalist Theorizing', *European Journal of Social Theory*, 5(2), pp. 243–263. Available at: <https://doi.org/10.1177/13684310222225432>.
- Reynolds, L. T. (1993) *Interactionism: Exposition and critique*. Rowman & Littlefield.
- Rientjes, S. (Ed.). (2000) *Communicating nature conservation: a manual on using communication in support of nature conservation policy and action*. Tilburg: European Centre for Nature Conservation.
- Riley, M. (2006) 'Reconsidering conceptualisations of farm conservation activity: The case of conserving hay meadows', *Journal of Rural Studies*, 22(3), pp. 337–353. Available at: <https://doi.org/10.1016/j.jrurstud.2005.10.005>.
- Riley, M. (2016). 'How does longer term participation in agri-environment schemes [re]shape farmers' environmental dispositions and identities?' *Land Use Policy*, 52, pp. 62–75.
- Riley, M., Sangster, H., Smith, H., Chiverrell, R., & Boyle, J. (2018) 'Will farmers work together for conservation? The potential limits of farmers' cooperation in agri-environment measures.' *Land Use Policy*, 70, pp.635-646.
- Rip, A. (2019) 'Recapturing the status of indigenous knowledge and its relation to Western science.' *Critical Studies in Teaching and Learning (CriSTaL)*, 7(1), pp. 86-107
- Ritchie, J., Lewis, J., & Elam, G. (2003) 'Designing and selecting samples.' *Qualitative research methods*, pp. 77-108.
- Robinson, J. (2004) 'Squaring the circle? Some thoughts on the idea of sustainable development.' *Ecological Economics*, 48(4), pp. 369–384. Available at: <http://doi:10.1016/j.ecolecon.2003.10.017>.
- Robinson, D., & Williams, T. (2001). 'Social capital and voluntary activity: Giving and sharing in Maori and non-Maori society.' *Social Policy Journal of New Zealand*, pp 52-71.

- Robison, L. J., Myers, R. J. and Siles, M. E. (2002) 'Social Capital and the Terms of Trade for Farmland.' *Review of Agricultural Economics*, 24(1), pp. 44–58. Available at: <http://doi.org/10.1111/1058-7195.00005>.
- Rolston H (2012) *A new environmental ethics: The next millennium for life on earth*. Taylor And Francis.
- Roman-Alcalá, A. (2021). *Histories of Othering, practices of solidarity, and prospects for emancipatory convergence among California's food and farming movements in times of resurgent rightwing power*. PhD Thesis. Erasmus University, Rotterdam.
- Roman-Alcalá, A. (2022) 'Five practical strategies for those who work for food systems change.' *Journal of Agriculture, Food Systems, and Community Development*, 12(1), pp.1-4.
- Rose Regeneration. (2012) Challenges Facing Farmers. The research was funded by Oxfam and co-produced with UTASS. It was launched at a Policy Roundtable chaired by Stuart Burgess (Commission for Rural Communities) on 12 October.
- Roulston, K. (2010) 'Asking Questions and Individual Interviews', in *Reflective Interviewing: A Guide to Theory and Practice*. London: SAGE Publications Ltd, pp. 9-. Available at: <https://doi.org/10.4135/9781446288009.n2>.
- Rowley, J. (1999) Working with social capital. *London: Department for International Development*.
- Salamon, S. (1995) *Prairie patrimony: Family, farming, and community in the Midwest*. UNC Press Books.
- Saugeres, L. (2002) 'Of tractors and men: masculinity, technology and power in a French farming community', *Sociologia Ruralis*, 42(2), pp. 143–159. Available at: <https://doi.org/10.1111/1467-9523.00207>.
- Sayer, S. (2011) 'Contributions on Macroeconomics and Policy: Introduction', *Journal of Economic Surveys*, 25(4), pp. 639–644. Available at: <http://doi.org/10.1111/j.1467-6419.2011.00700.x>.
- Sayer, J., Campbell, B., Pethram, L., Aldrich, M., Perez, M. R., Endamana, D., Dongmo, Z. N., Defo, L., Mariki, S., Doggart, N. and Burgess, N. (2007) 'Assessing environment and development outcomes in conservation landscapes.' *Biodiversity Conservation*, 16: pp.2677-2694.
- Segalen, M. (1983) *Love and Power in the Peasant Family. Rural France in the Nineteenth Century* Chicago, The University of Chicago Press.
- Sexton, A.E., Garnett, T. and Lorimer, J. (2022) 'Vegan food geographies and the rise of Big Veganism', *Progress in Human Geography*, 46(2), pp. 605–628. Available at: <https://doi.org/10.1177/03091325211051021>.
- Schatzki, T.R. (2001) 'On Sociocultural Evolution by Social Selection', *Journal for the theory of social behaviour*, 31(4), pp. 341–364. Available at: <https://doi.org/10.1111/1468-5914.00164>.
- Schils, Vellinga, & Kraak. (1999) 'Dry-matter yield and herbage quality of a perennial ryegrass/white clover sward in a rotational grazing and cutting system.' *Grass and Forage Science*, 54(1), pp. 19-29.

Schneider, J. A. (2009) 'Organizational social capital and nonprofits.' *Nonprofit and Voluntary Sector Quarterly*, 38(4), pp. 643-662.

Scoones, I. (1998) *Sustainable Rural Livelihoods: A Framework for Analysis*. Working Paper 72, Institute for Development Studies, Brighton, UK

Scott, J. (2017) *Social Network Analysis*. 4th edition. London: SAGE Publications Ltd.

Selman, P. and Knight, M. (2006). 'On the nature of virtuous change in cultural landscapes: exploring sustainability through qualitative models.' *Landscape Research*, 31(3), pp.295-307.

Shannon, W.D. (2012) 'The Survival of True Intercommoning in Lancashire in the Early-Modern Period', *Agricultural history*. Berkeley: Agricultural History Society, 86(4), pp. 169–191. Available at: <http://doi: 10.3098/ah.2012.86.4.169>.

Shove, E., & Warde, A. (2002) 'Inconspicuous consumption: the sociology of consumption, lifestyles and the environment.' *Sociological Theory and the Environment: Classical Foundations, Contemporary Insights*, 230(51), pp. 230-251.

Shucksmith, M and Chapman, P. (1998) 'Rural development and social exclusion', *Sociologia Ruralis*, 38(2), pp. 225–242. Available at: <https://doi.org/10.1111/1467-9523.00073>.

Silvasti, T. (2003a) 'The cultural model of "the good farmer" and the environmental question in Finland.' *Agriculture and Human Values*, 20(2), pp. 143–150.

Silvasti, T. (2003b). 'Bending borders of gendered labour division on farms: The case of Finland.' *Sociologia Ruralis*, 43(2), pp. 154–166.

Simon, W. and Gagnon, J.H. (1984) 'Sexual scripts', *Society (New Brunswick)*, 22(1), pp. 53–60. Available at: <https://doi.org/10.1007/BF02701260>.

Smith, P., Ashmore, M. R., Black, H. I. J., Burgess, P. J., Evans, C. D., Quine, T. A., Thomson, A. M., Hicks, K., and Orr, H. G. (2013) 'The role of ecosystems and their management in regulating climate, and soil, water and air quality', *The Journal of applied ecology*, 50(4), pp. 812–829. Available at: <https://doi.org/10.1111/1365-2664.12016>

Soliva, R., Rønningen, K., Bella, I., Bezak, P., Cooper, T., Flø, B. E., Marty, P., and Potter, C. (2008) 'Envisioning upland futures: Stakeholder responses to scenarios for Europe's mountain landscapes', *Journal of rural studies*, 24(1), pp. 56–71. Available at: <https://doi.org/10.1016/j.jrurstud.2007.04.001>.

Staszak, J. F. (2008) 'Other/otherness.' *International encyclopedia of human geography*, 8, pp. 43-47.

Stofferahn, C.W., (2012) 'Community capitals and disaster recovery: Northwood ND recovers from an EF 4 tornado.' *Community Development*, 43(5), pp.581-598.

Stone, M.T. and Nyaupane, G.P., (2018) 'Protected areas, wildlife-based community tourism and community livelihoods dynamics: spiraling up and down of community capitals.' *Journal of Sustainable Tourism*, 26(2), pp.307-324.

- Stott, P.A., Gillett, N.P., Hegerl, G.C., Karoly, D.J., Stone, D.A., Zhang, X. and Zwiers, F. (2010) 'Detection and attribution of climate change: a regional perspective', *Wiley interdisciplinary reviews. Climate Change*, 1(2), pp. 192–211. Available at: <https://doi.org/10.1002/wcc.34>.
- Stryker, S. (1968) 'Identity Salience and Role Performance: The Relevance of Symbolic Interaction Theory for Family Research', *Journal of Marriage and Family*, 30(4), pp. 558–564. Available at: <https://doi.org/10.2307/349494>.
- Stryker, S. (1980) *Symbolic interactionism: A social structural version*. London: Benjamin/Cummings.
- Stryker, S. (1987) *Identity theory: Developments and extensions*. In K. Yardley and T. Honess (Eds.), *Self and Identity: Psychological Perspectives* (pp. 89–103). Chichester: John Wiley and Sons.
- Stryker, S., and Serpe, R. T. (1982) 'Commitment, identity salience, and role behavior: Theory and research example.' In *Personality, Roles, and Social Behavior* (pp. 199-218). New York, NY: Springer New York
- Suess-Reyes, J., & Fuetsch, E. (2016) 'The future of family farming: A literature review on innovative, sustainable and succession-oriented strategies.' *Journal of rural studies*, 47, pp.117-140.
- Sutherland, L.-A. (2012) 'Return of the gentleman farmer?: Conceptualising gentrification in UK agriculture', *Journal of Rural Studies*, 28(4), pp. 568–576. Available at: <https://doi.org/10.1016/j.jrurstud.2012.05.001>.
- Sutherland, L. A. (2013). 'Can organic farmers be 'good farmers'? Adding the 'taste of necessity' to the conventionalization debate.' *Agriculture and Human Values*, 30(3), pp. 429-441.
- Sutherland, L. A., and Burton, R. J. (2011). 'Good farmers, good neighbours? The role of cultural capital in social capital development in a Scottish farming community.' *Sociologia Ruralis*, 51(3), pp. 238-255.
- Sutherland, L.-A., and Darnhofer, I. (2012) 'Of organic farmers and 'good farmers': Changing habitus in rural England.' *Journal of Rural Studies*, 28(3), pp. 232–240.
- Tajfel, H. (1981) *Human groups and social categories*. Cambridge: Cambridge University Press
- Tasker, J (2018) 'Plan business succession now', *Farmers Weekly*. Sutton: Mark Allen Group Ltd, 170(9), pp. 22–46.
- Taylor, M. (1982) *Community, anarchy and liberty*. Cambridge University Press
- Taylor, M. (2000) 'Communities in the Lead: Power, Organisational Capacity and Social Capital.' *Urban Studies*, 37(5-6), pp. 1019–1035. Available at: <http://doi: 10.1080/00420980050011217>.
- TCV (2021) Characteristic regional walls, retrieved <https://www.conservationhandbooks.com/dry-stone-walling/walls-in-the-landscape/characteristic-regional-walls/>

- Terry, D.J. and Hogg, M.A. (2000) *Attitudes, behavior, and social context: the role of norms and group membership*. Mahwah, N.J.; L. Erlbaum.
- Throsby, D. (1999) 'Cultural capital.' *Journal of Cultural Economics*, 23(1), 3-12.
- Throsby, D. (2001) *Economics and Culture*. Cambridge university press.
- UNESCO (1998) *Operational guidelines for the Implementation of the World Heritage Convention*
UNESCO
- Uphoff, N. (1993) 'Grassroots organizations and NGOs in rural development: Opportunities with diminishing states and expanding markets.' *World Development*, 21(4), pp. 607-622.
- Van Bommel, S., Röling, N., Aarts, N., and Turnhout, E. (2009) 'Social learning for solving complex problems: a promising solution or wishful thinking? A case study of multi-actor negotiation for the integrated management and sustainable use of the Drentsche Aa area in the Netherlands', *Environmental Policy and Governance*, 19(6), pp. 400–412. Available at: <https://doi.org/10.1002/eet.526>.
- Vanclay, F., Silvasti, T. and Howden, P. (2007) 'Styles, Parables And Scripts: Diversity And Conformity In Australian And Finnish Agriculture', *Rural Society*, 17(1), pp. 3–18. Available at: <https://doi.org/10.5172/rsj.351.17.1.3>.
- Vanclay, F. and Enticott, G. (2011) 'The Role and Functioning of Cultural Scripts in Farming and Agriculture', *Sociologia Ruralis*, 51(3), pp. 256–271. Available at: <https://doi.org/10.1111/j.1467-9523.2011.00537.x>.
- Van Horne, J.C. and Wachowicz, J.M. (2008) *Fundamentals of Financial Management*. (Thirteenth edition). Harlow, England;: Financial Times/Prentice Hall.
- Van Orshoven, J., Terres, J. M., Tóth, T., Jones, R., Le Bas, C., Nachtergaele, F., and van Velthuisen, H. (2012) Updated common bio-physical criteria to define natural constraints for agriculture in Europe : definition and scientific justification for the common biophysical criteria : technical factsheets. Institute for Environment and Sustainability Publications Office. Available at: <https://data.europa.eu/doi/10.2788/91182>
- Vannini, P. (2015) 'Non-representational ethnography: new ways of animating lifeworlds', *Cultural geographies*, 22(2), pp. 317–327. Available at: <https://doi.org/10.1177/1474474014555657>.
- Vlami, V., Kokkoris, I.P., Zogaris, S., Cartalis, C., Kehayias, G. and Dimopoulos, P. (2017) 'Cultural landscapes and attributes of “culturalness” in protected areas: An exploratory assessment in Greece', *The Science of the Total Environment*, 595, pp. 229–243. Available at: <http://doi:10.1016/j.scitotenv.2017.03.211>.
- Vollan, B., Prediger, S., & Frölich, M. (2013) 'Co-managing common-pool resources: Do formal rules have to be adapted to traditional ecological norms?.' *Ecological Economics*, 95, pp.51-62.
- Walford, N. (2001) Patterns of development in tourist accommodation enterprises on farms in England and Wales. *Applied Geography*, 21(4), pp. 331-345.

- Walford, N. (2003) 'Productivism is allegedly dead, long live productivism. Evidence of continued productivist attitudes and decision-making in South-East England.' *Journal of Rural Studies* 19, pp. 491–502.
- Wallace, E.E. (2021) *Quantifying and Modelling Spatio-Temporal Flood-Mitigation, Drought-Resilience, and Water-Quality Benefits Provided by Grassland Interventions in the Eden Catchment (North-West England, UK)*. ProQuest Dissertations Publishing.
- Wallace, C., and Beel, D. (2021) How cultural heritage can contribute to community development and wellbeing pp. 133-154. In *Researching Happiness*. Bristol University Press.
- Walling, P. (2015) *Counting Sheep: A Celebration of the Pastoral Heritage of Britain*. Profile Books, London.
- Walmsley, D. J., and Lewis, G. J. (2014) *People and Environment: Behavioural approaches in human geography*. London, Routledge.
- Warde, A. (2005) 'Consumption and Theories of Practice', *Journal of Consumer Culture*, 5(2), pp. 131–153. Available at: <https://doi.org/10.1177/1469540505053090>.
- Weatherall, A., van der Velden, N., Wallace, C. and Atkins, R. (2012) *Young Wood: a woodland beyond the edge*. Wildtrack Publishing, U.K.
- Westerink, J., Opdam, P., Van Rooij, S. and Steingröver, E. (2017) 'Landscape services as boundary concept in landscape governance: Building social capital in collaboration and adapting the landscape.' *Land Use Policy*, 60, pp. 408–418. Available at: <http://doi: 10.1016/j.landusepol.2016.11.006>.
- Whitehead, P. G., Wilby, R. L., Battarbee, R. W., Kernan, M., & Wade, A. J. (2009) 'A review of the potential impacts of climate change on surface water quality.' *Hydrological Sciences Journal*, 54(1), pp. 101-123.
- Whyte, I. (2006) 'Upland Britain: cultural processes and landscape change through time.' *The International Journal of Biodiversity Science and Management*, 2(3), pp. 138-141.
- Wiles, R. (2013) *What are qualitative research ethics?* London: Bloomsbury.
- Wilkie, R. (2010) *Livestock/deadstock: Working with farm animals from birth to slaughter*. Temple University Press.
- Wilson, P., Hadley, D., and Asby, C. (2001) 'The influence of management characteristics on the technical efficiency of wheat farmers in eastern England.' *Agricultural Economics*, 24, pp 329–338.
- Wilson, G. A., & Hart, K. (2001) 'Farmer participation in agri–environmental schemes: towards conservation–oriented thinking?.' *Sociologia ruralis*, 41(2), pp. 254-274.
- Winchester, H. P. (2013). *Landscapes: Ways of imagining the world*. Routledge
- Woods, M. (2015) 'Territorialisation and the assemblage of rural place: Examples from Canada and New Zealand.' In J. Dessein, E. Battaglini, and L. Horlings (Eds.), *Cultural sustainability and regional development: Theories and practices of territorialisation*. Abingdon, UK and New York: Routledge. pp 29–42

Woodcock, N. (2017) *Geology and environment in Britain and Ireland*. CRC Press.

Woods, M. (1998). 'Advocating Rurality? The Repositioning of Rural Local Government.' *Journal of Rural Studies* 14 (1): pp.13-26.

Woolcock, M. (1998) 'Social capital and economic development: Toward a theoretical synthesis and policy framework.' *Theory and society*, 27(2), pp. 151-208.

Wright, M., and Kemp, N. (2006) *Hostile Habitats—Scotland's Mountain Environment: A Hillwalkers' Guide to Wildlife and the Landscape*. Scottish Mountaineering Trust

Wu, C.C. and Tsai, H.M. (2016) 'Capacity building for tourism development in a nested social–ecological system—A case study of the South Penghu Archipelago Marine National Park, Taiwan.' *Ocean & Coastal Management*, 123, pp.66-7

Xie, X. (2021) 'New Farmer Identity: The Emergence of a Post–Productivist Agricultural Regime in China', *Sociologia Ruralis*, 61(1), pp. 52–73. Available at: <https://doi.org/10.1111/soru.12322>.

Yarwood, R. and Evans, N. (2006) 'A Lleyn Sweep for Local Sheep? Breed Societies and the Geographies of Welsh Livestock', *Environment and planning. A*, 38(7), pp. 1307–1326. Available at: <https://doi.org/10.1068/a37336>.

Zevallos, Z. (2011) 'What is Otherness?,' *The Other Sociologist*, 14 October. Online resource: <https://othersociologist.com/otherness-resources/>

Zoomers, A. (1998) 'Estrategõas Campesinas en el Surandino de Bolivia: Intervenciones y desarrollo rural en el norte de Chuquisaca and Potosõ.' *CEDLA/ CID/PLU- RAL, La Paz*.

Zugravu-Soilita, N., Kafrouni, R., Bouard, S. and Apithy, L. (2021) 'Do cultural capital and social capital matter for economic performance? An empirical investigation of tribal agriculture in New Caledonia', *Ecological Economics*, 182, p. 106933–. Available at: <https://doi.org/10.1016/j.ecolecon.2020.106933>.