

AN EXAMINATION OF THE FACTORS IMPACTING ON THE FARM BARGAINING INTENTIONS OF SMALLHOLDER WOMEN FARMERS IN THE EASTERN GANGETIC PLAINS

A thesis submitted by

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ABSTRACT

Various studies have confirmed that women smallholders have low farm bargaining power and that bargaining intention is a predictor of bargaining behaviour. However, this phenomenon has not been studied within the farm bargaining context. To fill this theoretical gap, the main objective of this research was to explore the factors influencing the bargaining intentions of women smallholder farmers in the Eastern Gangetic Plain region. The theoretical foundation of this research is the theory of planned behaviour, which argues that attitudes, behavioural norms and perceived behaviour control determine behaviour. Hence, three research questions were formulated to examine the impact of the three factors on the bargaining intentions of these women smallholder farmers. The philosophical research underpinnings of this study were relativism ontology and subjective epistemology. An interpretive paradigm was employed using a qualitative phenomenological approach and case study methodology. Data were collected by conducting in-depth interviews with 35 women smallholders in the Eastern Gangetic Plains (EGP) who signified the main focus of this study. To further inform the research, 17 interviews were conducted with the farmers' bargaining opponents in the region. The collected interview data were analysed using NVivo, a qualitative data analysis software package. A thematic analysis was employed to inform the research questions. Similar interview passages were combined into themes and within-theme differences were also examined to illuminate the results. Four farm bargaining spheres were evident, which consisted of multiple bargaining issues. Examining these spheres and bargaining issues enabled the identification of the bargaining attitudes, behavioural norms and perceived behavioural control of women farmers and the related impact on their intention to engage in farm bargaining. The findings revealed that this intention to engage in farm bargaining was embedded in power dynamics based on personal, product-related, sociocultural and institutional factors. These factors affected their attitudes, subjective norms and perceived behavioural control and consequently their farm bargaining intentions. Moreover, it was found that the theory of planned behaviour can indeed be effectively used to explore and explain the antecedents of women farmers' intentions to engage in farm bargaining. Thus, this study provides a new theoretical perspective on the practice of bargaining behaviour by women farmers in the EGP, using a

framework it developed to examine farm bargaining behaviour. The study's practical contribution lies in its recommendations regarding the development and improvement of agricultural policies in the EGP. Adopting these recommendations would help ensure the sustainability and resilience of women farmers as well as enhance their welfare. The study's results led to the conclusion that 'power' was crucial in the formation of women farmers' bargaining intentions, which is in line with the findings in the literature. 'Power' is potentially the fourth influencer of bargaining intention in the TPB framework. The existing power dynamics showed unequal power relations between women farmers and their bargaining opponents, which strongly affected the farmers' bargaining intentions. In conclusion, the study demonstrated that women farmers' farm bargaining was embedded in the power dynamics based on personal, product-related, sociocultural and institutional factors, which affected their attitudes, subjective norms, perceived behavioural control and, ultimately, their farm bargaining intentions.

Keywords: bargaining behaviour, bargaining intention, women, smallholders, agriculture, farm bargaining, Eastern Gangetic Plains.

CERTIFICATION OF THESIS

This Thesis is entirely the work of **Dipika Das** except where otherwise acknowledged. The work is original and has not previously been submitted for any other award, except where acknowledged.

Student and supervisors signature of endorsement are held at the University at the end of the page.

Principal Supervisor: Prof. Retha Wiesner

Associate Supervisor: Dr. Fraser Sugden

Associate Supervisor: Prof. Tek Maraseni

DEDICATION

I would like to dedicate this thesis to my father Ramapati Lal Das and my mother Kiran Das for sowing a seed of knowledge and encouraging it to thrive every day. I will be forever indebted for your hard work and your unwavering love and belief in me that motivated me to pursue my dreams, which has brought me to this stage in life.

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TABLE OF CONTENTS

ABSTRACT	I
CERTIFICATION OF THESIS	III
DEDICATION	IV
ACKNOWLEDGEMENTS	V
TABLE OF CONTENTS	VIII
LIST OF FIGURES	XV
LIST OF TABLES	XVI
LIST OF ABBREVIATIONS	XVII
CHAPTER 1: INTRODUCTION	1
1.1 Overview	1
1.2 Background of the Study	2
1.3 Research Justification and Problem Statement	
1.4 Research Objective and Questions	
1.5 Working Definitions of Key Terms	9
1.6 Research Methodology	11
1.7 Thesis Structure	
1.8 Summary	
CHAPTER 2: LITERATURE REVIEW	
2.1 Introduction	
2.2 Study Context	15
2.2.1 The Eastern Gangetic Plain region	15
2.2.2 Smallholder farmers	17
2.2.3 Smallholder farmers' contributions to agricultural production	
2.2.4 Women smallholders and agriculture	
2.3 Bargaining	
2.3.1 Measures of bargaining behaviour	
2.3.1.1 Economic measures of bargaining	
2.3.1.2 Socio-psychological measures of bargaining	
2.3.2 Women smallholders and bargaining	
2.4 Theoretical Underpinnings	
2.4.1 Contemporary theoretical frameworks	

2.4.2 Theory of reasoned action	33
2.4.3 Theory of planned behaviour	34
2.4.4 Applying the theory of planned behaviour in agricultural and	
bargaining studies	37
2.4.5 The theory of planned behaviour framework and bargaining	37
2.4.5.1 Attitude	38
2.4.5.2 Subjective norms	41
2.4.5.3 Perceived behavioural control	45
2.4.5.4 Background factors influencing farm bargaining intentions	48
2.5 Conceptual Framework of the Qualitative Measurement Constructs in this	S
Study	51
2.6 Summary	53
CHAPTER 3: RESEARCH METHODOLOGY	54
3.1 Introduction	54
3.2 Research Objective and Research Questions	55
3.2.1 Research Objective	55
3.2.2 Research Questions	55
3.3 Research Paradigm	56
3.3.1.1 Dominant Research Paradigms	56
3.3.1.2 Research Paradigm Elements	58
3.4 Research Design	59
3.4.1 Appropriateness of Qualitative Methodology	61
3.4.2 Qualitative Study Approach	63
3.4.3 Appropriateness of Case Study Site Selection	66
3.4.4 Kanakpatti and Koiladi village	68
3.4.5 Bhagwatipur and Mauahi Villages	69
3.4.6 Research Procedures	70
3.4.6.1 Sample Selection	70
3.4.6.2 Sampling Technique Employed	71
3.4.6.3 Sampling Strategies Employed	71
3.4.6.4 Sample Size Justification	72
3.4.6.5 Selection Criteria and Participant Recruitment	73
3.4.7 Data Collection Technique	74

3.4.7.1 Interview Technique	75
3.4.7.2 Interview Tools	
3.4.7.3 Data Collection Process	
3.4.7.4 Interview Settings	76
3.4.7.5 Interview Process	
3.4.8 Language and Translation	77
3.5 Data Management and Analysis	77
3.5.1 Data Analysis	
3.6 Ethical Considerations	80
3.6.1 Procedural Ethics	80
3.6.2 Ethics in Practice	81
3.7 Research Credibility	83
3.8 Limitations and Delimitations of this Research	86
3.9 Reflexivity	87
3.9.1 Self-reflection	88
3.9.2 Journey towards Research Idea	90
3.9.3 Data Collection Experience	91
5.9.5 Data Conection Experience	
3.10 Summary	
-	92
3.10 Summary	92 9 4
3.10 Summary CHAPTER 4: RESULTS (PART I)	92 94 94
3.10 Summary CHAPTER 4: RESULTS (PART I) 4.1 Introduction	92 94 94 95
3.10 Summary CHAPTER 4: RESULTS (PART I) 4.1 Introduction 4.2 Participants Demographics	92 94 94 95 96
3.10 Summary CHAPTER 4: RESULTS (PART I) 4.1 Introduction 4.2 Participants Demographics 4.3 Characteristics of the Four Village Study Sites	92 94 94 95 96 99
 3.10 Summary CHAPTER 4: RESULTS (PART I) 4.1 Introduction	92 94 94 95 96 99 99
 3.10 Summary CHAPTER 4: RESULTS (PART I) 4.1 Introduction 4.2 Participants Demographics	92 94 94 95 96 99 99
 3.10 Summary CHAPTER 4: RESULTS (PART I)	92 94 94 95 96 90 99 99
 3.10 Summary CHAPTER 4: RESULTS (PART I)	92 94 94 95 96 96 99 99
 3.10 Summary CHAPTER 4: RESULTS (PART I) 4.1 Introduction	92 94 94 95 96 96 99 99
 3.10 Summary CHAPTER 4: RESULTS (PART I). 4.1 Introduction 4.2 Participants Demographics. 4.3 Characteristics of the Four Village Study Sites 4.4 Existing Agricultural Practices in the Eastern Gangetic Plain Region 4.4.1 Farm actors in the Eastern Gangetic Plain Region 4.4.2 Value-added Agriculture in the Eastern Gangetic Plain Region 4.5 The Existing Bargaining Spheres and Associated Issues over which Women Farmers in the Eastern Gangetic Plain Region Bargain (RQ1) 4.5.1 Intra-household Farm Bargaining Sphere	92 94 94 95 96 96 99 99
 3.10 Summary CHAPTER 4: RESULTS (PART I). 4.1 Introduction 4.2 Participants Demographics. 4.3 Characteristics of the Four Village Study Sites 4.4 Existing Agricultural Practices in the Eastern Gangetic Plain Region 4.4.1 Farm actors in the Eastern Gangetic Plain Region 4.4.2 Value-added Agriculture in the Eastern Gangetic Plain Region 4.5 The Existing Bargaining Spheres and Associated Issues over which Women Farmers in the Eastern Gangetic Plain Region Bargain (RQ1) 4.5.1 Intra-household Farm Bargaining Sphere 4.5.1.1 Control over productive resources 	92 94 94 95 96 96 99 99
 3.10 Summary 3.10 Summary CHAPTER 4: RESULTS (PART I) 4.1 Introduction 4.2 Participants Demographics 4.3 Characteristics of the Four Village Study Sites 4.4 Existing Agricultural Practices in the Eastern Gangetic Plain Region 4.4.1 Farm actors in the Eastern Gangetic Plain Region 4.4.2 Value-added Agriculture in the Eastern Gangetic Plain Region 4.5 The Existing Bargaining Spheres and Associated Issues over which Women Farmers in the Eastern Gangetic Plain Region Bargain (RQ1) 4.5.1 Intra-household Farm Bargaining Sphere 4.5.1.2 Micro decisions related to farm activities 	92 94 94 95 96 99 99 101 103 104 104 104

4.5.2 On-farm Bargaining Sphere	
4.5.2.1 Preparing land	
4.5.2.2 Sowing/Planting	
4.5.2.3 Irrigation	106
4.5.2.4 Weeding	106
4.5.2.5 Fertilising	
4.5.2.6 Applying pesticides and chemicals	
4.5.2.7 Harvesting	107
4.5.2.8 Threshing	
4.5.2.9 Milling	
4.5.2.10 Cleaning/Sorting/Bunching	
4.5.3 Market Bargaining Sphere	
4.5.3.1 Purchasing farm inputs	
4.5.3.2 Selling produce	
4.5.4 Intermediate Bargaining Sphere	111
4.5.4.1 Land tenancy	111
4.5.4.2 Transportation	
4.5.4.3 Institutions	
4.6 Summary	114
CHAPTER 5: RESULTS (PART II)	
5.1 Introduction	
5.2 Factors Influencing the Bargaining Intentions of Women Farmers in	the
Eastern Gangetic Plain Region (RQ2)	115
5.2.1 Personal factors	118
5.2.1.1 Bargaining competency	118
5.2.1.2 Access to Information	
5.2.1.2 Access to Information	
5.2.1.2 Access to Information5.2.1.3 Socio-Demographic Characteristics	126 129
 5.2.1.2 Access to Information	126 129 131
 5.2.1.2 Access to Information	126 129 131 133
 5.2.1.2 Access to Information	

5.2.1.10 Landlord – Tenant Farmer Relationship	140
5.2.2 Product related factors	141
5.2.2.1 Product Quality	141
5.2.2.2 Product Quantity	144
5.2.2.3 Product Demand	145
5.2.2.4 Product Management	147
5.2.3 Socio-cultural factors	148
5.2.3.1 Gender Dynamics (Male privilege, gender roles, hegemonic	
masculinity)	148
5.2.3.2 Myths	152
5.2.4 Institutional factors	154
5.2.4.1 Collective Farming	154
5.2.4.2 Institutional Farm Structures	157
5.3 Summary	159
CHAPTER 6: RESULTS (PART III)	161
6.1 Introduction	161
6.2 How and Why Do Women Smallholders' Attitudes towards Existing Farr	n
Bargaining Issues Influence Their Intention to Bargain? (RQ3.1)	162
6.2.1 Women Are Better at Bargaining	163
6.2.2 Bargaining Importance	164
6.2.3 Attitude Towards Gaining Benefits	164
6.2.4 Traders (Middle people) Gain Most Profit	165
6.2.5 Bargaining Necessity	166
6.2.6 Difficulty in Bargaining	167
6.3 How and Why Do the Perceptions of Significant Others in Women	
Smallholders' Lives (Subjective Norms) Influence Their Intention to	
Bargain? (RQ3.2)	167
6.3.1 Gender Norms	169
6.3.2 Power Relations	172
6.3.3 Shyness	174
6.3.4 Local Norms	175
6.3.5 Gendered Farm Practices	178
6.3.6 Encouragement	179

6.4 How and Why Does the Belief of Women Farmers in Their Own	
Bargaining Ability, Skills and Control Over Bargaining (Perceived	
Behavioural Control), Influence Their Intention to Bargain? (RQ3.3)	180
6.4.1 Confidence	181
6.4.2 Flexible and Fixed Rates	182
6.4.3 Comfort	183
6.4.4 Skills	183
6.5 Summary	184
CHAPTER 7: DISCUSSION, RECOMMENDATIONS AND	
CONCLUSION	187
7.1 Introduction	187
7.2 Existing Bargaining Spheres and Associated Issues Regarding Women	
Farmers in the Eastern Gangetic Plain Region	188
7.3 Factors Influencing Women Farmers' Bargaining Intentions in the Eastern	
Gangetic Plain Region	190
7.3.1 Personal Factors	190
7.3.2 Product-related Factors	195
7.3.2.1 Product Quality	195
7.3.2.2 Product Quantity	196
7.3.2.3 Product Demand	196
7.3.2.4 Product Management	197
7.3.3 Sociocultural Factors	197
7.3.3.1 Gender Dynamics	197
7.3.3.2 Myths	199
7.3.4 Institutional Factors	199
7.4 Women Smallholder Farmers' Attitudes, Perceptions and Beliefs	
Influencing Their Bargaining Intentions	201
7.4.1 Influence of Women Smallholder Farmers' Attitudes on Their	
Bargaining Intentions	201
7.4.1.1 Women Are Better at Bargaining	202
7.4.1.2 Bargaining Importance	203
7.4.1.3 Attitude towards Gaining Benefits	204
7.4.1.4 Traders (Intermediates) Gain the Most Profit	204
7.4.1.5 Bargaining Necessity	205

7.4.2 Influence of Women Smallholder Farmers' Perceptions and Subjective	
Norms on Their Bargaining Intentions	206
7.4.2.1 Gender Norms	207
7.4.2.2 Power Relations	209
7.4.2.3 Encouragement	210
7.4.2.4 Cultural Practice	211
7.4.2.5 Shyness	212
7.4.2.6 Gendered Farm Practices	213
7.4.3 Influence of Women Smallholder Farmers' Beliefs Regarding Their	
Bargaining Ability, Skills and Control Over (Perceived Behavioural	
Control) Their Bargaining Intentions	214
7.4.3.1 Confidence	214
7.4.3.2 Flexible and Fixed Rates	215
7.4.3.3 Comfort	216
7.4.3.4 Skills	217
7.5 Theoretical Implications	218
7.6 Implications for Policy and Practice	222
7.7 Limitations	224
7.8 Recommendations for Future Research	225
7.9 Farm Bargaining, Women Smallholders and COVID-19: A 'New Normal'.	227
7.10 Conclusion	229
7.11 Summary	233
REFERENCES	237
APPENDICES	
Appendix A: Interview Guidelines	
Appendix B: Results Tables: Quotations from Respondent's Interviews	296
Appendix C: Ethical Approval Grant from USQ Human Research Ethics Committee (HREC)	321
Appendix D: Approval letter from DSI4MTF project for this research	
Appendix E: Participant Information for USQ Research Project - Interview	323
Appendix F: Consent Form for USQ Research Project - Interview	
Appendix G: Data Management Plan	326

LIST OF FIGURES

Figure 1.1: Structure of Chapter 1
Figure 1.2: Thesis structure
Figure 2.1. Structure of Chapter 2 Literature Review
Figure 2.1: Eastern Gangetic Plain
Figure 2.2: The TRA framework
Figure 2.3: The TPB framework
Figure 2.4: Conceptual Framework of the Qualitative Measurement Constructs in
the Study
Figure 3.1: Structure of Chapter 3
Figure 3.2: Philosophical Standpoints for this Study
Figure 3.3: Research Onion to Select a Research Design (adapted from Saunders
et al. 2016)
Figure: 3.4: Map of Study Sites (adapted from Google map)67
Figure 3.5: Kanakpatti village (source: Researcher)
Figure 3.6: Koiladi village (source: Researcher)
Figure 3.7: Bhagwatipur village (source: Researcher)70
Figure 3.8: Mauahi village
Figure 4.1: Structure of Chapter 4 (Results: Part I)
Figure 4.2. A Typical Smallholder Farm Production Chain in the EGP Region 100
Figure 4.3. Fallen rice (<i>Tur/Tura</i> on the ground due to delayed harvesting 107
Figure 4.4: Local Periodic Market (Hatiya) at Traffic Chowk, Kanakpatti109
Figure 4.5: A Chattiwala (Informal buyer) buying rice in the Local Periodic
Market (Hatiya) at Traffic Chowk, Kanakpatti village, Saptari110
Figure 4.5: Spider Diagram of Farm Bargaining Spheres for Women Farmers 113
Figure 4.1: Structure of Chapter 5 (Results: Part II)115
Figure 5.5: Oxgen Plough Used in the EGP Region153
Figure 6.1: Structure of Chapter 6 (Results: Part III)161
Figure 6.2: Main Actors in Farm Product Transactions
Figure 7.1: Structure of Chapter 7
Figure 7.2: Conceptual Framework of Women Smallholders' Bargaining
Intention

LIST OF TABLES

Table 2.1: Percentage of women in agricultural production 22
Table 3.3. Site-specific Distribution of Participants by Category $(n = 52)$ 73
Table 4.1: Participant Demographics 95
Table 4.2. Codes Used to Create Participants' Unique Identifier 96
Table 4.3: Characteristics of the Four Village Study Sites 97
Table 4.4: List of Periodic Markets at Study Sites
Table 5.1: Factors Influencing Women Smallholders' Farm Bargaining Intention. 117
Table 6.1: Farm Bargaining Attitudinal Themes that Influence Bargaining
Intentions (n= 35)
Table B1. Quotes identified for Factors Influencing the Women Smallholders'
Farm Bargaining Intention from Interviews
Table B2: Attitudinal Themes and Farm Bargaining Intention Quotations
Identified from Interviews
Table B3: Subjective Farm Bargaining Norms, Identified Themes and Related
Quotations from Interviews
Table B4. Perceived Behavioural Control Themes and Related Quotations
Linked to Bargaining Intentions

LIST OF ABBREVIATIONS

ACIAR	Australian Centre of International Agriculture Research
CAE	Centre for Agricultural Engineering
COVID	Corona Virus Disease
DAP	Diammonium Phosphate
DIL	Daughter In-Law
DMP	Data Management Plan
DSI4MTF	Dry Season Irrigation for Marginal and Tenant Farmers
EGP	Eastern Gangetic Plains
FAO	Food and Agriculture Organisation
FIL	Father In-Law
FPE	Feminist Political Ecology
HREC	Human Research Ethics Committee
iDE	International Development Enterprises
INR	Indian Rupee
IWMI	International Water Management Institute
JAFeL	John Allwright Fellowship Executive Leadership
MIL	Mother In-Law
MRP	Maximum Retail Price
NPR	Nepalese Rupee
NGO	Non-Governmental Organisation
OBC	Other Backward Caste
PBC	Perceived Behavioural Control
RQ	Research Question
SC	Schedule Caste
SDG	Sustainable Development Goals
TPB	Theory of Planned Behaviour
TRA	Theory of Reasoned Action
UC	Upper Caste
USQ	University of Southern Queensland

CHAPTER 1: INTRODUCTION

1.1 Overview

This research focuses on the bargaining intentions of women smallholder farmers in the agricultural sector in the Eastern Gangetic Plain (EGP) region. Globally, agricultural responsibilities in developing countries are increasingly being carried out by women as the principal farmers, unpaid family contributors, agricultural wage workers and product sellers (Alston 2003; Kelkar 2007; Lastarria-Cornhiel 2008; Song et al. 2009; Tamang et al. 2014). To optimise farm production and maximise benefits, women farmers must bargain actively and effectively (Gomes-Casseres 2005b; Crook & Combs 2007). However, persistent bargaining imbalances have been identified between women smallholder farmers and the other participants in the agricultural supply chains (Bijman et al. 2012a). In particular, women farmers face substantially greater challenges, hence often display weaker bargaining power than their male counterparts as well as lower intentions to engage in farm bargaining (Dorward et al. 2003; Harding et al. 2003; Farnworth 2011). These dynamics and the factors influencing the intention of women farmers to engage in bargaining are the main focus of this study.

Figure 1.1 illustrates the structure of this chapter. The background to the study is discussed next by briefly outlining the context in which women farmers bargain. The justification and problem statement for the study are outlined, followed by the main research objective and associated research questions. Next the methodology employed plus the working definitions of key terms used in this thesis is briefly outlined.

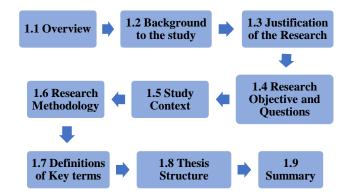


Figure 1.1: Structure of Chapter 1

1.2 Background of the Study

In developing nations, 80% of farmland is managed by smallholder farmers who cultivate land holdings less than 10 hectares (FAO 2012b), while women's contribution represents up to 60-80% of agricultural labour(Palacios-Lopez et al. 2017). Similar circumstances are apparent in South Asia, particularly in the Eastern Gangetic Plain (EGP) region, the context of this study, where extreme conditions exist (Sugden, Lata, et al. 2014). The EGP is an integral part of the Indo-Gangetic Plain. The Plain, which has the most fertile land in South Asia, covers approximately 255 million hectares and extends from Pakistan to Bangladesh (Gupta et al. 2002). The EGP begins in India's Bihar region, stretches to the Himalayan foothills in the east and covers the southern belt of Nepal's Terai region and India's Bengal region before ending in Bangladesh (Gupta et al. 2002). Agriculture is the region's main livelihood because it has served as a food bowl for surrounding countries for centuries (Gupta et al. 2002). Nevertheless, rural poverty, low literacy and densely populated areas are typical characteristics of the EGP region (Carter & Darbas 2014; Sugden 2016a; Sugden et al. 2016). In addition, the region's poverty cycle results from social stratification by class and caste and the high prevalence of inequitable landlord-tenant relationships (Sugden 2009a, 2013; Sugden et al. 2016).

In the EGP, the male workforce migrates to the city to seek employment and leaves behind the women to take over the family farm production system (Sugden, Maskey, et al. 2014; Lahiri-Dutt & Adhikari 2015). Smallholders are resource-poor and women farmers engaged in agriculture face gender vulnerabilities in performing masculine tasks, such as ploughing and irrigation (Leder, Clement, et al. 2017).

Furthermore, the agricultural system itself in this part of the world is gendered (Kelkar 2007) with deeply entrenched socio-economic inequalities amongst class, caste, ethnic group and tenancy types (Sugden 2009a). Due to agricultural hardship, the survival needs of marginal and tenant farmers are barely fulfilled, forcing males to out-migrate to find better livelihoods (Sharma 2008; Gartaula et al. 2010; Sugden, Lata, et al. 2014; Tamang et al. 2014). Traditionally, the EGP's agricultural sector was male dominated with a strict gender division of labour, with women working under the male's authority when performing intensive tasks like planting, weeding and harvesting (Lahiri-Dutt & Adhikari 2015). Although agriculture has brought opportunities for women to actively

participate in public spheres, it has also exposed them to gendered vulnerabilities (Quisumbing & Pandolfelli 2010; Leder 2015).

Several studies on sustainable agriculture emphasise the need to address smallholder farmers' ability to double the current food production within a decade (Lahiri-Dutt & Adhikari 2015; Rockström et al. 2017; Cui et al. 2018). Making a profit from farm products is essential for sustainable agriculture, and bargaining plays a crucial role in securing a profit. However, women farmers often find it difficult to secure adequate profits (Farnworth 2011). While agricultural commercialisation has provided business opportunities, poorer women smallholders face difficulties in accessing markets, getting a fair price for their crops, and meeting farm product transportation needs (Reardon & Berdegué 2008a; Farnworth & Ragasa 2009). All actors in the competitive agricultural supply chain must participate actively in order to optimise their production, maximise their benefits and ensure their sustainability. Bargaining is essential to achieve these outcomes as it helps them to obtain better value for their farm products (Gomes-Casseres 2005b; Crook & Combs 2007). However, Bijman et al. (2012a) argue that there are persistent bargaining imbalances between women farmers and their supply chain partners. The agricultural sector continues to be influenced by bargaining power relations in and beyond the farm.

For example, women farmers are marginalised because they have less access to land, labour, farm inputs, and extension services (Doss 2001; Ragasa et al. 2013). Furthermore. women farmers often have less access to market information and farm decision making, while undertaking the majority of household chores and agricultural tasks (Kerr & Patel 2014; Kerr et al. 2016). Women farmers also face gendered and cultural barriers to participate in farming (Peterman et al. 2014; Sachs et al. 2016) despite the fact that the active participation of women smallholder farmers in food production can significantly enhance economic growth and reduce poverty. Since women farmers need to bargain in order to be active participants in farming, bargaining related challenges must not be ignored (Doss 2018).

In the South Asian context where feminisation of agriculture is increasing (Gartaula et al. 2010; Pattnaik et al. 2017), the significance of bargaining is even greater to women farmers. Based on the development literature, Doss (2013) illustrated that women's bargaining within the household is linked to their educational level, their health, their

children's education level and the general wellbeing of all members within the household. Women farmers' bargaining behaviour significantly influences the allocation of their labour to various types of work, including household, agricultural and wage work. Therefore, the engagement of women farmers in bargaining is crucial in the agriculture sector.

Bargaining, a human behaviour, has a crucial role in agriculture, hence the intention to bargain is an immediate predictor of behaviour (Kautonen et al. 2013; Sussman & Gifford 2019; Ajzen 2020). Intention describes the motivational factors of behaviour and indicates an individual's willingness to exercise effort to accomplish a particular behaviour (Lortie & Castogiovanni 2015).

Bargaining demands specific skills for personal and professional goal achievement (Lewicki et al. 2009), however, these skills are worthless if unused (Leier 2015). Negotiating or asking is the start of a conversation that determines who will be first to initiate the bargaining (Babcock & Laschever 2009). Hence, bargaining initiation is a prerequisite for achieving the desired goal (Wheeler 2004). Making the first offer can remarkably influence one's bargaining outcomes (Magee et al. 2007). In trading, whether the seller or buyer makes the first offer affects the final settlement price and research indicates that it is higher when the seller initiates the bargaining (Benton et al. 1972; Galinsky & Mussweiler 2001). Since selling is an essential activity in agriculture, bargaining initiation shows paramount significances in this sector. However, to initiate bargaining, women farmers must have the intention to bargain. In addition, numerous contextual factors could affect bargaining behaviour, such as age, gender, ethnicity, class, education, nationality, religious orientation, personality, general attitudes and values, intellect, past experiences and the exposure to new knowledge (Ajzen 2011b), apart from personality factors, norms and attitudes (Harris & Mowen 2001; Volkema & Fleck 2012b; Kapoutsis et al. 2013). However, the effects of these factors on women smallholder farmers' farm bargaining intentions remain conceptually ambiguous and underexplored.

1.3 Research Justification and Problem Statement

The improvement of the status of women in agriculture can support agricultural productivity, nutrition, and child health and could also combat poverty (Farnworth et

al. 2011; Sraboni et al. 2014). (Njuki et al. 2022) argues that the reduction of existing gender inequalities faced by women farmers can increase the agricultural yield supporting food security.

Farnworth and Colverson (2015) recognise the link between women's weaker access to productive resources and less effective participation in community-level decisionmaking forums, including agri-supply chain networks and innovative platforms. For smallholders, market and credit access inequalities (Palacios-López & López 2015) result in productivity differences among men and women farmers (Rubin & Manfre 2014). Even women wage labourers on the farm receive less pay compared to their male counterparts (Hertz et al. 2008). The context-specific infrastructures, facilities, and existing social norms (Agarwal 1997) are recognised as enablers or constraints for smallholder women farmers' ability to fully and effectively fulfil their roles in the agriculture. Their existing responsibilities, along with inequalities, significantly shape women farmers' performance in the agriculture, hence, it is essential to consider complex intersectional power relations along with agricultural outcomes that lead to empowerment (Leder, Clement, et al. 2017). It should be noted that substantial research has been conducted on agriculture and its potential to empower farm women in the global North (Farnworth & Hutchings 2009; Wright & Annes 2016), yet examining the factors impacting the bargaining intentions of women farmers employing the Planned Theory of Behaviour within the context of the Eastern Gangetic Plains, has not received attention.

Manfre et al. (2013) studied African agriculture in order to modernise extension and advisory services (MEAS). They found that the reason extension and advisory services did not reach women in agriculture was due to the lack of women's participation in community activities within a farming context. Jost et al. (2016) further noticed that while many women maintained the traditional culture of excluding themselves from community activities, some smallholder women farmers applied their agency to change the culture by directly seeking contact with extension staff who work with fertilisers, composts, agrochemicals, and improved seed varieties. This showed that women farmers generally have a strong intention and capability to achieve positive farm outcomes. However, they could not fully take on the risk of trying new crops because in many societies, women's roles are still confined to carrying out the

emotional and manual responsibilities associated with food provision in a family (Allen & Sachs 2012). Hence, in the more current context of feminised agriculture, the ways in which women farmers exercise their agency within the context of existing social expectations, and how they use their agency, become very important in understanding the changing dynamics. Furthermore, global value chain studies that focus on a greater inclusion of women smallholder producers have identified that there is often a bottle neck when women farm producers exercise their bargaining power. They emphasise the importance of exploring measures that provide women a greater chance to be competitive (Bamber & Fernandez-Stark 2014). Peterman et al. (2014) argue that due to complex gender relations and differences, yield comparisons for men and women farmers can be context-specific, hence, studies that are region specific are highly desirable.

Women's involvement in agriculture has been discussed abundantly in several studies. Whatmore (2016) mentions the need for further theorising on women in the agricultural household unit, and the existing power differentials, whereas Orsi et al. (2017) highlights the importance of a relational network for smallholder farmers to perform well in the agriculture. Furthermore, Tripathi et al. (2012) and Anand and Maskara (2016) demonstrate how collective farming can be more economical by empowering women farmers and strengthening their group performances.

However, the influence of existing gender dynamics and power relations in agricultural bargaining and how bargaining power is exercised by individuals in the bargaining process need further exploration.

It is therefore clear from existing research that there is a theoretical and practical gap around strengthening the active participation of women smallholder farmers in agricultural bargaining. There is a dearth of research on the intention of women smallholder farmers to engage in bargaining, and more specifically, on the intention of women farmers to engage in bargaining in the agricultural context. Furthermore, there is an absence of studies focusing on this topic within the EGP region and as such this study represents a novel contribution to the literature on farm bargaining.

Furthermore, related studies that focus on women's bargaining used New Home Economics (NHE) (Becker 1965, 1991), the cooperative household bargaining model

(Nash 1953), non-cooperative intra-household models (Rubinstein 1982), and feminist political ecology (Agarwal 2010a; Meinzen-Dick et al. 2012; Sugden, Maskey, et al. 2014; Leder, Sugden, et al. 2019) and Sugden (2009a) used the lens of Marxist theory and Füssel (2007) conducted a vulnerability analysis. However, the current study has used the Theory of Planned Behaviour, which has not been applied previously to study the factors that impact upon women's farm bargaining intentions. Hence, although the TPB model has been used to explain bargaining intentions in many other contexts (Volkema & Fleck 2012a), the current study is the first to use this model to explore women farmers' bargaining intentions.

Furthermore, this study brings together multi-disciplinary perspectives which represents a novel approach within the context of this study. By drawing on the TPB model this study incorporates a cognitive theory foundation. However, sociocultural aspects were drawn upon in this study when existing bargaining practices and norms of farm women were analysed. Feminist perspectives were also drawn upon when the intention to bargain was examined through a gender lens and economic perspectives were drawn upon when the engagement in bargaining over financial aspects was explored in this study. The cognitive approach of the TPB was particularly useful to explain the interactions of sociocultural, feminist, and economic aspects, that impacted on psychological processes influencing farm bargaining intentions.

Several studies have argued that various background factors could lead farmers to form beliefs that affect their farm behaviour (Fishbein & Ajzen 2011; Sok et al. 2020), however none of these studies have combined attitudes, behavioural norms and perceived behavioural control as constructs that impact on women farmers' intention to engage in farm bargaining. Because this study explores, describes and explains the composition of these constructs and how and why they influence farm bargaining intentions, the resultant conceptual framework, which is unique to this study, can potentially be used to explore, describe and explain these factors in similar farm bargaining contexts. Hence, it could help measure the constructs of attitude, subjective norms and perceived behavioural control, which impact the farm bargaining intention of women in similar farm bargaining contexts.

Several studies note the development of interventions that target structural needs by ending the gender gap in terms of access to and control over resources, women's property rights, access to credits, extension services etc., yet the context-specific, culturally sensitive, subtle needs of women farmers are often ignored (Quisumbing & Pandolfelli 2010).

Socially constructed gender norms are complex and dynamic (West & Zimmerman 1987), and actors adjust themselves with respect to their changing needs. Hence, studies that identify patterns of change in the roles of producer, manager, worker and decision-maker based on social norms become necessary for understanding how these patterns in agriculture are changing gender norms (Quisumbing et al. 2014). Hence amidst challenging conditions and the burden of unequal responsibilities it is necessary to explore women's strategies for coping with their roles on the farm. Likewise, the support systems on which women farmers rely, as well as the way they exercise agency in playing new roles in agriculture, are still unexplored.

Hence, this study also fills a practical gap, by developing a conceptual framework that can be used to guide interventions to be employed by policy makers in order to reduce the gender gap that currently exists in farm bargaining in the EGP. The conceptual framework developed in this study and the recommendations made to better support women farmers can be used as valuable tools to engage women in farm bargaining and more effectively target the development of their bargaining skills.

1.4 Research Objective and Questions

In view of the discussion above the objective of this research was to explore the factors influencing the farm bargaining intentions of women smallholder farmers in the EGP region. The following research questions and sub-questions were created to inform this research objective:

RQ1: What are the bargaining spheres and associated issues over which women farmers in the Eastern Gangetic Plain region bargain?

RQ2: What are the background factors influencing the bargaining intentions of women farmers in the Eastern Gangetic Plain region?

RQ3: How and why do women smallholders' attitudes towards farm bargaining issues; their perceptions of significant others in their lives (subjective norms); and the belief they have in their own bargaining ability and skills (perceived behavioural control), influence their intention to bargain?

The following sub-research questions will inform this research question:

RQ3.1: How and why do women smallholders' attitudes towards existing farm bargaining issues influence their intention to bargain? RQ3.2: How and why do the perceptions of significant others in women smallholders' lives (subjective norms), influence their intention to bargain? RQ3.3: How and why do the belief of women farmers in their own bargaining ability, skills and control over bargaining (perceived behavioural control), influence their intention to bargain?

1.5 Working Definitions of Key Terms

In order to provide a shared understanding of the main concepts used in this study, a definition of key terms used in the study is provided below:

Bargaining Power: The origin of the term 'bargain' roots from the 14th century French term 'bargaine' meaning 'haggle for price'. The term was then used in commercial trading for business transactions or agreements. Bargaining power has been recognised as a focus for industrial relations too. Martin (1992) argues that bargaining power is a negotiation process that uses power to achieve a bargaining objective. In the book, 'Art of bargaining' Lebow (1996) explains that bargaining is a search for advantage through accommodation. Nowadays, the concept of bargaining power is broadly used in different domains. In market studies, bargaining power is "the power to obtain a concession from another party by threatening to impose a cost, or withdraw a benefit, if the party does not grant the concession" (Kirkwood 2004).

In social science, researchers define the bargaining power of intrahousehold members as "fallback or a breakdown position that one can achieve if the household dissolves" Within the context of this study, the bargaining power in household is often hidden, involving game theory or emotional manipulations (Locke & Okali 1999). The complex process of bargaining involves understanding of how bargainers perceive, use, and manipulate power, hence the notion of dependence is at its centre, and this emphasises the tactical, subjective nature of bargaining power (Bacharach & Lawler 1981). Studies on individual and collective bargaining show that bargaining in a group is more influential. Measures of bargaining are complex as it is a composite outcome of different variables. This study interprets the bargaining power of smallholder women farmers in the agricultural context as the ability of women to use their agency to control a fair share of farm income, or the ability to choose (in whichever node of the agri-supply chain) how they actively participate and make decisions in their favour that lead them to sustain a competitive farm.

Bargaining: Bargaining is a process by which people settle their issues through negotiating regarding what to take and what to give (Rubin & Brown 2013). The working definition of bargaining in this study is the ability of a farmer to make the decision to have a fair share of farm income or the ability to make choices in each decision related to their farm.

Bargaining Intention: It is the planned decision to get involved in a bargaining act. In this study, it refers to the having the intention to engage in the bargaining act within the agricultural and farm context. According to (Ajzen 1991), bargaining intention is a closet predictor that can explain bargaining behaviour.

Attitude: Attitude is an individual's negative or positive value towards behaviour (Ajzen 1991, 2001). Furthermore, it is the extent to which individuals hold a favourable attitude toward a specific behaviour (Ajzen 2001).

Subjective Norms: Subjective norms refer to an individual's perception of social pressure to perform or not perform a behaviour (Ajzen 1991; Lortie & Castogiovanni 2015). In this definition, the social pressure is caused by the perception of how significant others in their life (e.g. family members, peers, teachers and other influential people) consider the behaviour (Ajzen 1991).

Perceived Behavioural Control (PBC): PBC refers to the perceptions that individuals espouse regarding their own ability to perform a particular behaviour (Ajzen 1991). Furthermore, PBC is an individual's perceived belief about how they control their competence to perform a certain behaviour (Ajzen 1991; Lortie & Castogiovanni 2015; Ajzen & Schmidt 2020).

Normative belief: Normative beliefs are the beliefs that form subjective norms (Ajzen 1991; O'Neal 2007).

Behavioural belief: Behavioural beliefs are the beliefs that form attitudes (Ajzen 1991).

Control belief: Control belief is the belief and perception that influence perceived behavioural control (Ajzen 2002b, 2020).

Gender Dynamics: Gender dynamics refer to the way in which men and women are treated or behave differently in society, either with their own gender or with each other. Within the context of this study it refers to the interactions and relations between women and men that take place within the household or farming context (Malhotra et al. 2002)

Gender roles: Gender roles are the roles or behaviours learned by a person as appropriate to their gender, determined by the prevailing cultural norms. Hence gender roles refer to the widely shared expectations and norms within a society about what behaviour is or is not appropriate for women and men which is determined by the socioeconomic and cultural environment (Mollel & Mtenga 2000).

Smallholder: Smallholders are the farmers who cultivate a small plot of land less than 2 ha that they either own or rent and on which they grow crops and on which predominantly family labour is used to cultivate the crops (DAFF 2012).

1.6 Research Methodology

This study was underpinned by relativism in line with the researcher's belief that the study participants' bargaining experiences are derived from multiple realities. The researcher believed that each study participant would have an individualistic bargaining experience owing to intersectionality and the context-specific aspects of the research that raised the possibility of multiple truths. The researcher investigated those truths through a subjective inquiry into the participants' beliefs and feelings. Hence, the researcher's view was underpinned by subjective and intuitive epistemology. The methodology used in this research was an inductive approach. In addition, the axiology for this research guided the researcher to treat all the study participants with respect and according to human ethics principles.

Case study methodology was employed, underpinned by the phenomenological approach, to explore, describe and explain the intentions of women farmers to engage in farm bargaining and the factors impacting upon their intention to bargain. This study used qualitative methodology, which is similar to other studies that explore human experiences embedded in complex gender dynamics in a specific sociocultural context (Jost et al. 2016). The current study attempted to understand women farmers' farm bargaining intentions, which are influenced by the complex sociocultural and gender dynamics in farm settings. Hence, it focused on understanding their behavioural experiences by asking them for their subjective opinions and views.

Data were collected through in-depth interviews with study participants. Since semistructured interviews were selected as the data collection tool, an interview guide was developed prior to conducting the interviews. The interviews were analysed in line with qualitative data analysis protocols. First, the researcher transcribed the interviews by reading the field notes and listening to the audio recordings. The text of the interviews was imported into NVivo software after transcription. A thematic analysis was employed to answer the research questions by identifying the main themes and sub-themes that emerged from the data. The researcher combined similar themes and identified what different opinions had emerged within the same themes to finally organise the analysis of the data.

1.7 Thesis Structure

This thesis comprises seven chapters, as Figure 1.2 outlines.

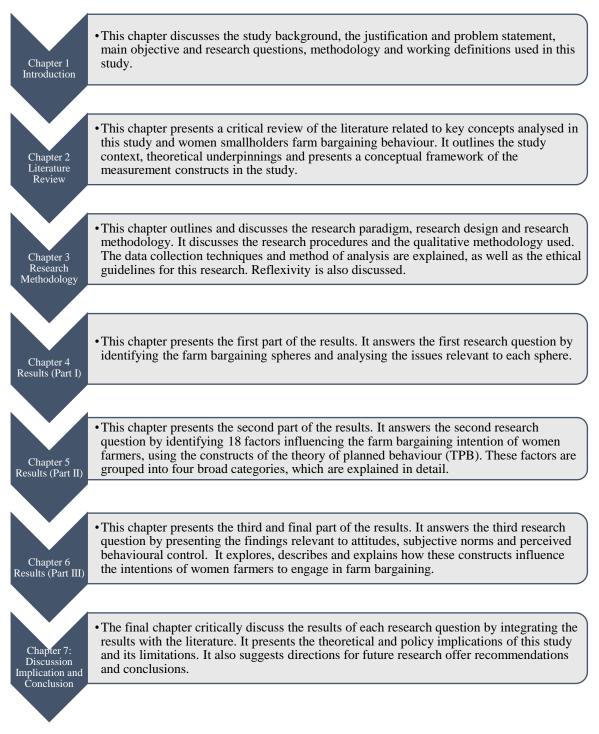


Figure 1.2: Thesis structure

1.8 Summary

This chapter laid the foundation for this research on women smallholders' farm bargaining. It outlined the background to the research, discussed the justification and the problem statement and delineated the research objective and research questions that inform this objective. It also briefly summarised the methodology employed in this study. The next chapter discusses the theoretical underpinnings of this research, the literature relevant to women farmers' bargaining and the key concepts used in the study. A conceptual framework outlining the measurement constructs is also presented.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Chapter 1 briefly introduced the study by stating the research background, justification, problem statement and research objective and questions. Chapter 2 provides a literature review, which examines the study context and theoretical underpinnings. Figure 2.1 summarises the structure of this chapter. The study context is established first, and then relevant literature and gaps in the literature are offered to support the justification for constructing each research question. RQ1, RQ3, RQ3.1, RQ3.2, RQ3.3, and RQ2 are presented subsequently in the chapter. RQ2 is placed last as it is beneficial to first understand the three antecedents of the theory of planned behaviour including, attitude (3.1), subjective norms (3.2), and perceived behavioural control (3.3) first, in order to comprehend the factors in RQ2.

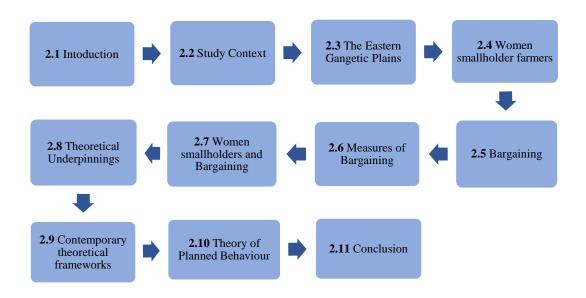


Figure 2.1. Structure of Chapter 2 Literature Review

2.2 Study Context

2.2.1 The Eastern Gangetic Plain region

The Indo-Gangetic Plain is the most fertile land in South Asia, covering approximately 255 million hectares and extending from Pakistan to Bangladesh (Gupta et al. 2002). The Indo-Gangetic Plain is divided into three regions—upper, middle and lower—of

which the lower region is also known as the Eastern Gangetic Plains (EGP) (Aravindakshan et al. 2015), as shown in Figure 2.1. The EGP is an integral part of the greater plains; it begins in India's Bihar region and stretches towards the Himalayan foothills in the east, covering the southern belt of Nepal's Terai region and India's Bengal region before ending at Bangladesh (Gupta et al. 2002).

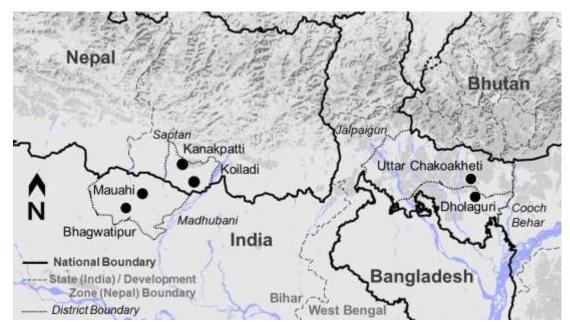


Figure 2.1: Eastern Gangetic Plain

The EGP region (also referred to as Mithilanchal) is situated north between $25 \circ 28$ ' and $26 \circ 52$ ' latitude and between $84 \circ 56$ ' and $86 \circ 46$ ' longitude. The region covers an area of approximately 200 km × 400 km (Jha 2013) and primarily comprises plains formed by deposition of the major river basins (i.e. Koshi, Ganges and Gandak) (Jha 2013; Pandey et al. 2014).

In ancient times, the Mithilanchal region was a kingdom named Videha that King Janak ruled, as discussed in the oldest Hindu mythological epic—*Ramayana*. Eventually, King Janak renamed the kingdom 'Mithila' after his father 'Mithi' (Sinha 2009). Currently, two countries—India and Nepal—share the Mithilanchal region; the culture remains the same even though the region is divided by political boundaries. Moreover, 'Maithili' is the primary language spoken in the Mithilanchal region; however, Hindi and Nepali are the official languages in the Indian and Nepalese parts of EGP, respectively (Yadava 2007; Groff 2017).

Mithila culture in the EGP region show deeply ingrained patriarchal, patrilineal, and patrilocal social formations and resource allocation methods that systematically position women at a lower status than men. Household chores, caregiving, and religious activities are primarily considered as women's responsibilities while men are considered as head of the household and engaged in income-generating activities, therefore they enjoy more leisure and mobility opportunities than women (Davis 2009; Payal 2016). The region also features rural poverty, low literacy and densely populated areas (Carter & Darbas 2014; Sugden 2016b; Sugden et al. 2016). In addition, evidence supports the region's poverty cycle as a result of social stratification based on class, caste and a high prevalence of inequitable landlord–tenant relations (Sugden 2009a, 2013, 2016b).

Agriculture is the region's main livelihood—the region has served as a food bowl for surrounding countries for centuries (Gupta et al. 2002). Rice, wheat and potato are the major crops produced over the winter (November–March; also known as Rabi season) and summer (April–May) seasons, as well as the rain season (June–November; also known as Kharif) (Laik et al. 2014).

The region is rich in water resources from the abovementioned rivers; however, farmers face irrigation challenges because of insufficient irrigation in the canal system (Jat et al. 2014), which adversely affects smallholders' production. Groundwater is another source for irrigation but the required extraction system involves fuel that is unaffordable for smallholder farmers (Jat et al. 2014). Moreover, the region's economy primarily comprises and relies on agriculture to support livelihoods (Carter & Darbas 2014). For farmers in the EGP, there are two important market systems (Sugden 2009b). First, informal markets involve produce that is directly sold to traders or consumers. Second, the periodic market (known as '*hatiya*') is a socially arranged low-income market for a few local catchment villages, which occurs once or twice each week. The local subsistence-oriented and marginal farmers and traders sell their produce at *hatiya*.

2.2.2 Smallholder farmers

The literature uses a range of terms to describe the smallholder farmers, including small farmers, small-scale farmers, subsistence-oriented farmers, marginal and sub-

marginal farmers, peasant farmers, resource-poor farmers, tenant farmers, food-deficit farmers, household food security farmers, family farmers and emerging farmers (Murphy 2010). However, the 'small' in smallholder is a context-specific concept; that is, the definition of smallholder is context-dependent and varies according to the study criteria or country (ETI 2005). For example, a 20 ha tea plantation in Kenya is considered small whereas a 15 ha sweet potato farm in Indonesia is considered relatively large. Further, a study conducted in South Africa defined 'smallholder' as a farmer who farmed an area between 1 ha and 20 ha (Shabangu 2015) whereas a study conducted in Tanzania defined a smallholder as a farmer of less than 5 ha (Hassan 2015).

Likewise, the UN Food and Agriculture Organization (FAO) defined smallholders as 'small-scale farmers, pastoralists, forest keepers, fishers who manage areas varying from less than one hectare to 10 hectares' (FAO 2012a, p. 11). Moreover, the UN FAO highlighted three crucial features of smallholders: they (1) embrace family-focused motives such as choosing the stability of a farm household system, (2) predominantly use family labour for production, and (3) use part of the produce for family consumption. Further, a smallholder farmer can also be defined as a farmer who owns less than 2 ha on which subsistence crops and cash crops are grown and which relies almost exclusively on family labour (World Bank 2008; Hazell et al. 2010; IFAD 2011; Zakaria 2017). In the context of the EGP region, Sugden (2016b) defined a smallholder as a 'farmer owning or renting land of an area less than or equal to 1 hectare to cultivate for subsistence or market, that includes tenants, part tenants, small landholders'. This definition is the most suitable for the current study.

Moreover, the World Bank (2008) classed smallholders into five livelihood categories based on household income generation activities:

- 1. market-oriented smallholders, whose income is largely generated from market sales of agricultural produce
- 2. subsistence-oriented smallholders, who use the larger part of their produce for household consumption
- labour-oriented households whose significant income source is generated from wage labour markets (either on-farm or off-farm labour)

- 4. migration-oriented households, of which a large income portion relies on remittances from migrants (or the entire household migrates)
- 5. diversified households, which have multiple vital income sources from engaging in agriculture, off-farm labour markets and/or remittances or wages from migration.

Sugden (2013, p. 535) performed an anthropological study in the EGP region based on land ownership and tenancy, classing smallholder farmers into five categories: (1) owner cultivation only (independent peasant), (2) owner cultivation and tenancy (part-tenant), (3) tenant cultivation only (pure tenant), (4) no land operated (landless labourer), and (5) renting out land only with no cultivation. In the EGP region, most farmers were smallholders (either marginal or tenant farmers) who cultivated less than 1 ha of land (Sugden 2016b). Although the definition of smallholder farmers varies according to context, researchers have found commonalities irrespective of context. For example, Netting (1993) described smallholders as rural cultivators who practice a diverse variety of crops on relatively small plots in densely populated areas. Other characteristics associated with smallholders (ETI 2005; Barnett & Srivastava 2017) include:

- cultivating a relatively smaller area of land, which subsequently yields fewer crops;
- using traditional knowledge and skills for production;
- being resource-poor farmers compared with commercial-scale farmers (e.g. largely rainfed farms that use small irrigation techniques, are hoe-ploughed farms and receive fewer inputs and mechanised techniques);
- using family labour (but could also hire workers);
- producing for subsistence, as a market or export commodity, or diversifying livelihood; and
- being part of the informal economy and unregistered producers, which usually involves holding limited records and results excluded from social protection and labour legislation.

These characteristics demonstrate how smallholders are resource-poor and vulnerable in the agricultural production system. Therefore, it is necessary to explore how their vulnerability can be reduced, which would enable them to become more sustainable.

2.2.3 Smallholder farmers' contributions to agricultural production

The FAO has estimated that agriculture forms the primary livelihoods of nearly 2.5 billion people, with the majority being rural smallholders (FAO 2013b). However, there is a lack of information regarding smallholders' actual contributions to national and global agricultural production. Ricciardi et al. (2018) estimated that smallholders cover a gross 24% of global agricultural areas and produce 30–34% of the global food supply. However, regardless of these substantial contributions, smallholders are often overlooked as significant producers and denied adequate support from relevant authorities (Rietberg & Slingerland 2016). These deficiencies lead to a 'yield gap', which is the difference between the production capacity and actual yield (Duncan et al. 2015). The yield gap is worsened by smallholders' vulnerabilities and their lack of resilience regarding climate coping systems (Ray et al. 2015). Further, the gap intensifies from the impact of natural disasters such as floods, droughts and hailstorms (FAO 2013a), which challenges global food demand. Therefore, sustainable agricultural researchers have emphasised the need to address smallholders' capacity to double the current food production measure in a decade (Rockström et al. 2017).

Smallholders' contributions are usually overlooked; however, policymakers have recently focused their attention on smallholders. The FAO acknowledged smallholders as 'critical agents of change' in attaining the first and second global sustainable development goals (SDG 1 and 2) (Andersson & D'Souza 2014; FAO 2015c). In 2014, the UN realised the need to support family smallholder farmers and thus they celebrated the 'International Year of Family Farming' (FAO 2014). In addition, the UN advocated the evolution of small farms as an essential means of economically developing countries (FAO 2015b). Further, the global food and water system (GFWS) platform noted the importance of input intensification (i.e. smallholders' irrigation and fertiliser usage) to attain optimum food production demand to feed the global population (Grafton et al. 2015).

Albeit the growing interest in smallholders, there is a dearth of information regarding their actual situation in various parts of the world (FAO 2015a). In addition, there is a lack of clarity regarding the extent to which development strategies should focus on smallholders (Gollin 2018). Therefore, detailed information is required regarding how smallholders' production, income and constraints could be addressed to establish a

supportive sustainability strategy. For example, one solution could be to increase their bargaining behaviour.

2.2.4 Women smallholders and agriculture

A large body of literature has documented the rise in women's contribution to agriculture (Alston 2003; Kelkar 2007; Song et al. 2009; Gartaula et al. 2010; Tamang et al. 2014; Pattnaik et al. 2017; Rana et al. 2018). Currently, less than 3% of the US population is involved in farming (Rosenfeld 2017). Conversely, this figure was almost 50% in early 1900s, before decreasing to 30% by 1920 and even further to 3% in 1980 with the increase in industrialisation. However, while the overall agricultural workforce has decreased, the proportion of women in agriculture has grown—from 3% in 1920 to 10% in 1979, before reaching almost 14% in 2007 (Kalbacher 1983). In Australia—a land-rich country—women farmers' contributions were traditionally largely unrecognised. Alston (2003) described women farmers as 'invisible farmers' because, regardless of their involvement in farm activities, women were usually considered subordinate. However, Australian women currently have a strong representation in farming and undertake major roles as primary producers (Alston 2012).

The above examples demonstrate the incremental increase in women's participation in farming in developed nations. However, in developing nations, the contribution of women farmers in agriculture has grown even more significantly. The FAO (2012a) stated that 43% of agricultural labour in developing countries is performed by women, rising to 50% in South-East Asia and sub-Saharan Africa. Table 2.1 demonstrates women's participation in agricultural labour and gender disaggregation in agricultural employment in selected developing countries.

Country		Women's participation in agricultural labour (%)	Employment in agriculture (%)		
			Men	Women	Overall
Sub-Saharan Africa	Ghana	>50	44.5	36.7	40.6
	Burundi	55	85.9	96.5	91.4
	Kenya	75	30.0	47.1	38.0
	Nigeria	60–80	45.2	26.2	36.5
	Rwanda	70	55.6	76.7	66.5
	Uganda	_	64.1	74.3	69.0
South Asia	Bangladesh	66	30.6	60.5	39.1
	Nepal	60	59.7	82.8	71.7
	Pakistan	36	33.5	72.8	42.0
	India	_	38.3	56.4	42.7

 Table 2.1: Percentage of women in agricultural production

(ActionAid (2015); FAO (2017); World Bank (2017)

Table 2.1 shows that several countries in sub-Saharan Africa have a large percentage of women employed in the agricultural labour force, which indicates an increase in women smallholders and women's overall participation in agriculture. For example, 65% of smallholders in Zambia are women whereas one in four households in Uganda is headed by a woman, as women constitute more than half of the country's farmers (ActionAid 2015).

In developing countries, there are multiple reasons to increase women's presence in agriculture. One is that the farms of smallholders are less resilient towards climate variability, resulting in agrarian stress (Lastarria-Cornhiel 2006; Kelkar 2007; Sugden, Lata, et al. 2014). In rural regions, families have fewer employment opportunities so the male workforce often migrates to the city to seek work (Pattnaik et al. 2017). Usually, male family members migrate from rural areas and 'leave behind' the women to take over the family production system (Sugden, Lata, et al. 2014; Lahiri-Dutt & Adhikari 2015). However, smallholders are resource-poor and women smallholders engaged in agriculture face gender vulnerabilities because they perform masculine tasks such as ploughing and irrigation (Leder, Raut, et al. 2017).

Economist Ester Boserup (1970) was a pioneer whose work explained the economic activity of smallholder farmers. Boserup was among the first to highlight the contribution of women farmers to agriculture, as they were invisible at the time. Similarly, economist Bina Agarwal (1994) explained smallholder farmers' lives in South Asia and explained the challenges embedded in patriarchy that women smallholders face. Although this research discussed smallholders in different contexts, the findings produced similar results regarding smallholders' lives being embedded in their relatively small landholding, the gender division of labour, traditional farming practices and smallholders' adaptive nature to use local resources and social capital for subsistence farming (Netting 1993). Therefore, Netting (1993, p. 22) termed smallholder households as a "corporate social unit" for mobilising agricultural labour, managing productive resources and organising consumption'.

The majority of smallholders living in rural households are classed as rural poor (Pinstrup-Andersen 2007; FAO 2012a), a group in which there is a strong gender division of labour (Lahiri-Dutt & Adhikari 2015). For example, a typical farm household in the EGP consists of men starting farm activities early in the morning and women completing domestic chores and reproductive/childcare tasks before joining them (Pommells et al. 2018). A time-use survey in rural Bangladesh found that women farmers worked one hour more than men every day to collect fuel (Yoshino 2013). In numerous parts of India and sub-Saharan Africa, women and young girls walk for hours each day to fetch drinkable water and fuel for their families (Mapfumo et al. 2016; Pommells et al. 2018). The time taken to perform these tasks reduces women's availability to contribute to farm work. Further, in woman-headed and single-woman households, including those in which the men have migrated for work, the women are responsible for all tasks (van Koppen et al. 2017). This responsibility burdens them because the women are less available for farm work.

Because smallholders are resource-poor and have relatively smaller farms, they prefer manual tillage and mostly use hoes to plough (predominantly male tasks). Smallholder farms are largely rainfed and resource-poor and lack access to mechanised irrigation (Sichoongwe et al. 2014). Similarly, irrigation is usually considered a male activity and villages' irrigation-user groups predominantly comprise male members. Faced with limited resources, smallholder farms manage with what they have. A study in Ghana demonstrated that smallholders use traditional farming technology and often receive little agricultural input (Barnett & Srivastava 2017). Smallholders largely depend on family labour—children assist after school and elders join farm activities if they are able. There is some scope to purchase labour if tasks remain unmanaged; woman-headed households usually manage the tasks regularly performed by males by purchasing labour.

The FAO has emphasised the benefits of closing the gender gap—women smallholders with equal access could increase food productivity by 20–30%. Therefore, gender equality could increase total production by 2.5–4% in developing countries, which would feed 100–150 million additional people (FAO 2011). Smallholders' active participation enhances economic growth and reduces poverty (Muriithi & Matz 2015; Sibande 2016). A focus on women smallholders is crucial to achieving SDG 1 and 2 and providing food security for the Asian and African populations (Lowder et al. 2016). Moreover, women smallholders must bargain for active participation (Doss et al. 2018); therefore, women's bargaining issues should not be neglected in the attempt to achieve a fruitful outcome.

Having discussed the context regarding the EGP and smallholder farming, the following sections explain the bargaining process and the current study's theoretical underpinnings.

2.3 Bargaining

Bargaining is a negotiating activity that explores the likelihood of common benefits (Evans & Beltramini 1987). Bargaining is a transactional process in which people settle their issues by negotiating what to take and what to give (Rubin & Brown 2013). Martin (1992) argued that bargaining is a negotiation process that uses power to achieve a bargaining objective. Bargaining objectives are different in economic, psychological and sociological domains. In economic studies, the objective of bargaining is primarily to obtain monetary benefits (Stigler 1950; Stone 1954; Tsang et al. 2011). In psychology, the bargaining process links with gaining intrinsic enjoyment and advantages (Heath et al. 1995; Lebow 1996; Darke & Dahl 2003). However, regarding intra-household bargaining in sociology, it is believed that

negotiation is preferred to obtain a 'better deal' in the division of a family's labour and decision-making powers (Agarwal 1997; Osmani 2007).

Bargaining also provides time benefits (Berger et al. 2012) and has been successfully linked with pride, intelligence and achievement (Morris 1987; Mano & Elliott 1997; Tsang et al. 2011; Becker & Curhan 2018). Therefore, bargaining motives can be perceived in a number of ways, depending on the context. The current study discusses women smallholder farmers and thus it is argued that their bargaining has multiple motives. Farming includes various activities with multiple roles involved, including homemakers, farmworkers, sellers and buyers.

Bargaining must be performed in multiple spheres; however, such spheres remain yet to be explored and thus the following research question is examined in this study:

RQ1: What are the existing bargaining spheres and associated issues over which women farmers in the Eastern Gangetic Plain region bargain?

Previous research has viewed bargaining as a game between two parties. This perception is based on the game theory proposed by Nash (1953), which focuses on how two parties reach a common agreement. In every game, there is a unique solution (Nash 1953). Most economic-based research has focused on finding the condition in which the unique solution is found (eg. Bateni et al. 2010; Clempner & Poznyak 2017; Mao 2020). However, these studies have presumed players' participation in the game but have not explored how or why players participate in such games (Small et al. 2007). It is argued that bargaining behaviours prompt participation in the bargaining game. Bargaining is a behavioural system that is structured and embedded in socio-economic and cultural contexts (Uchendu 1967). Moreover, bargaining intentions vary according to the culture (Ott 2016). Research regarding bargaining predominantly regards Western cultures rooted in Euro–American traditions and is less likely to explore other cultures (Gelfand & Brett 2004). Specifically, minimal bargaining behavioural research exists regarding the EGP's Mithila culture. Therefore, this study aims to explore the bargaining behaviour of EGP smallholder farmers.

Bargaining is a process that involves two or more individuals for decision-making whenever one cannot accomplish their intentions on their own (Thompson 2009). Bargaining demands specific skills that are essential for personal and professional goal

achievement (Lewicki et al. 2009); however, these skills are worthless if a person does not initiate the bargaining (Leier 2015). Initiating a negotiation or 'asking' is the start of a conversation that determines who will be first on the bargaining table (Babcock & Laschever 2009). Researchers have identified that women are less likely to intentionally start bargaining, for reasons unknown (Babcock et al. 2003; Small et al. 2007; Bear & Babcock 2012; Leier 2015).

It is commonly believed that initiating the bargaining process is one of the most challenging bargaining phases because 'asking' creates anxiety, even if the outcome is likely to be favourable (Wheeler 2004; Volkema & Fleck 2012a). However, bargaining initiation is a must if an individual expects to achieve something wanted or anticipated (Wheeler 2004). Making the first offer in bargaining can remarkably influence one's outcomes (Magee et al. 2007). For example, an individual's bargaining about their initial job offer can significantly affect their lifetime wealth (Babcock & Laschever 2009). When bargaining in trading, the seller or buyer making the first offer affects the final settlement price; final settlement prices are higher when a seller initiates the bargaining (Benton et al. 1972; Galinsky & Mussweiler 2001). Despite its importance, research studies have usually overlooked bargaining initiation as a part of bargaining models (Reif & Brodbeck 2014, 2017). Little is known about the psychological antecedents of behaviour regarding the intention to begin (or suppress) bargaining (Reif & Brodbeck 2014). In addition, little is known about those who simply agree on the offered deal when bargaining (Small et al. 2007). This scarcity of knowledge is relevant when studying women's farm bargaining behaviour; therefore, this study fills the knowledge gap by studying women smallholders' farm bargaining intentions in the EGP.

2.3.1 Measures of bargaining behaviour

Broadly, measures of bargaining behaviour can be grouped into two categories economic and socio-psychological (Thompson 1990). Economic measures, obtained from axioms of individual judgement and prescriptive analyses of bargaining behaviour, emphasise the outcomes or results of bargaining (Nash 1953). Sociopsychological measures, based on features and practices of social perception, emphasise the bargaining process and outcome (Thompson & Hastie 1990).

2.3.1.1 Economic measures of bargaining

Bargaining can occur in three ways—mutual agreement, distributive bargaining and integrative bargaining. Most economic bargaining models note that bargainers should reach a mutual agreement if it is more beneficial than a disagreement (Thompson 1990). However, this is not always true—bargaining can reach an impasse owing to lack of information, even if mutual agreement is beneficial (Myerson 1989). The mutual agreement depends on negotiators' bargaining zones, which are determined by reservation prices (i.e. the negotiators minimum settlement price) (Raiffa 1982). Positive agreement outcomes occur when bargaining zones overlap and negative outcomes occur when bargaining zones do not overlap. Interestingly, a seller's aspiration price is significantly more important than the reservation price for mutual agreement (Moosmayer et al. 2012).

2.3.1.1.1 Distributive bargaining

Distributive bargaining involves bargainers distributing resources and enforcing or compromising what each party gives and takes to maximise their benefit (Steinel & Harinck 2020). In such bargaining, bargainers aim to gain most of the bargaining surplus (i.e. the difference between the reservation and final settlement prices) (Raiffa 1982; Thompson 1990). Most economic models consider that bargainers seek to increase their benefit; however, a few descriptive approaches do not believe that bargainers aim to optimise self-gain (Thompson 1990). Moreover, all bargaining situations involve distributive bargaining, except those in which all parties' interests match exactly (Lax & Sebenius 1987).

2.3.1.1.2 Integrative bargaining

Integrative bargaining involves bargainers focusing on mutually beneficial deals through problem-solving behaviours (Steinel & Harinck 2020); it is a precise process that focuses on whether bargaining outcomes are efficient (Thompson 1990). Integrative bargaining allows bargainers to achieve optimum value and avoid probable deadlock; it nurtures positive relations between bargainers (Pruitt et al. 1986).

2.3.1.2 Socio-psychological measures of bargaining

Socio-psychological measures of bargaining are embedded in social perception concepts, including perceptions of social surroundings, norms, behaviours and context (Schneider et al. 1979). Bargainers perceive bargaining situations, opponents and themselves (Thompson & Hastie 1990). Perception in bargaining is important because bargainers judge their counterparts even when unaware of their interests and reservation prices, which potentially leads to bargaining zone distortion (Thompson 1990; Schaerer et al. 2016). Further, bargainers may or may not perceive conflict when it is present (Thompson 2009). The present study explores women smallholders' bargaining intentions according to a perception-based psychological framework (i.e. the theory of planned behaviour) (Ajzen 1991).

2.3.2 Women smallholders and bargaining

Women farmers working in agriculture often face difficulties in making adequate profits (Farnworth 2011). Although agricultural commercialisation has created market opportunities, poor women smallholders struggle to access markets and receive a reasonable price for products, as well as facing deterrents to product and delivery needs (Reardon & Berdegué 2008b; Farnworth 2009). To optimise production, maximise benefits and be sustainable in the competitive agri-supply chain, actors must actively participate. Bargaining power is an important quality of smallholders in this process, as value creation is closely associated with bargaining (Gomes-Casseres 2005a; Crook & Combs 2007). However, Bijman et al. (2012b) argued that agri-supply chains generally have persisting bargaining imbalances between farmers and the supply chain partners, for example seed suppliers, farm machinery suppliers, irrigation suppliers, transportation, farm labours, cold storage, whole-sellers, retailers, middle-people, traders/vendors and customers.

The agriculture sector continues to be influenced by bargaining power relations in and beyond the farm. In feminised agriculture, women's bargaining power is even more significant. Doss (2013) illustrates that, based on development literature, women's bargaining power in the household links with their personal education level, health, children's education and general wellbeing. In the farming sector, women's bargaining

power significantly influences allocating labour to various activities (e.g. household, agriculture and wage work).

Gender gaps are often observed in bargaining. Research reveals that men tend to have better bargaining power (Hoyt & Murphy 2016) whereas women usually do not feel comfortable with bargaining and are much less likely to initiate negotiation for personal gain (Babcock & Laschever 2009). Even in Western countries, women are often reluctant to bargain (Cai & Liu 2008). However, in developing countries (particularly in the EGP region), women's bargaining power problems are much more prevalent (Lahiri-Dutt & Adhikari 2015). Further, Dorward et al. (2003) observed that smallholders, particularly women smallholders, often have low bargaining power resulting from a lack of productive resources and low literacy and numeracy levels. In addition, women are steered by socially constructed gender norms (Farnworth 2011) and have lesser bargaining power than men (Harding et al. 2003). Such power imbalances make women smallholders more vulnerable.

Generally, the agri-food supply chain perpetuates bargaining imbalances between farmers and their upstream and downstream partners (Bijman et al. 2012b). For example, in Nepal's Terai region, retail traders visiting the smallholder's farm to collect vegetables also allocate agricultural products' prices. Usually, smallholders suffer a loss because of traders' stronger bargaining powers (Bastakoti Ram et al. 2017). There is an imperfect price transmission of products across the agricultural production chain—bargaining power could influence the favourability of the deal (Velázquez & Buffaria 2017).

Barrett (2008) suggested that unequal bargaining power levels create imperfect market competition in the agri-supply chain. To counter imperfect marketing channels, gaining bargaining power as a group would potentially lead to better terms of trade from downstream purchasers. Attaining group bargaining power is a driver in farmers' cooperation—the direct participation of farmers in marketing and commercial ventures increases producers' bargaining power (Barrett 2008). Similarly, women smallholders in the agri-supply chain have weaker bargaining positions because of their lack of control over productive resources. The farms managed by women have often been found to yield less than those managed by males (Udry et al. 1995; Larson et al. 2015). Larson et al. (2015) explained that such differences in crop yield do not result from gender differences; instead, these differences exist because women farmers use less input (e.g. fertiliser) in the production process. Extension services on farms could assist by offering knowledge and training to smallholder women farmers; however, gender constructions could potentially make it challenging to contact women smallholders (Manfre et al. 2013).

Farnworth and Colverson (2015) noticed the connection between women's limited access to productive resources and reduced participation in community-level decisionmaking forums (e.g. agri-supply chain networks and innovative platforms). In agribusiness, women smallholders' face unequal access to the market and also to credit access (Palacios-López & López 2015) leading to productivity differences among men and women farmers (Rubin & Manfre 2014). On farms, women labourers receive less pay than their male counterparts (Hertz & Winters 2009). Access barriers to contextspecific infrastructures and facilities and existing social norms hinder smallholder women farmers' ability to practice their agricultural roles fully (Agarwal 1997). Women farmers' existing responsibilities and inequalities significantly shape their agricultural business performance; therefore, it is essential to explore complex intersectional power relations and agricultural outcomes that lead to empowerment (Leder, Raut, et al. 2017). Peterman et al. (2011) suggested that, as a result of complex gender relations and differences, yield comparison for men and women farmers can be context-specific; hence, studies by region are needed. Studying gender relations in the bargaining domain of the EGP region has received little attention despite its significance.

2.4 Theoretical Underpinnings

Following the discussion regarding the context of the present study, this section discusses the theoretical orientation of the research. Relevant theoretical foundations were explored, and suitable theoretical underpinnings were chosen to develop a conceptual framework for the present study.

2.4.1 Contemporary theoretical frameworks

A large number of analytical frameworks have been used to examine complex farmrelated issues. New household economics (NHE), agrarian studies that focus on the rural farm dynamics refer to feminist political ecology (FPE), Marxian political economy, social constructivist, political economy approach or empowerment frameworks. This section briefly discusses the contemporary theories to examine which is most suitable for the present study's objectives.

The Theory of Peasant Behaviour (Chayanov 1925) was one of the first models for farm households. According to the theory, households maximise utility by balancing consumption satisfaction and labour aversion. Based on this theory, Becker (1965) introduced a unitary model of household resource allocation, popularly known as the New Household Economics (NHE) model. The NHE model assume that household members will rationally take on specialised roles based on their relative productivity to improve overall household utility. In most cases, women specialise in home production while men specialise in market production. (Nakajima 1986) extended the NHE theory to agricultural households and developed several types of models depicting various agricultural household situations in his seminal work "The Subjective Equilibrium Theory of the Farm Household". These agricultural household models are known by various names, such as integrated farm-household models, integrated production-consumption models, or farm household models. These models are significant because they provide a framework for predicting farm household responses to changes in output prices, input prices, wage rates, technology, and family structure. These models also include farm-household decisions about home consumption of output versus selling output to meet non-farm consumption needs. The NHE model has been criticised as it treats the household as a single entity for both consumption and production and assumes the household head as altruistic and responsible for making choices and preferences to maximise household utility (Agarwal 1997).

The FPE framework studies the relationship between environments, gender and development, and holds its popularity as a framework because of the rapid transformation of economies, environments and cultures at a global and local level (Mitchell 2000; Elmhirst 2011, 2015). Broadly, the FPE framework is found in studies regarding water access, community forestry, green governance and gender (e.g. women's issues and gender equality regarding natural resources) (Agarwal 2010b; Meinzen-Dick et al. 2012; Sharma 2013). Studies have applied the FPE framework to explore farm collectives (Leder, Raut, et al. 2017; Leder, Sugden, et al. 2019).

However, in the context of this study, the FPE framework was not suitable for analysis because it does not explore socio-psychological dimensions regarding individuals' attitudes and abilities and norms related to farm bargaining. Moreover, a social constructivist or political economy approach helps to understand the vulnerability because of the multiple factors embedded in social structures (Füssel 2007; Sugden, Silva, et al. 2014). This framework is suitable to explore the vulnerability of rural women farmers in regard to a particularly vulnerable situation (Füssel 2007); however, the framework overlooks the socio-psychological and emotional perspectives of women farmers, which must be assessed to examine bargaining intentions.

Analysing both material and non-material aspects of social relations of gender and gender justice related to farming (Mukhopadhyay et al. 2010) are popular methods of analysing farm-related issues through a gender lens. This analytical framework is also called the gender equity framework which usually focuses on four dimensions of analysis, including gender division of labour, values and assumptions, intra-household decision-making and access to and control over resources. It is a commonly used framework for such analysis; however, beyond-household and farm-related market dynamics are ignored, and these are required for this study.

Similarly, the Marxian political economy helps to study peasant units and involves exploiting the classes embedded in farming production (Marx 1974). This framework examines the trajectory of the mode of production in the agrarian context and transitional stages because women's work is essential for reproducing family labour power (Benholtd-Thomson 1982). Furthermore, this framework helps to understand intra-household class relations and unequal household relations, representing another form of 'crystallised power' directed against class struggles (Sugden 2009b). This framework is suitable to analyse the inequalities related to the economic production process, class oppression and economic aspects related to landlordism. However, it lacks the ability to explore farm-related psychological and emotional aspects of farm bargaining, which are relevant aspects of the present study.

The empowerment theory (Kabeer 1999) assesses empowerment using three constructs—resource, agency and achievement—which consist of interrelated constructs that affect the ability to make choices. First, resources involve access to and control over the material, human and social resources. Second, agency is

conceptualised as the decision-making process of mobilising resources to achieve goals. Less-measurable behavioural displays of agency include negotiation, deception and manipulation. Sen (1990) noted that agency is not only about acting but also about resisting actions, decisions or manipulation. Third, achievement involves measurable outcomes of wellbeing. The connection between resources, agency and achievement can show empowerment. In farming, empowerment theory can be used to assess how individuals recognise and act on available choices, which are shaped and constrained by resources, opportunity structures or structural factors (Kabeer 1999). This theory has a general use to understand empowerment in diverse areas, including farming spaces. However, critical analysis of resources and agency is not enough to understand women farmers' bargaining intentions because individual relations, market access, personal abilities and norms could potentially affect the process.

2.4.2 Theory of reasoned action

For years, psychologists have been interested in the concept of predicting human behaviour. Human behaviour is driven by a purpose and behavioural outcomes are influenced by several cognitive processes, which aid in understanding human behaviour more effectively (Ajzen 1985). Because cognitive processes in behavioural progression are essential, the concept of attitude occupies a central position when studying human behaviour(Krosnick et al. 2005). Researchers have noted that attitude helps to shape behaviour and potentially predicts actual behaviour (Ajzen & Fisbbein 1974; Gross & Niman 1975; Kraus 1995). Therefore, the theory of reasoned action (TRA) framework was developed to predict human behaviour (see Figure 2.2) (Fishbein & Ajzen 1975; Ajzen & Fishbein 1980).

The TRA improved human behaviour prediction by considering attitudes, beliefs, intentions and behaviours (Ajzen & Fishbein 1980). The TRA states that an individual's intention to perform a behaviour is the most proximal predictor of the behaviour (Fishbein & Ajzen 1975). Attitudes and subjective norms guide an intention—the stronger the intention, the stronger the chance to perform the behaviour. The TRA framework assumes that human behaviour predicted using the framework must be volitional (i.e. characterised by the presence of personal motivation). However, non-volitional behaviours can be influenced by resource availability in

addition to personal motivation. Therefore, a theoretical gap was observed, predicting both volitional and non-volitional human behaviours (Armitage & Conner 2001).

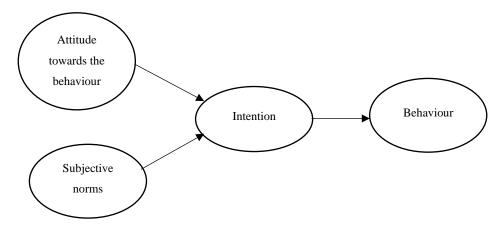


Figure 2.2: The TRA framework

Although the TRA framework is an influential theory, it was unable to meet the interests of researchers who opted to predict non-volitional behaviours, which resulted in major criticism (Miniard & Cohen 1981; Liska 1984; Smedslund 2000; Greve 2001; Ogden 2003). Therefore, a theory to predict human behaviour was necessary to fill the gap. Ajzen (1991) added a construct that predicted intention—perceived behavioural control (PBC)—to the TRA framework's third determinant; therefore, the TPB was created.

2.4.3 Theory of planned behaviour

The theory of planned behaviour (TPB) (Ajzen 1991) is an extended theoretical version of the TRA framework (TRA; Fishbein & Ajzen 1975; Fishbein et al. 1980). The TPB was modified to predict both volitional and non-volitional control-related behaviours (Ajzen 1985, 1991; Armitage & Conner 2001). According to Ajzen (1991), behaviour is the noticeable response in a particular situation. However, it could be challenging to observe behaviour for analysis and thus studying behavioural intentions helps understand the phenomenon leading to a behaviour (Ajzen 1991, 2020).

To formulate TPB, Ajzen (1985) added PBC to the TRA, which assumes that attitude and subjective norms predict behavioural intention (Ajzen & Fishbein 1980). The TPB assumes that intention is an immediate predictor of behaviour (Kautonen et al. 2013; Sussman & Gifford 2019; Ajzen & Schmidt 2020). Intention describes the motivational factors of behaviour and indicates an individual's willingness and preparedness to exercise effort to accomplish a particular behaviour (Lortie & Castogiovanni 2015). Further, intention and behavioural control produce behaviour (Ajzen 1991). Moreover, in TPB, attitudes towards the behaviour, subjective norms and PBC are predictors of intention, which shapes behaviour (see Figure 2.3) (Sussman & Gifford 2019).

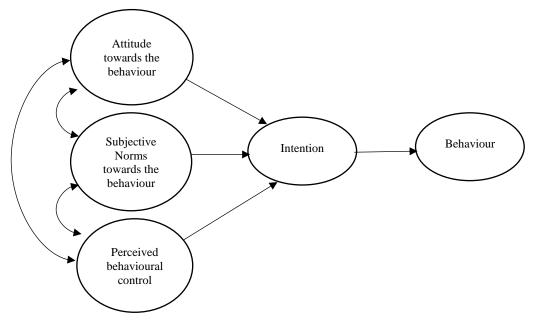


Figure 2.3: The TPB framework

'Attitude' towards a behaviour is an individual's negative or positive value which is placed on the behaviour (Ajzen 1991, 2001). It is a product of 'behavioural belief', which regards an individual's faith that a particular behaviour will deliver a specific outcome (Ajzen 2001). 'Subjective norms' refer to an individual's perception of social pressure to act or not act a behaviour (Ajzen 1991; Lortie & Castogiovanni 2015). Subjective norms are determined by 'normative beliefs', which refer to an individual's perception of how people in their life (e.g. family members, peers, teachers and other influential people) will consider the act (Ajzen 1991). PBC is the perception of an individual's ability to perform a particular behaviour (Ajzen 1991). Such perception is derived from 'control beliefs', which refers to an individual's perceived belief about how they control their competence to perform a certain behaviour (Ajzen 2002b; Ajzen & Schmidt 2020). Further, PBC also directly affects behaviour (Ajzen 1991; Lortie & Castogiovanni 2015; Ajzen 2020).

Applying the TPB framework is widespread. Nevertheless, regardless of its popularity, the TPB has been criticised for its accuracy in predicting human behaviour because it ignores emotion-determining behavioural factors (Gibbons et al. 1998; Pligt & De Vries 1998).

Beliefs are largely cognitive in nature and are developed over a relatively long period of time. Emotions, on the other hand, may involve little cognitive appraisal and may appear and disappear rather quickly. (McLeod 1992, p. 579)

Unlike affective processing models, the TPB does not consider emotional variables such as anxiety, apprehension or mood as proximal determinants of behaviour (Conner & Armitage 1998). However, Ajzen (2002a) defended the criticism by noting that the TPB framework presents emotions as background variables, which are supposed to affect intentions and behaviour through their effect on attitudes and PBC.

Further, researchers have questioned how the TPB framework justifies overestimating people's rationality for a behaviour (Sniehotta 2009). However, this was answered by (Ajzen 2011a, p. 66):

There is no assumption in the theory that people carefully and systematically review all their beliefs each time they are about to perform a particular behaviour. On the contrary, the theory recognises that most behaviour in everyday life is performed without much cognitive effort.

Moreover, researchers have argued human decision making is governed by two separate systems. System 1 is a bit simplistic, automatic and fast and a person responds directly to the environment. System 2 is conscious, controlled, slow and requires cognitive effort to make a decision for the behaviour (Kahneman 2011). Ajzen (2011b) also recognises that human behaviour is not an outcome of systematic analysis of reasons; instead, it is a performance in promptness based on the analysis of a few key factors. However, the intention to predict a behaviour under the TPB framework indicates that behaviour, which reflects the System 2 model (Kahneman 2011; Tetlow et al. 2015). People who have made a behavioural decision do not usually re-weigh the pros and cons until circumstances change—they will simply recover their previously established purpose from long-term memory and keep performing the same behaviour (Ajzen 2005). Consequently, the TPB framework may suggest a more constrained rationality than the model's opponents often argue (Francis et al. 2004). There have been several unjustified critiques of the TPB framework; however, this does not rule

out the possibility of change. In addition to the TPB framework's limitations, extensions to the framework can improve its efficacy in predicting behavioural purpose.

2.4.4 Applying the theory of planned behaviour in agricultural and bargaining studies

The TPB framework is a commonly used concept to study human behaviour, particularly in the research community (Armitage & Conner 2001; Ajzen 2002a; Munro et al. 2007; Steinmetz et al. 2016; Ajzen 2020). The TPB framework has been applied to various human behavioural studies, including farmers' behavioural intentions (Bergevoet et al. 2004; Feola & Binder 2010; Duarte Alonso & Krajsic 2015; Chin et al. 2016). Within these studies, a wide range of objectives have focused on adopting organic agriculture (Hattam 2006; Yazdanpanah & Forouzani 2015), engaging farmers in sustainable farm practices (Fielding et al. 2008), decision-making in farming (Hansson et al. 2012) and adopting technology (Kamrath et al. 2018).

Furthermore, the TPB framework has been applied to bargaining behaviour studies in multiple ways. For example, research regarding consumers' behaviour (Siang 2008; Hoppe et al. 2013; Chen et al. 2016; Hegner et al. 2017) and bargaining studied the framework's constructs to explain the consumers' behaviour. The present study's theoretical foundation is based on Ajzen (1991) TPB framework because it explains how human behaviour follows intentions in the form of well-developed plans.

2.4.5 The theory of planned behaviour framework and bargaining

This section reviews the TPB framework's usefulness in understanding women farmers' bargaining intentions. It also provides a critical discussion of the literature informing the following research question:

RQ3: How and why do women smallholders' attitudes towards existing farm bargaining issues; perceptions of significant others in their lives (subjective norms); and the belief they have in their own bargaining ability and skills and that bargaining is within their control (perceived behavioural control), influence their intention to bargain?

2.4.5.1 Attitude

Attitude is one of the predictors of intention in the TPB. Behavioural attitude is the extent to which a person has favourable or unfavourable views on the behavioural question (Ajzen 2001). Further, attitude is considered to comprise an individual's beliefs regarding the behaviour's outcome (Fishbein & Ajzen 2011). Similarly, Willock, Deary, Edwards-Jones, et al. (1999) described attitude as a negative or positive response to an object (e.g. person, idea, concept or behaviour). Attitudes are embedded in the behavioural significance that an individual affixes to an object (Willock, Deary, Edwards-Jones, et al. 1999). Moreover, individuals' attitudes differ depending on whether they believe that a specific behaviour will produce a certain set of outcomes and how important they consider the outcomes to be (Fishbein & Ajzen 1975; Ajzen 1988, 2001, 2020).

Researchers have argued that attitude constitutes various components. Some researchers believe that attitudes comprise three components—cognitive, affective and behavioural (Bagozzi & Burnkrant 1979; McGuire 1985; Asiegbu et al. 2012; Chou et al. 2020). The cognitive component regards attitudes as relating to knowledge, beliefs and ideas about objects. The affective component refers to attitude as feelings about objects. Similarly, the behavioural component perceives attitude as a tendency towards action (Reid 2006). In addition, researchers have classed attitudes as both affective and instrumental (Ajzen 1991; French et al. 2005; Phipps et al. 2021). In this context, an affective attitude involves contrasting feelings such as enjoyable vs. unenjoyable, interesting vs. boring and relaxing vs. stressful. Conversely, an instrumental attitude expresses feelings such as useful vs. useless, wise vs. foolish and beneficial vs. harmful (Rhodes & Courneya 2005; Hevel et al. 2019). These two classifications are only representative; however, they do prevail.

Moreover, researchers have also classed attitude as strength, importance and certainty. Attitude importance refers to how an individual assigns emotional significance to an attitude (Boninger, Krosnick & Berent 1995). Perceiving an attitude as personally important affects information processing, decision-making and behavioural performance (Boninger, Krosnick, Berent, et al. 1995). Attitude importance can prompt knowledge accumulation processes and influence intentions and actions (Holbrook et al. 2005). There is a shortage of literature regarding attitude classification

in women smallholders' bargaining. Several factors could affect this population's attitude; for example, knowledge can affect attitudes and behavioural intentions (Zhang et al. 2015). When studying farmers' behaviours towards pressurised irrigation technologies, Castillo et al. (2021) found that knowledge and previous experience can shape attitude. In addition, it was found that knowledge has a moderating effect on the attitude towards objects (Wilson et al. 1989).

Recent studies on consumer behaviour found that knowledge has a moderating effect on the relationship between attitude and willingness to pay (Fu & Elliott 2013; Hafaz et al. 2019; Higueras-Castillo et al. 2019), as well as bargaining behaviour (Weingart et al. 1996) and decision-making (Raju et al. 1995). Women farmers are consumers of agriculture inputs and thus they must bargain when purchasing agriculture inputs. Therefore, it is essential to explore the effect of knowledge on women farmers' attitudes and bargaining behaviours. It is expected that experience positively influences attitude; however, a study on commercial vegetable farming in Indonesia reported a significant adverse effect of experiences regarding commercial vegetable farming (Mariyono 2018). In addition, it was reported that knowledge is influenced by experience (Park et al. 1994). Therefore, it could be argued that experience plays a crucial role in forming attitudes; however, there is little research regarding this potential relationship in the context of women smallholder farmers and farm bargaining.

Another important factor that influences attitude is benefit—various perceived benefits can positively affect attitude formation (Clark et al. 2016). An Indian study found that when the perceived economic benefit was higher than perceived risk, farmers had positive attitudes towards eggplant farming (Chong 2005). Moreover, perceived economic benefit positively affects attitudes towards a crop and influences crop cultivation decisions (Pokhrel 2010). Research has found that perceived economic benefit affects intra-farm household bargaining (Tu 2004). In addition, time benefits have the potential to form an attitude and influence behavioural intentions (Reimer et al. 2012; Choi et al. 2013). Although there is a strong possibility that a beneficial attitude can influence farming, minimal research exists regarding such an attitude

among women smallholder farmers. Therefore, it is noteworthy to explore attitudes among women smallholder farmers regarding benefit.

Socio-demographic variables such as age, gender, education, income and location can alter a farmers' attitude and thus these are predominantly studied (Clark et al. 2016). In terms of age, a systematic review regarding the welfare of farm animals found that old age is negatively associated with attitude (Clark et al. 2016), which may be because older people have negative experiences (Park et al. 1994; Mariyono 2018). In regard to gender, studies have found that women have a more negative attitude towards financial matters, which is likely because women are more hesitant to take risks than men (Hallahan et al. 2004; Gilliam et al. 2010). However, the factors that can influence a person's riusk taking behavipour can be contextual as in some other areas it was found that women were more willing to take risks than men (Al Riyami 2021).

Further, women have a greater dislike for unclear outcomes and thus generate a negative attitude towards such outcomes (Borghans et al. 2009). Specifically, bargaining involves unclear outcomes; in bargaining situations between farmers and middle people, farmers consider long-term risks, and these restrict their capacity to participate in tough bargaining (Ranjan 2017). Therefore, it is possible that women have negative perceptions about bargaining. Education is also a socio-demographic variable that positively influences attitude (Munoz et al. 2019), which is validated by a successful educational program designed to promote attitudinal change in farming (Coleman et al. 2000; Hemsworth et al. 2002). Studies have examined the significant role of education in attitude formation; however, minimal research explores this relationship in the context of smallholder women farmers' bargaining behaviours. Besides the abovementioned socio-demographic variables, several other variables are likely to have relationships with attitude but are yet to be explored.

Several studies have discussed the connection between attitude and behaviour. Willock, Deary, McGregor, et al. (1999) studied farmers' technology adoption and decision-making. The study revealed that farmers consistently hold norms, habits and expectations regarding the outcome of behaviours, considering that attitudes will influence behaviour. Further, Pampel and van Es (1977) indicated that profit maximisation or sustainability attitudes influence the type of adopted innovations. Willock, Deary, Edwards-Jones, et al. (1999) noted that multiple attitudes are influential to business and environmentally oriented behaviours, of which some attitudes influence behaviour directly and others are mediated by objectives. Moreover, the attitude–behaviour relationship is mediated by intentions (Ajzen 1991; Steinmetz et al. 2016).

Previous studies have examined the TPB influence of the framework constructs on intention and have shown that attitude positively influences intention (e.g. Borges et al. 2014; Kothe & Mullan 2014; McDonnell et al. 2014; Tomasone et al. 2015; Shin & Hancer 2016). For example, Borges et al. (2014) studied farmers' behaviours regarding natural grassland and revealed that their attitude influenced their intention to use improved natural grassland. Similar findings regarding smallholder farmers' intentions were found in regard to diversifying agricultural production (Senger et al. 2017). In addition, attitude and subjective norms have interactive effects on intention (Wan et al. 2017) and attitude positively affects bargaining power (Leonidou et al. 2010).

Although extensive literature is available regarding the effect of attitude on behaviours, there is a lack of research in the context of women smallholder farmers' bargaining behaviours. Hence the following sub-research question is examined in this study:

RQ3.1: How and why do women smallholders' attitudes towards existing farm bargaining issues influence their intention to bargain?

2.4.5.2 Subjective norms

Historically, social psychological research has noted that peoples' acts are influenced by normative beliefs and observations (e.g. Asch 1956; Milgram et al. 1969). According to the TPB framework, normative beliefs predict subjective norms, which reflect the perceived social pressures or influences on whether to perform a given behaviour (Ajzen 1991; O'Neal 2007). Individuals act on a behaviour either because they strive to meet potential expectations of important people or because the failure to act on such expectations has consequences for social approval(Rimal & Real 2005). Normative beliefs, coupled with individuals' motivation to obey those beliefs, produce subjective norms (Manning 2009). In addition, researchers have demonstrated the variable nature of degrees of normative information used to make behavioural decisions individually (e.g. Trafimow & Finlay 1996; Latimer & Martin Ginis 2005). Moreover, subjective norms can include the expectations of a group of important people (e.g. family members, relatives and friends), as to whether an individual should perform a particular behaviour and the concerns regarding how other people behave (Bagheri et al. 2019).

Researchers have studied the effect of normative influence on a range of behaviours, including maintaining health (e.g. Albarracin et al. 2001; Agha & Van Rossem 2004), conserving energy (Jachimowicz et al. 2018), using public transportation (Heath & Gifford 2002; Chen & Chao 2011), completing school (Davis et al. 2002; Burrus & Roberts 2012), exercising (Godin et al. 1993; Downs & Hausenblas 2005; Brooks et al. 2017), starting a new business (Hunjra et al. 2011; Roy et al. 2017) and bargaining (Lee 2000; Gillison et al. 2014). These studies show significant evidence of people's normative perceptions; however, there is currently little research regarding how and why normative beliefs influence the social structure of smallholder farmers' behaviours in the context of farm bargaining. Therefore, it has been worthwhile to investigate these concepts in the current study.

Cialdini et al. (1990) argued that subjective norms could be formed in two ways. Firstly, individuals shape their subjective norms based on the perceived pressure to act a desired behaviour (i.e. injunctive norms). Secondly, individuals feel social pressure when considering what they observe or infer based on others' behaviours (i.e. descriptive norms). Injunctive norms refer to how individuals may be intimately aware of what is expected of them and witness others' responses to their behaviours, from which they build perceptions of norms (Rimal & Real 2005). However, descriptive norms refer to the cases when individuals rely on signals from others' prevailing behaviours to perceive norms (Rimal & Real 2005). Social comparison theory (Festinger 1954) suggests that by comparing oneself with others in society, acceptable modes of behaviour are evaluated; that is, one observes others' actions if confused about how to behave in a new or unfamiliar situation. Witnessing others' behavioural engagement indicate social approval—in a given circumstance, a behaviour is perceived as correct depending on whether it is observed that others also act on it (Cialdini 2009).

42

Several studies have classified subjective norms into injunctive and descriptive norms. For example, Manning (2009) performed a meta-analysis of subjective norms in studies that used the TPB framework and found that subjective norms are generally grouped into injunctive and descriptive norms. Moreover, numerous researchers have endorsed this distinction empirically in different contexts (e.g. Cialdini et al. 1990; Larimer & Neighbors 2003; Larimer et al. 2004; White et al. 2009; Lac & Donaldson 2018; Morais et al. 2018). However, literature on such distinctions in the context of farm bargaining is lacking.

Numerous theories illustrate that norms are related to behaviours, including the TRA (Fishbein 1979; Ajzen & Fishbein 1980), the focus theory of normative conduct (Cialdini et al. 1990), the theory of normative social behaviour (Rimal et al. 2005; Rimal & Real 2005) and the TPB (Ajzen 1991). The TPB framework, which includes normative perceptions' influence on behavioural engagement, is possibly the most widely used. In the framework, one's intention to engage in behaviour mediates the relationship between subjective norms and behaviour (Ajzen 1991). This relationship is validated by several behaviours and situations (Ajzen 2015a); however, it is anticipated to demonstrate various results across different behaviours and contexts (Ajzen 1991).

Various studies have reported that the effect of subjective norms is inconsistent (Ajzen 1991; Armitage & Conner 2001; Manning 2009), which is mainly attributed to issues regarding measurement (Manning 2009; Ajzen 2015a). For example, when the TPB framework was first developed, Ajzen (1991) speculated that subjective norms were injunctive norms. Later, Ajzen and Fishbein (2005) recommended including both descriptive and injunctive norms when measuring subjective norms. In addition, Manning (2009) recommended considering descriptive norms and injunctive norms as separate constructs. Further, researchers have argued that the measurement method of subjective norms in the TPB framework is insufficient to capture various types of social norms, resulting in inconsistent results (Carrus et al. 2009; Passafaro et al. 2019).

Fornara et al. (2011) demonstrated that indicators of subjective norms fail to gauge the normative influence obtained from individuals sharing a spatial location—termed 'local norms'. Moreover, researchers have confirmed that when combined with the

TPB's original components, local norms can clarify the additional variance amount in behaviours (Carrus et al. 2009). Still, the function of local norms in the TPB framework is yet to be explored (Passafaro et al. 2019). In addition, several gender-related norms are presented locally. Gender norms exist in the world that an individual is born into (Cislaghi & Heise 2020) and are imposed, heard and adopted through various social means (Hyde 2014). Therefore, gender norms have a crucial role in forming subjective norms. Limited inclusion of gender-specific norms when measuring subjective norms could produce inconsistent results.

A large body of literature has studied the relationship between subjective norms and behaviours. Researchers have found a significant positive relationship between subjective norms and intention across various behaviours, including purchasing organic foods (Irianto 2015), bringing reusable bags (Muralidharan & Sheehan 2016), fertility (Mencarini et al. 2015), customer bargaining (Gillison et al. 2014) and farming behaviours (Borges et al. 2014). Besides a direct effect, researchers were also interested in how subjective norms have a moderating effect on intention. Researchers recognise the practical importance of various social processes, allowing further understanding of the relationship between constructs in frameworks such as the TPB (Povey et al. 2000).

Regarding a moderating effect, researchers have found a causal connection between subjective norms and attitudes, leading to intention (Shimp & Kavas 1984; Vallerand et al. 1992; Chang 1998; Al-Swidi et al. 2014; Khalek 2014; Punniyamoorthy & Asumptha 2019). Similarly, Al-Swidi et al. (2014) identified the moderating effect of subjective norms on the relationship between PBC and buying intentions. In a similar way, Bagheri et al. (2019) established the moderating effect of subjective norms on the relationship between PBC and intention when studying farmers' pesticide-using behaviours. Researchers have found that subjective norms significantly affect intention; conversely, researchers have argued that subjective norms exert no direct influence on intentions when other norms are considered (Bamberg & Möser 2007). Although there are various instances of such a non-influential effect, it is not always true (Niemiec et al. 2020). As previously discussed, there are multiple reasons for such a mixed result—various contextual norms could produce inconsistent results, but this aspect is yet to be explored. Because very little is known about the dynamics of such norms, qualitative research can be an excellent research method to form a deeper understanding.

In view of the discussion above, the following sub-research question is explored in this study:

RQ3.2: How and why do the perceptions of significant others in women smallholders' lives (subjective norms), influence their intention to bargain?

2.4.5.3 Perceived behavioural control

As previously discussed, the TPB (Ajzen 1991) was derived from the TRA (Fishbein & Ajzen 1975). The main difference between these two theories is that the TPB includes the PBC. The TRA assumes that intentions are the motivational force and predictor of any voluntary behaviour. Liska (1984) criticised this assumption by arguing that not all behaviours are volitionally controlled and thus the TRA is only applicable to voluntary behaviours that need only motivation and are independent of the influence of any available resources. Therefore, different models are required to address voluntary and involuntary behaviours. To address this issue, Ajzen (1991) added the PBC to the TRA framework as a determinant of intention and renamed the framework accordingly (i.e. TPB). PBC regards one's perception of how easy or difficult a behaviour is to perform (Ajzen 1991).

Hence, PBC is the product of beliefs regarding resources and obstacles that can facilitate or hinder performing a given behaviour. These beliefs can include internal controls (e.g. skill or ability required to perform the behaviour) and external controls (e.g. time, money or cooperation from others) (Ajzen 2015b). According to Mathieson (1991), PBC is an individual's perception of control on behavioural performance. Doll and Ajzen (1992) argued that PBC is the perceived level of ease or difficulty to execute a behaviour, which reflects on previous difficulties, hindrances and experiences. Thus PBC gauges an individual's perceptions of their volitional control over a behaviour (Hansson et al. 2012).

The concept of PBC draws on Bandura's (1997) concept of self-efficacy, which regards an individual's beliefs about their ability to perform a behaviour. In this context, it reflects one's feelings of confidence in executing a behaviour, irrespective

of circumstances. PBC expanded this idea to incorporate one's perceived competence in performing a behaviour (Boudewyns 2013). PBC and self-efficacy expectations (Bandura 1989) are conceptually equivalent even though separate operations are usually applied when these constructs are measured in empirical research (Fishbein & Ajzen 2011). PBC can be measured directly (i.e. by asking people whether a behaviour is easy or difficult to perform) or indirectly (i.e. by assessing what factors influence the perception of whether a behaviour is easy or difficult to perform) (Trafimow & Duran 1998; Ajzen 2002a). A direct measure of PBC should encapsulate one's confidence in performing the behaviour (Ajzen 2002a). It is argued that the PBC scale should contain self-efficacy and controllability measures; however, it should be noted that the items selected in the scale have a high degree of internal consistency (Ajzen 2002a).

PBC is derived from accessible control beliefs regarding the presence of factors knowledge, skills, abilities, time, money, cooperation from others or other resources that can assist or hinder implementing a behaviour (Ajzen 2015b; Ajzen & Schmidt 2020). As discussed earlier, control beliefs are one's subjective evaluation of the likelihood that enabling or hindering factors will be present in the state of concern (Ajzen & Schmidt 2020). One's subjective evaluation of each factor (i.e. each control belief) contributes to PBC. Moreover, accessible control beliefs are assumed to account for PBC (Ajzen 2002a). Control belief strength could be measured by questions regarding control beliefs (e.g. the level of agreement that control factors affect performed behaviours and control belief power) and the amount of difficulty to perform the behaviour regarding each accessible control factor (Ajzen 2002a).

Researchers have studied linking PBC with various behaviours, including farm-related behaviours. In the farming context, such studies include practising food safety (Rezaei et al. 2018), using antimicrobials carefully (Vasquez et al. 2019), diversifying business (Hansson et al. 2012), applying for rural development support (Stojcheska et al. 2016), adopting personal protective equipment (Rezaei et al. 2019), adopting animal-friendly practices (Borges et al. 2019), using renewable energy (Rezaei & Ghofranfarid 2018), vaccinating cattle against a disease (Sok et al. 2015) and adopting technology (Lalani et al. 2016; Borges et al. 2019). However, there is a dearth of research studying a connection between PBC and farm bargaining behaviours.

Generally, the abovementioned research found that PBC positively affected behavioural intentions. For example, Lalani et al. (2016) studied smallholder farmers' motivation for using conservation agriculture and found that PBC had the secondhighest influence on intention, only exceeded by attitude. In another study regarding the intentional use of renewable energy in Iran, Rezaei and Ghofranfarid (2018) found a significant positive relationship between PBC and intention. Conversely, other research has failed to find a substantial connection between PBC and intention. For example, Hansson et al. (2012) studied farmers' decisions to diversify or specialise their businesses and found no significant correlation between PBC and intentions regarding business development strategies; however, a significant correlation between subjective norms and PBC was found. Fishbein and Stasson (1990) found that PBC did not significantly contribute to predicting non-academic university employees' intentions in regard to attending training sessions. Similarly, a non-significant result was found by Knibbe et al. (1991) in their study of alcohol consumption in public drinking places. The disparity in results concerning the PBC-behavioural intention relationship and the minimal research regarding farm bargaining indicates that exploring the relationship between PBC and farm bargaining is worthwhile.

Despite many studies successfully using PBC as a research construct, other researchers questioned the construct (Kraft et al. 2005), particularly regarding the dimensions of PBC (Rhodes & Courneya 2003). PBC was initially treated as a unidimensional construct, which has been adopted by the majority of TPB research (Ajzen 2002a). However, researchers have also viewed PBC as a multidimensional construct (Liu et al. 2007; Amireault et al. 2008). Ajzen (2002a) reviewed research samples to class PBC as a unitary higher-order concept with two interrelated components-selfefficacy and controllability. Similarly, Trafimow et al. (2004) demonstrated this classification empirically and through meta-analysis, and Kraft et al. (2005) presented self-efficacy and controllability as PBC components. A factor analysis of PBC showed distinct components of self-efficacy (e.g. ease/difficulty, confidence) and controllability (e.g. personal control over behaviour, appraisal of whether the behaviour is solely the decision of the individual) (Ajzen 2002a). An investigation into the two components identified that self-efficacy was the optimal empirical predictor of intention (Rhodes & Courneya 2003). Hence, PBC has different componentsvarious belief factors, which vary according to different behaviours (Ajzen 2002b).

These control belief factors are unidentified in the context of farm bargaining and thus exploration into this concept is necessary.

RQ3.3: How and why do the belief of women farmers in their own bargaining ability, skills and control over bargaining (perceived behavioural control), influence their intention to bargain?

2.4.5.4 Background factors influencing farm bargaining intentions

TPB recognises that background factors can indirectly affect behaviour through behavioural beliefs, normative beliefs and control beliefs (Ajzen 2011b). However, a myriad of potential background factors, which vary across the different domains of behaviour, could affect intentions and ultimately behaviour. These factors include age, gender, ethnicity, class, education, nationality, religious orientation, personality, general attitudes and values, intellect, past experiences and exposure to new knowledge (Ajzen 2011b). Researchers have demonstrated that various factors influence bargaining intentions. These include power differences (Magee et al. 2007; Small et al. 2007; Lammers et al. 2008), characteristics of the negotiation partner (Bowles et al. 2007; Eriksson & Sandberg 2012), cues of negotiability (O'shea & Bush 2002; Small et al. 2007), negotiation topic (Bear & Babcock 2012), offer characteristics (Gerhart & Rynes 1991), culture in general (Alserhan 2009; Volkema & Fleck 2012a), prior experience/opportunity recognition (O'shea & Bush 2002; Chapman et al. 2017), personality factors, norms and attitudes (Harris & Mowen 2001; Volkema & Fleck 2012a; Kapoutsis et al. 2013).

In addition to these factors, researchers studied the effect of gender (Babcock et al. 2002; Bowles et al. 2007; Small et al. 2007; Leibbrandt & List 2015; Kugler et al. 2018) and age (Volkema & Fleck 2012a) in the decision-making process of initiating bargaining. The role of gender in bargaining engagement is better understood as a phenomenon of culture. Specifically, individuals' understanding of bargaining is socially constructed and could vary according to time, place and situation (Volkema 2009). Regarding the negotiator's bargaining role, men are considered compatible and women are deemed incompatible (Kray & Thompson 2004; Amanatullah & Morris 2010). This gender difference privileges men (either through the perception or through actual privilege) more than women (Babcock et al. 2003; Bowles et al. 2005; Miles &

LaSalle 2009; Stuhlmacher & Linnabery 2013), which can strongly influence bargaining intentions. In addition to gender, variation of age could also affect bargaining initiation; for example, Volkema and Fleck (2012a) found that old age negatively associates with a propensity to initiate bargaining.

Further, power also plays a crucial role in bargaining behaviours. According to Keltner et al. (2003), control over important resources and the ability to govern rewards and punishment develops power and activates the behavioural approach system. Further, powerlessness triggers the behavioural inhibition system (Carver & White 1994). People evaluate the costs and benefits of bargaining initiation according to their perception of economic or relational effects and punishments or rewards (Reif & Brodbeck 2014). This evaluation triggers the behavioural activation or inhibition systems (Carver & White, 1994), which have a role in developing bargaining intentions. Previous research regarding power has demonstrated that individuals with more control over their own resources approach others more for bargaining (Anderson & Berdahl 2002; Smith & Bargh 2008). Powerful people perform more bargaining behaviours (Galinsky et al. 2003), negotiate more (Magee et al. 2007), and take more risks when bargaining (Anderson & Galinsky 2006; Maner et al. 2007).

Moreover, individuals' power can be influenced by culture. For example, in the context of intra-household bargaining (Agarwal 1997), power can be exercised between husband and wife. Wives' power is likely to be undermined in the negotiation of familial power relations (Seiz 1991; Kabeer 1997; Katz 1997). This phenomenon is more intense in patriarchy—a cultural construct. The authoritarian male-dominated system has oppressive and discriminatory tendencies (Daplah 2013). These factors should have a similar effect on farm bargaining.

In farming, various background factors could form behavioural beliefs that affect farm behaviour (Fishbein & Ajzen 2011; Sok et al. 2020). In the context of women's farm bargaining behaviours, economic resources generated from cash-crop farming accompany control beliefs, which develop power (Keltner et al. 2003). Therefore, these resources play an important role in farm-related bargaining within and beyond households (Vargas Hill & Vigneri 2011; Chant 2016). However, in developing countries, women's involvement in cash-crop farming is minimal (Quaye et al. 2016; Zakaria 2017), which gives them little bargaining power (Agarwal 1997). Their

involvement in this farming process could be limited as a result of several issues, including misperceptions that women possess limited knowledge and interest in cashcrop farming (Enete & Amusa 2010), male-dominated power relationships are embedded in patriarchal systems ((Nazneen et al. 2019; Acosta et al. 2020), men are in control of marketing and income (Alkire et al. 2013; Aregu et al. 2018) and sociocultural norms and practices limit women to travel to markets and sell products (Doss et al. 2018). In addition, rural women lack access to resources such as land, new technologies, education, skills-based training and extension services, which negatively affect their decision-making and bargaining power (Bisseleua et al. 2018).

Market conditions also have a crucial role to play in farmers' bargaining intentions. Farmers often lack the required knowledge and information to bargain with stakeholders in markets (Courtois & Subervie 2015; Batzios et al. 2021), which affects the control belief of their bargaining ability (Borges et al. 2014). Information regarding existing market prices is very important in farm bargaining (Fafchamps & Minten 2012); Svensson and Yanagizawa (2009) found that access to market information improves farmers' bargaining power. However, farmers from villages in developing countries often lack knowledge about existing market prices because they live remotely and have minimal communication with marketplaces. This disadvantage weakens farmers' bargaining powers (Lu et al. 2008; Batzios et al. 2021) and possibly reduces their bargaining intentions. Cooperatives can minimise the abovementioned problems by facilitating farmers with market access (Batzios et al. 2021) and increasing their bargaining power, which can influence their decision-making (Alho 2015). Further, cooperatives unite farmers and create collective bargaining power to negotiate in the market (Fikar & Leithner 2020).

However, farmers could personally fail if they are incapable of meeting the quality standards of agricultural products that a market demands. Further, perishable agricultural products could lead to deterioration in quality in a short period, which weakens farmers' bargaining power (Lu et al. 2008) and makes them vulnerable to opportunistic buyers (Johnson 1960). To prevent the diminished quality of perishable products, farmers require advanced technologies and managerial and financial capacities, which are difficult for smallholder farmers to obtain (Hu & Xia 2007). These needs can be supported by government agencies or development organisations

by establishing required facilities and strengthening farmers' knowledge and skills through market participation training (Balayar 2018).

This literature review has concluded that a substantial number of background and contextual factors could affect farmers' bargaining intentions. However, there is still a gap in the literature regarding how these factors affect smallholder farmers' farm bargaining intentions, especially in the context of the Eastern Gangetic Plain. Therefore, the present study attempts to answer this question in a qualitative manner through examining the following research question:

RQ2: What are the factors influencing the bargaining intentions of women farmers in the Eastern Gangetic Plain region?.

2.5 Conceptual Framework of the Qualitative Measurement Constructs in this Study

The previous sections critically examined the theoretical issues regarding the research questions. Figure 2.4 summarises the measurement constructs explored in this study through interview methodology (see Figure 2.4).

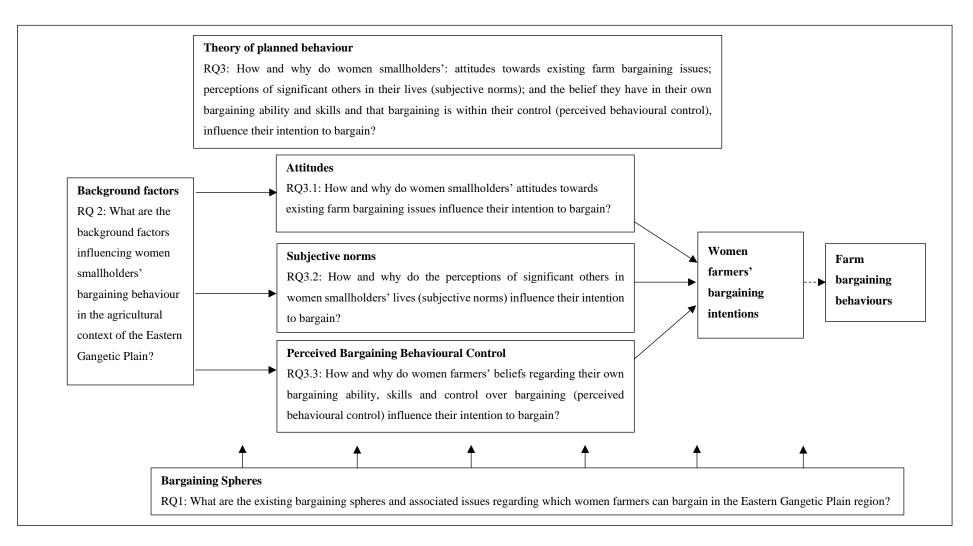


Figure 2.4: Conceptual Framework of the Qualitative Measurement Constructs in the Study

2.6 Summary

This chapter assisted in understanding and identifying the concepts of farm bargaining. The chapter's main objective was to explore the factors influencing the bargaining intentions of women smallholder farmers in the EGP region. From a theoretical perspective, the TPB informed the various research questions developed as a result of the theoretical gaps highlighted throughout the chapter. The literature informing the following research questions and sub-questions was critically discussed:

RQ1: What are the existing bargaining spheres and associated issues regarding how women farmers in the EGP region bargain?

RQ2: What are the background factors influencing the bargaining intentions of women farmers in the EGP region?

RQ3: How and why do women smallholders' attitudes towards existing farm bargaining issues, perceptions of significant others in their lives (subjective norms) and self-belief in their bargaining ability, skills and control over bargaining (PBC) influence their intention to bargain?

RQ3.1: How and why do women smallholders' attitudes towards existing farm bargaining issues influence their intention to bargain?

RQ3.2: How and why do significant others' perceptions in women smallholders' lives (subjective norms) influence their intention to bargain?

RQ3.3: How and why does the self-belief of women farmers in their bargaining ability, skills and control over bargaining (PBC) influence their intention to bargain?

Through this critical discussion of the litearture, research gaps were identified that assisted in forming the research questions. Factors discussed that influenced farm bargaining intentions included attitudes, subjective norms and PBC. The importance of background factors and spheres for farm bargaining were also discussed. The chapter concluded with a conceptual framework of the measurement contructs explored through interview methodology in this study. The next chapter presents the methodological aspects used to explore the current study's research questions.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The previous chapters explained the background to the study, and the study context and reviewed relevant literature on the farm bargaining of smallholder women farmers. The theoretical perspectives of farm bargaining intentions and certain behavioural and motivational theories related to farmers' bargaining behaviour were examined, which provided a conceptual framework summarising the measurement constructs in this study.

The purpose of this chapter is to explain the methodology used in this research, including the research plan and the data collection process. As Figure 3.1 shows, this chapter consists of ten sections. The research objectives and questions are stated again in Section 3.2. Sections 3.3 and 3.4 present a general overview of the research paradigm and research design, respectively. Section 3.5 discusses the procedure for management and analysis of the collected data. The ethical considerations and the research credibility are explained in Sections 3.6 and 3.7, respectively, followed by the limitations and delimitations in Section 3.8. Section 3.9 explains the reflexivity from the researcher and Section 3.10 concludes this chapter by summarising the main ideas presented in it.

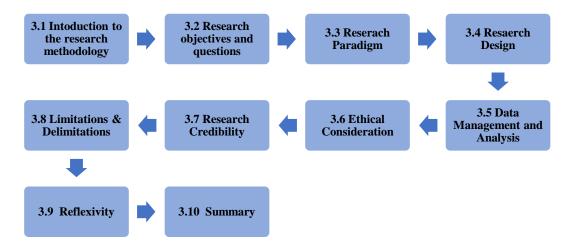


Figure 3.1: Structure of Chapter 3

3.2 Research Objective and Research Questions

The research objective and the related research questions (RQs) were reviewed in detail in Chapter 3 but are outlined again below.

3.2.1 Research Objective

The research objective of this study was to examine the factors influencing the bargaining intentions of women smallholder farmers in the agricultural context of the EGP region.

3.2.2 Research Questions

Based on the existing theoretical gaps and problems identified in the previous chapters (Agee, 2009), the following research questions were formulated to inform the research objective:

RQ1: What are the existing bargaining spheres and associated issues over which women farmers in the Eastern Gangetic Plain region bargain?

RQ2: What are the factors influencing the bargaining intentions of women farmers in the Eastern Gangetic Plain region?

RQ3: How and why do women smallholders' attitudes towards existing farm bargaining issues; perceptions of significant others in their lives (subjective norms); and the belief they have in their own bargaining ability and skills and that bargaining is within their control (perceived behavioural control), influence their intention to bargain?

RQ3.1: What are the attitudes of women smallholders' attitudes towards existing farm bargaining issues and how and why do these factors influence their intention to bargain?

RQ3.2: How and why do the perceptions of significant others in women smallholders' lives (subjective norms), influence their intention to bargain?

RQ3.3: How and why do the beliefs of women farmers in their own bargaining ability, their skills and control over bargaining (perceived behavioural control), influence their intentions to bargain?

The following sections identify the appropriate research design pathways that led to the successful execution of this research study. The research paradigm, research design and research methodology employed in the study are now discussed.

3.3 Research Paradigm

The American philosopher Thomas Khun (1962) is the first to have used the word paradigm to describe a philosophical way of thinking in research. This word originated from a Greek word and means *pattern* (Kivunja & Kuyini 2017). In research, the term paradigm refers to a researcher's worldview (Mackenzie & Knipe 2006). The worldview is a perspective, a set of shared beliefs or a school of thought that informs the interpretation of the research. Furthermore, Lather (1986) defined researchers' worldview as their beliefs about the world that they want to study and live in. Thus, each researcher's paradigm is the set of abstract beliefs and principles that guide that researcher's perceptions of the world.

Likewise, Guba and Lincoln (1994) defined a paradigm as the basic set of beliefs or the worldview that guides research action or an investigation. Denzin and Lincoln (2005) viewed paradigms as human principles that help to understand the researcher's background upon which she/he constructs meaning embedded in the data. Thus, a paradigm governs the selection of the topic to be studied and the methods to be used in the study as well as the interpretation of the study's results. Hence, in any scientific research, the paradigm is very important because it guides the overall research process.

3.3.1.1 Dominant Research Paradigms

Several paradigms are discussed in the literature. Candy (1989) suggested that the three dominant paradigms are positivism, interpretivism or constructivism and the critical or transformative paradigms. Tashakkori and Teddlie (2010) discussed a fourth paradigm—pragmatism. Comte (1880) is the first to have discussed positivism, a paradigm that follows a scientific method. It is also understood as rationalism and empiricism. The ontological standpoint reflects the positivist paradigm, which is also known as objectivism, which asserts the existence of reality that is independent of the human and cannot be mediated by humans or laws. This paradigm also supposes the existence of a single reality (Mertens 2014). Positivism is also termed as realism, given its nature of searching for one absolute reality. In positivism, a researcher aims to test

a theory or describe an experience 'through observation and measurement in order to predict and control forces that surround us (O'leary 2004 p.5). However, with the advancement of academic discourses (after World War II), it was realised that the rigorous, rigid way of positivism could be made more flexible in the form of postpositivism (Mertens 2014). Post-positivism assumes that several well-developed theories that are tested can help to find the truth (Cook et al. 1979). Mostly, positivism and post-positivism align with quantitative ways of data collection and analysis.

The interpretivist or constructivist paradigm proposes to understand the human experience (Cohen L et al. 2007), assuming that reality is socially created (Mertens 2014). This paradigm focuses on human experiences and believes that reality can be multiple or relative; therefore, the ontological standpoint for interpretivism is relativism (Cresswell 2009). The epistemological standpoint of interpretive is subjective. Here the researcher follows a deductive approach to explore reality (Orlikowski & Baroudi 1991). An interpretive methodology relies on a small sample size and applies qualitative data collection and analysis methods (Saunders & Lewis 2012).

The critical or transformative paradigm believes in the existence of reality and claims that reality is created by culture, gender, politics, religion and ethnicity, which interact to shape a society (Kincheloe 2008). This paradigm promotes research on social justice issues to resolve a particular political, social or/and economic situation that potentially lead to oppression, conflict, struggle or power imbalance (Mertens 2014). The critical paradigm aims to bring change and hence is also termed the transformative paradigm. The methodology it applies is dialogic.

Pragmatism focuses on the 'what' and the 'how' of a research problem (Creswell 2009). Pragmatists 'reject the scientific notion that social inquiry was able to access the "truth" about the real world solely under a single scientific method' (Mertens 2005 p.26). The pragmatist paradigm has no philosophical loyalty towards a particular method but maintains the research problem as central and applies all possible ways to investigate the problem (Creswell 2009). Therefore, this paradigm underlies a philosophical framework for mixed-methods research (Somekh & Lewin 2005; Tashakkori & Teddlie 2010).

3.3.1.2 Research Paradigm Elements

Guba and Lincoln (1994) mentioned that the set of underlying belief systems of a research paradigm are based upon four elements: ontology, epistemology, methodology and axiology. It is essential to understand these elements since they comprise the beliefs, norms, underlying assumptions and values of each paradigm.

The first, ontology, refers to 'one's own belief about reality' (Richards et al. 2013). It is the assumption one makes about the very nature or core of the social phenomenon under investigation to believe that something makes sense or is real (Scotland 2012). The understanding of ontology is essential because it clarifies the phenomena that constitute the world and are real to the researcher (Scott & Usher 1996; Kivunja & Kuyini 2017). Reality-based ontology seeks the answer to certain questions: What exists? What is real? What is the nature of reality? Does reality exist, or is it just an outcome of individual cognition? How can one sort existing knowledge? Hence, one's ontological beliefs direct how objective the relationship between the researcher and what can be known should be. The ontological views of the researcher further guide the epistemological and methodological choices.

The second element, epistemology, originates from the word 'episteme', which means 'knowledge' in Greek. In research, epistemology refers to how knowledge of the truth is gained (Cooksey & McDonald 2011). Hence, it seeks to understand what counts as knowledge in the world. For example, what is nature, in what forms does it exist and how can it be acquired and communicated? However, the most crucial question to be asked in epistemology is: How do we know what we know? This question then becomes the basis of investigations to ascertain the truth. The basis for generating knowledge in epistemology is categorised into four groups: authoritative, intuitive, empirical and logical (Slavin 1984). The knowledge of a researcher relies on people, leaders, books and institutions. Hence, epistemology uncovers knowledge in the context of one's research.

The third element, methodology, explains the research design, methods and approaches applied in a study (Keeves 1997). In other words, methodology is a theoretically guided approach in the whole process of producing data (Ellen 1984; Rehman & Alharthi 2016). In Crotty's (1998) view, methodology is a systematic

approach comprising a critically selected plan of action, process and design for research.

The fourth, axiology, refers to the ethical aspects that must be considered in planning the research. Finnis (1980) considered axiology to be the philosophical approach that facilitates making accurate and valuable decisions. It specifies the ethical code of research and the guiding values for the research (Kivunja & Kuyini 2017). Axiology focuses on the ways in which participants' rights can be ensured during the research and explains the ways by which moral issues and ethical demands are considered in the study (Kivunja & Kuyini 2017). Thus, axiology guides the overall approach to be used for research implementation, so it takes place in a respectful, peaceful way. The philosophical stances taken for a study are shown in Figure 3.2.

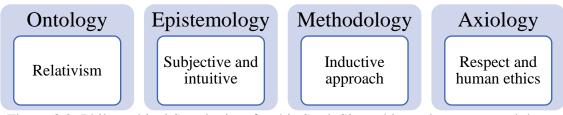


Figure 3.2: Philosophical Standpoints for this StudySince this study represented the study participants' bargaining experiences qualitatively and the researcher believes that these experiences are derived from multiple realities, this study was underpinned by relativism.

Furthermore, the researcher believed that each study participant would have an individualistic bargaining experience owing to intersectionality and the context-specific aspects of the research that raised the possibility of multiple truths. The researcher investigated those truths through a subjective inquiry into the beliefs and feelings of these participants. Hence, the researcher's view was underpinned by subjective and intuitive epistemology. The methodology used in this research was the inductive approach. Finally, the axiology for this research guided the researcher to treat all the study participants with respect and according to human ethics principles.

3.4 Research Design

Research design refers to the overall strategy selected to address the research problem effectively (De Vaus 2001). It is also popularly known as the 'blueprint' for empirical

research (Dulock 1993). Therefore, it constitutes a plan for the overall execution of the research, including data collection, analysis and interpretation (Saunders et al. 2009).

Saunders et al. (2016) depicted research through an onion diagram. It is clear from Figure 3.3 the research philosophies; research approaches; methodological choices, strategies, time horizons; data collection techniques and procedures are essential research parameters and must be considered well in selecting a suitable research design for a study. The clarity of those parameters provides methodological insight in leading a successful research study.

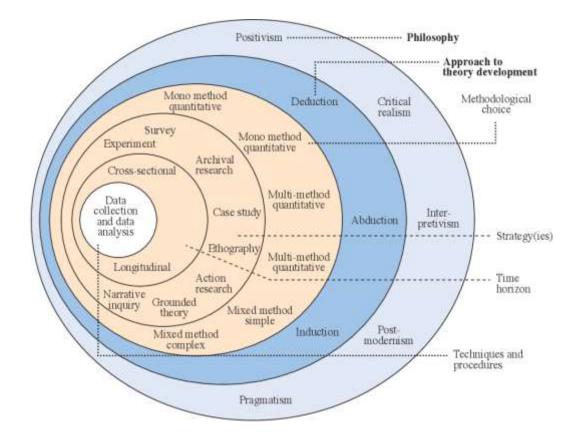


Figure 3.3: Research Onion to Select a Research Design (adapted from Saunders et al. 2016)

Broadly, three types of research designs are discussed in the literature: (i) descriptive research design, which describes the population; (ii) exploratory research design, which classifies the nature of the problem and helps to develop hypotheses; and (iii) causal research, which tends to find the statistical causal effect among study variables (Zikmund et al. 2012). The researcher needs to adopt a suitable strategy to address the research problem since it affects the nature of a study and its outcome (Joslin & Müller

2016). Many authors suggest that the research design must be guided by its purpose or the problem it considers (Andrew & Halcomb 2007; Venkatesh et al. 2013). Joslin and Müller (2016) noted that while researchers identify the research design for a study, they usually adjust the research questions according to the specific research design. However, adjustments can reduce the variance in the results and also lead to predictable findings. Hence, the selection of the research design is critical because it should fit the research problem, which means the researcher should avoid selecting a design first and then finding suitable questions.

The three approaches widely used to implement a research design are the quantitative, qualitative and the mixed methods approach (Creswell 2009). Quantitative methods usually test theories based upon hypothesis generated for the study using experimental or non-experimental techniques (Creswell 1994). Qualitative methods are best known for their appropriateness to unpack people's individual experiences, and complex social and human issues (Creswell 1994; Andrew & Halcomb 2007). A mixed-methods approach integrates both quantitative and qualitative methods.

Owing to the dearth of research conducted in the study area of this research, an exploratory study design was adopted, which helped to explore the women farmers' bargaining intentions and factors impacting their bargaining intentions. Hence, this study employed a qualitative methodology.

3.4.1 Appropriateness of Qualitative Methodology

This study adopted a qualitative approach based on the nature of its research objective and questions. This decision was made after reviewing the strengths and weaknesses of the qualitative and the quantitative approaches (Guba & Lincoln 1994; Kelle 2005; Zikmund et al. 2012; Choy 2014; Basias & Pollalis 2018). Quantitative and qualitative approaches are two main approaches that dominate social research. Quantitative research tests the hypothesis with the help of numerical data. It provides averages and patterns, test causal relationship and generalise predictivity of a theory based on numerical measures (Zikmund et al. 2013). Although quantitative approaches are helpful, it is limited to problems and issues that can be evaluated objectively. However, not all social issues can be measured with numbers and analysed statistically to predict theory generalisations (Creswell 1994). Some problems can only be evaluated subjectively, such as people's feeling, experiences or values (Creswell & Poth 2016).

In contrast to quantitative studies, qualitative studies provides the inner meaning, indepth account and new insights into the phenomena investigated in a non-numerical manner, through techniques that offer elaborative interpretations (Zikmund et al. 2013). Further, it explains the complex, contextual, interactive and interpretive dimensions of a study (Salkind 2010). The techniques used in qualitative research include interviews, field notes, photographs, conversations and memos (Denzin & Lincoln 2005 p.5). Furthermore, questions are less structured in qualitative methods compared with those in quantitative methods. In qualitative studies, the researcher plays a key role in extracting the exact meaning from participants' unstructured responses, such as those in texts, visuals, observations, body language and voice tones in recorded interviews, life story narrations and general discussions (Zikmund et al. 2012). The qualitative researcher must remain vigilant during the entire data collection process because a simple gesture from a respondent can signify valuable information. Further, Bogdan and Biklen (1997) emphasised that by using the qualitative approach, a researcher develops the ability to answer where, when, how and under what circumstances behaviour comes into actuality. The researcher can also elaborate the underlying traditional backgrounds and movements that are relevant to the research situation (Bogdan & Biklen 1997).

This study is similar to other studies that explore human experiences embedded in complex gender dynamics in a specific sociocultural context. In such studies, these human experiences are studied through qualitative measures (Jost et al. 2016) and the findings are presented in the form of experience-based stories, views, beliefs and ideas explained by study participants within their actual context. The current study attempted to understand the farm bargaining intentions of smallholder women farmers, which are influenced by the complex sociocultural and gender dynamics in the farm settings. Hence it focused on understanding women farmers' behavioural experiences by asking them for their opinions. Several researchers have discussed the link between gender power relations and bargaining (Kandiyoti 1988; Tu 2004; Meurs & Ismaylov 2019). Wright and Annes's (2016) study on the empowerment experiences of women farmers in a value-added agricultural setting employed qualitative techniques. So did the study

by Kilby et al. (2019) study on the effects of patriarchal norms on women farmers in West Bengal region. As the current study is of a similar nature, a qualitative approach was deemed to be appropriate to explore, discover and provide inductive logic.

3.4.2 Qualitative Study Approach

Zikmund et al. (2012) mentioned that to understand the existence of phenomena, qualitative study tools are most appropriate. Qualitative studies use diverse analysis techniques. The most suitable qualitative technique(s) for a study can be determined by the nature of the problem and the field of study (Zikmund et al. 2012). The major categories of qualitative research include:

- narrative;
- ethnography;
- grounded theory;
- phenomenology; and
- case studies.

In narrative research, 'narrative' refers to text or any discourse used for qualitative inquiry (Creswell & Poth 2007). Autobiographies, biographies, chronologies, epiphanies, historical contexts, life stories and personal stories are some examples of the narrative research approach (Creswell & Poth 2007). This type of research includes an account of a discrete event, such as an experience of pregnancy or a journey to a place that has a clear beginning and ending (Bloor & Wood 2006).

Ethnography is the study of culture-sharing groups (Morse & Richards 2002) that focuses on social arrangements, norms, beliefs, behaviours and attitudes (Schensul & LeCompte 1999). In ethnography, a researcher completely immerses her/himself in the study culture by becoming part of that culture through highly active or passive participation (Feldman 1998). Further, ethnographic research always centres on two goals: to understand the sociocultural problem of a community or institution, and to identify a solution to the problem to bring positive change in the community or institution (Schensul & LeCompte 1999).

The term 'grounded theory' was coined by Glaser and Strauss (1967) in their book, *The Discovery of Grounded Theory*. Similar to the other qualitative methods, grounded theory is not just an analysis technique but is an analysis approach that combines many other techniques flexibly to generate insights from qualitative data (Bloor & Wood 2006). It uses an inductive investigative approach by which a researcher poses questions to respondents and then examines their answers or evidence from historical records repeatedly to obtain deeper insights (Zikmund et al. 2012). The use of this technique is suitable in highly dynamic situations that involve significant changes over time (Zikmund et al. 2012). According to Strauss and Corbin (1990), grounded theory researchers ask two key questions: 'What is happening here?', and 'How is it different?'.

Phenomenology aims to explicate the lived experiences of individuals or groups of people who experience a phenomenon ((McCaslin & Scott 2003; Creswell & Poth 2007; Christensen et al. 2014). The strength of phenomenology is its ability to ensure thorough understanding of a phenomenon (Pereira 2012). Further, Mangan et al. (2004) viewed phenomenology as a model to deal with actions and behaviours generated within the human mind as an outcome of specific processes. However, human experiences are inherently subjective and context specific (Zikmund et al. 2012). Bentz and Shapiro (1998), and Kensit (2000) argued that phenomenology can depict deep descriptions of phenomena and their settings. Phenomenological research provides an opportunity to gain an understanding of two critical questions: the lived experiences of individuals or groups regarding certain phenomena; and the meanings, structures and essence of the lived experiences of those experiencing the phenomena (Creswell & Poth 2007).

A case study approach is a comprehensive scientific investigation of a single case or a group of cases explaining a phenomenon (Yin 2003; Gerring 2006; Zikmund et al. 2012). Gerring (2006) described eight main characteristics of a case study research as: i) qualitative, small sample size; ii) holistic investigation of a phenomena; iii) particular way of examination such as textural, field research; iv) naturalistic; v) case and context are complex to explain; vi) robust triangulation as multiple sources of evidence; vii) a focus on single observation; and viii) a focus on a single phenomenon. Further, Bloor and Wood (2006) highlighted the case study's strength to explain a phenomenon through detailed examples and to generate or test theories.

In view of this discussion, it became clear that the application of the phenomenological approach combined with case study methodology were suitable to examine the farm bargaining behaviour of women farmers. In this study, the experiences of women farmers were examined regarding the phenomena of bargaining in the context of the EGP region. Case study methodology is a reliable research approach, particularly when a comprehensive, in-depth investigation is required. One of the reasons for the popularity of case studies as a research method was that researchers became increasingly concerned about the limitations of quantitative approaches in presenting holistic and in-depth interpretations of the social and behavioural issues under consideration (Zainal 2007). Further, Tellis (1997) mentioned that a case study approach helps researcher to go beyond the quantitative measures and to attain deep understanding of the topic through complete investigation and analysis of the cases.

There are several criticisms of case study methodology regarding its robustness. Therefore, crafting the case study design needs paramount importance. Either a single case or a multiple cases approach can be adopted depending on the objective of the investigation. Multiple case study design helps to investigate a real-life event that shows numerous sources of evidence and triangulates the information through replication rather than sampling logic (Zainal 2007). Hence, a careful selection of the case study method can be robust when it assures that: i) it is the only feasible method to produce implicit and explicit data from the participants, ii) it is the best way to answer the research question, iii) it follows the proper set of guidelines for data collection iv) the scientific conventions used are followed, v) a 'chain of evidence during data collection are systematically maintained particularly when interviews and direct observation by the researcher are the main sources of data and vi) the case study is linked to a theoretical framework.

Three types of case study designs are outlined in the literature: exploratory, descriptive and explanatory (Yin 2003). The first, exploratory case study design sets out to explore a phenomenon of interest of the researchers, where there is very limited prior research available on the topic, and when there is no single set of outcomes. It often forms the basis of much larger studies. Explanatory case studies, in contrast, seek to answer the 'how' and 'why' questions (Yin 2014). They endeavour to 'establish cause-and-effect

relationships, determining how events occur and which ones may influence particular outcomes' (Hancock & Algozzine 2017, p. 37). The use of qualitative research methods to identify causal relationships and develop causal explanations is now accepted by a significant number of both qualitative and quantitative researchers, which was not the case previously (Maxwell 2004). Descriptive case studies "attempt to present a complete description of a phenomenon within its context" (Hancock & Algozzine 2017, p. 37). The focus is on one event in isolation with no attempt to generalise to other situations (Yin 2014; Hancock & Algozzine 2017). Descriptive case studies explain the casual relations of a natural phenomenon related to a topic. The goal is set, data are collected, and a story based on the data is narrated. Likewise, explanatory case study design explains the research question related to a topic in detail both from surface and deep level to explain the phenomena.

This study drew on all three of these case study designs. The study explored, described and provided explanations for the phenomenon of women farmers' bargaining in the EPG. The essentials of the explanatory case study approach that guided the data collection for this study were i) collecting evidence: the data required was collected by multiple sources of evidence and the chain of evidence was maintained, ii) analysing case study evidence: the analysis of the data was guided by theoretical framework used in this study, iii) reporting the case study: all the data were studied closely to identify inference related to the inquiry for reporting (Kohlbacher 2006). This study chose thematic analysis of the data.

In this case study, the language used during interviews was crucial in gathering the ascribed meanings of the farm bargaining experiences (Josselson 2006). The researcher, as a native of the study site, had the advantage of being able to speak the local Maithili language and hence was able to bond with the participants during the interviews, which helped to extract real-life experiences and to engage in deeper conversations to extract individual variations in participants' bargaining experiences.

3.4.3 Appropriateness of Case Study Site Selection

The study was executed in the EGP region of India and Nepal in the study sites shown in Figure 3.4. The study site selection was based on the EGP features of dense population and rural poverty in addition to the existing social stratification according to class, gender, caste and the landlord – tenant farmer system (Sugden, Maskey, et al. 2014). Agriculture was found to be one of the main occupations of the region's population, and most farmers in the region were characterised as smallholder farmers who cultivated farms less than 2 hectares in area (Sugden 2016b). Further, the involvement of women in EGP in farming has tended to increase owing to the increase in the male out-migration (Lokshin & Glinskaya 2009; Pattnaik et al. 2017). Therefore, since these sites from the EGP region had these characteristics, they were selected for study.

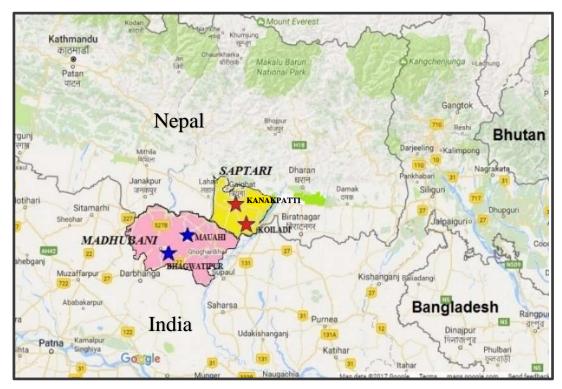


Figure: 3.4: Map of Study Sites (adapted from Google map) The specific sites selected were from the Saptari and Madhubani districts in the EGP region. From the Saptari district, two villages, Kanakpatti and Koiladi in Province No. 2 of Nepal, were selected. Likewise, from Madhubani, two villages, Bhagwatipur and Mauahi located in Bihar, were selected.

This study formed part of a larger project: "The project for dry season irrigation for marginal and tenant farmers (DSI4MTF)". The larger action research project was funded by the Australian Centre for International Agriculture Research (ACIAR) and implemented in the EGP regions of Nepal, India and Bangladesh. Some of its research implementation sites were located in the following four sites: Kanakpatti, Koiladi, Bhagwatipur and Mauahi. As mentioned, these sites were selected for this study. The

larger project was implemented during 2015–2019 and focused on supporting marginal and tenant farmers in the region by providing technical skills for sustainable agriculture in the dry season. The larger project had implemented models of farmers' collectives ((Sugden 2016b; Leder, Sugden, et al. 2019). The current study selected the women farmers from the four sites and found that some participants were involved in the project. The women farmers from the project were selected to draw on their knowledge and experiences with collective farming and farm bargaining in the village. No other collective farming project was in operation at the study sites during the data collection period for the current study.

3.4.4 Kanakpatti and Koiladi village

The Kanakpatti (as shown in figure 3.5) is one of the ancient villages located on the northern foothills of the Churiya range in Saptari District of Nepal. It is situated approximately a kilometre inwards from the east-west highway. This village has approximately 177 households. Most of the residents are Tharu ethnic people who are considered as indigenous to the Terai region. Apart from the indigenous population, there are *Dalit* and Muslim residents in the village who have migrated from elsewhere. Muslims entered the village with a business purpose to make a living on the unoccupied government land. The Tharu community owned most of the land in the village. Their livelihood is also mostly based on agriculture. While funds transfer from migration becomes another major source of income, there are other prospects to earn a livelihood such as selling forest wood, working for a wage and providing a service.



Figure 3.5: Kanakpatti village (source: Researcher)

Koiladi is a rural Terai village (as shown figure 3.6), in the Saptari district of Nepal. It is situated less than 3 km from the Indian border. It is one of the most accessible villages that still faces developmental challenges. The ancient villages have approximately 548 households. The caste distribution shows that a majority of the population is Singh (upper caste), followed by Chaudhary, Muslim and Dalits. Male outmigration is very high with seasonal migration to India in search of a better livelihood.

Apart from incoming funds through migration in the village, agriculture, fishery, and wage labour are other everyday economic activities that the villagers participate in. There is a vast gap between the incomes of landlords and tenants.



Figure 3.6: Koiladi village (source: Researcher)

3.4.5 Bhagwatipur and Mauahi Villages

Bhagwatipur is a rural village in Madhubani (as depicted in figure 3.7), Bihar in India. The village consists of 256 households constituting three major castes. According to Leder et. al (2017), the caste distribution shows that 62% are Yadavs from the Other Backward Caste (OBC), about 20% are Rams considered as Schedule Caste (SC) or Dalits, and 19.9% Malaha, who are the fisherman community belonging to the OBC. In the whole village, there is only one house of Brahmins, the upper caste (UC) family. The Brahmin family owns substantial land and are the landlords of the village who have created job opportunities for the villagers. Although the other caste population is in the majority compared to the UC, they own less land compared to the UC family. From a historical perspective, the UC family rented their land to the local OBC and SC communities. Therefore, there is a significant economic gap between the UC and the rest of the community.



Figure 3.7: Bhagwatipur village (source: Researcher)

Similarly, the Mauahi village falls under the Babubhari Panchayat (as depicted in figure 3.8), of the Madhubani district which consists of 556 households. The majority (60%) of the population in the village are Brahmins (upper caste), twenty-five percent are Muslims, who are predominantly the wage labourers for construction work; and the remaining fifteen percent are from OBC and SC. In most of the households, male members have migrated to the cities to work in temporarily jobs. These male workers come back to support their families during the peak agricultural season while those who cannot return, support their families financially by working as hired labour.



Figure 3.8: Mauahi village (source: Researcher)

3.4.6 Research Procedures

The research process comprised three main stages: sample selection; data collection technique and implementation; and data analysis.

3.4.6.1 Sample Selection

The research was conducted in the sample of women farmers from low-resource settings in the EGP. The farmers were smallholders who cultivated farmland measuring less than 2 hectares and whose livelihood was predominantly dependent on their farming. The farming practice of the farmers was individual and/or collective farming.

3.4.6.2 Sampling Technique Employed

Probability or non-probability sampling can be applied to select study participants. The former is mostly used in quantitative research studies, whereas the latter is used in qualitative research studies. Probability sampling demands random sampling and collects information on the characteristics of the entire population under study, whereas the sampling technique used in this research was determined by the characteristics of the population studied and the research objectives. Since this research adopted a qualitative approach, which is a naturalistic study method and attempted to understand complex human behaviours in their natural settings, the non-probability sampling technique was used in this study (Marshall 1996).

3.4.6.3 Sampling Strategies Employed

Three approaches can be used in the sampling technique for qualitative research: convenience, purposive, and theoretical sampling (Marshall 1996). *Convenience sampling* involves selecting accessible participants. Its benefit is that it is cost-effective in terms of time, money and effort. However, its main weakness is that it is the least rigorous approach and may lack intellectual credibility (Marshall 1996).

Purposive or *judgemental* or *purposeful sampling* is a more rigorous sampling technique than convenience sampling (Etikan et al. 2016). In this sampling technique, a researcher identifies people who fit the type and nature of the study to achieve an indepth understanding (Etikan et al. 2016). It starts with a purpose in the researcher's mind based on the intention to inform the research questions and to include suitable people of interest. It is often based on the literature review and the researcher's practical knowledge of the research area (Marshall 1996). This type of sampling is considered a more rational way to select a sample (Marshall 1996). Furthermore, a researcher can stratify the sample based upon the intersectionality of key features or beliefs of the respondents. Hancock (2007) argued that if researchers can cover intersectionality in a study population, such as race, gender, class, caste, sexual orientation-based marginalisation, they could uncover ground-breaking realities that

add to the power of purposive sampling. The power of purposive sampling can increase if the sample covers a broad range of participants and outliers, including participants who have unique experiences or particular expertise, such as key informants (Marshall 1996). Similarly, in *theoretical sampling*, the sample selection is driven by theory. This strategy is often used in grounded theory approaches (Marshall 1996).

This study used a *non-probability purposive sampling* technique. According to Zikmund et al. (2013), in a purposive sampling method, researchers can select samples that fulfil some criteria based upon their judgement and that satisfy the research purpose. In this approach, the researchers have developed knowledge based on a literature review, which enables them to develop a conceptual framework, identify the variables that can influence an individual's contribution and to purposely select the sample. Further, Marshall (1996) pointed out that if the study aims to develop or expand a framework depending on several variables, purposive sampling is the most suitable technique. Therefore, to meet the research objective, women farmers from the EGP region were selected purposively for this study.

3.4.6.4 Sample Size Justification

Qualitative studies tend to develop the depth of understanding, rather than its breadth, in terms of sample size in a non-positivist paradigm (Boddy 2016). Therefore, in general, a qualitative study uses a smaller sample size than quantitative studies (Mason 2010). Moreover, for a qualitative study in which the population is relatively homogeneous a sample size of 30 in-depth interviews is sufficient (Guest et al. 2006; Mason 2010; Baker & Edwards 2012). A large sample size would lead to the repetition of responses and can be resource inefficient; therefore, an essential guideline to determine the sample size for a qualitative study is often the concept of saturation (Mason 2010; Malterud et al. 2016). Saturation in a qualitative study means that 'no new information and themes' are observed in the responses and reaching this situation in data collection is termed as reaching the 'saturation point' (Guest et al. 2006). Therefore, the data collection can be terminated on arriving at the saturation point (Malterud et al. 2016). In this study, most of the information started to repeat indicating reaching saturation point after 32 interviews, however, an additional three interviews were conducted to check whether new information emerged. These three interviews failed to obtain new information, therefore data collection was stopped after 35 interviews. Hence, it could be concluded that saturation was reached. Table 3.3 shows the sample size selected from each study site.

Study Site	Saptari (Nepal)		Madhubani (India)		Total
Participants	Kanakpatti	Koiladi	Bhagwatipur	Mauahi	
Women farmers	10	8	10	7	35
Key informants	6	4	5	2	17
Total	16	12	15	9	52

 Table 3.3. Site-specific Distribution of Participants by Category (n = 52)

This study considered the aforementioned guidelines in finalising the sample size. Section 2.2 discussed the study context, and the homogeneity of the population in the EGP region. Thirty-five women smallholders were purposively selected to answer the research questions outlined in this study. In addition, to ensure complete understanding of the bargaining intentions of women farmers, the study used multiple perspectives sources (Braun & Clarke 2013). As the possibility of multiple truths exists relating to the bargaining intention of the 35 women farmers, their answers were verified using the responses of 17 key informants who were selected because they were possible counterparts to these women farmers for farm bargaining in the EGP region. The key informant category included men farmers, landlords, input suppliers (i.e. input suppliers who sold seeds, fertiliser and chemicals); middle people and DSI4MTF project staff from the selected sites. Women key informants were also included in the study.

3.4.6.5 Selection Criteria and Participant Recruitment

In line with the requirements of this study, the following selection criteria were employed to select the women participants (farmers):

- women farmers who engaged in individual and/or collective farming;
- all the participants for interviews were more than 18 years of age and could explain their bargaining experiences. This criterion was guided by the human ethics procedure of the University of Southern Queensland;
- the study participants were smallholder farmers who cultivated less than 2 hectares of farmland; and

• the study participants' livelihood was predominantly dependent upon their farming since they also sold what they produced.

After finalising the methodological approach, the data collection process was planned by liaising with an employee of the International Water Management Institute (IWMI), the research implementation lead for the DSI4MTF project in the Nepal and India sites. An email was sent to IWMI's Kathmandu office to inform them about the research and to request data collection support. The IWMI provided the contact details of one key person from each study site. A face-to-face meeting between the researcher and the key person was arranged at each study site, and a detailed data collection plan was finalised. To recruit women farmers for this study, the key people, who were familiar with the village farmers, helped the researcher to prepare a list of possible women farmers who met the study's selection criteria. Each key person also helped the researcher to find a local person for walking with the researcher through the village to find the women farmers and the key informants for the purpose of data collection.

During the interviews with women participants, they were asked about the following issues: the name of the seller from whom they bought seeds, fertiliser and pesticides; ploughing; threshing; and transportation for their farming. The information on their landlords was also obtained from the women farmers. Therefore, at the end of all interviews with the women participants in each village, a list of key informants was also prepared. Most of the farmers in a village purchased from a common seller, which helped in identifying these agri-supply chain actors as key informants to interview for this research.

3.4.7 Data Collection Technique

The in-depth interview technique was identified as the most appropriate method of data collection. Since this study required gathering in-depth information on human experiences, the interview technique 'provides a unique opportunity to uncover rich and complex information from an individual' (Cavana et al. 2001, p. 138). The interview technique, the data collection process, the interview methodologies and the interview settings are now discussed.

3.4.7.1 Interview Technique

There are three types of interviews: structured, semi-structured and unstructured (Gill et al. 2008). In *structured interviews*, a list of predetermined questions is administered to elicit structured responses and no or very few further probing or follow-up questions are asked. *Unstructured interviews* do not involve any preconceived ideas of the researcher, and the interview progresses in a fluid manner (May 1991). Each subsequent question in this type of interview is directed by the interviewee's response to the previous question. *Semi-structured interviews* involve a list of several guiding questions that help to define the areas to be explored but also allow the interviewer to elect to pursue or not pursue the responses in detail ((Britten 1999). Semi-structured interviews are a powerful method of obtaining interview data and were found suitable for this exploratory study (Gill et al. 2008).

3.4.7.2 Interview Tools

As semi-structured interviews were selected as the data gathering tool, an interview guide was developed prior to conducting the interviews. Three senior academics with knowledge about the research topic were asked to provide feedback on the suitability of the questions. The questions were amended based on their feedback. The interview guide was used to guide the questioning of study participants in the interviews.

3.4.7.3 Data Collection Process

The data collection started at the Kanakpatti village, followed by Koiladi, Bhagwatipur and Mauhahi villages. The researcher's familiarity with the study sites, the IWMI's support and the researcher's understanding of the local language and culture ensured the smooth execution of the data collection.

The local arrangements for the researcher's visits to the Nepal and Indian sites were made with the help of the IWMI. The researcher stayed in the Saptari district for data collection at the Nepal sites and at the Sakhi's facilities at the India sites. Sakhi is a local non-governmental organisation (NGO) located in the village of Bhagwatipur, Madhubani.

A brief introduction to the research was given to the IWMI office members. The team consisted of one centrally located project coordinator from IWMI (who was

responsible for the overall DSI4MTF project operations), one employee at the local level from the implementing partners (iDE in Nepal and Sakhi in India) who was responsible for project supervision, and one local resident staff from the respective villages, who was responsible for implementing and monitoring the day-to-day activities of the farmers in the project.

Once the researcher reached the study sites, a micro plan for data collection was finalised with the help of the key people and the identified local people, who resided in the same village and were familiar with the villagers. In addition, each local person assisted the researcher to arrange a suitable interview time with the women farmers and the key informants.

The researcher reached the villages during the *Kharif* season, or autumn, which is the peak season to harvest fully ripened paddy. Therefore, most of the villagers were busy harvesting. This harvesting season provides farmers an opportunity to earn from harvesting, and many farmers also worked as daily wage labourers. This season is crucial to the villagers, as reflected in one local saying, '*baap marlau ta rakh aur pahile kaat*', which means '*even if your father has died, keep his body at home and first complete your harvesting*'. This saying indicates that paddy cultivation is demanding and the intensive efforts it requires may be wasted if harvesting is delayed. Therefore, observing the value of this important time in a farmer's life, most of the interviews with the farmers were conducted on the farms to minimise the impact on their farming activities.

The researcher took field notes during the semi-structured interviews to describe the information collected during the data collection process. The field notes were referred to later during data transcription and analysis. The interviews lasted for 1–2 hours, depending upon the aspects that emerged during the discussions and the respondents' interest in the topic. For every interview, the researcher followed the standard ethics protocol (explained in Section 3.6).

3.4.7.4 Interview Settings

Since the farmers were busy harvesting, several interviews were conducted on the paddy fields. For the interviews with the key people, the researcher travelled to their workplaces to arrange appointments. Once an appointment was confirmed, the

researcher, along with the designated local person, walked through the villages to interview the participants individually.

3.4.7.5 Interview Process

The following steps were taken in the interview process. First, the interviews commenced by building rapport with participants and obtaining consent from each of them to participate in the study. Then a private interview setting was identified that provided a suitable space where they could feel confident and enabled to fully participate in the interview. With their consent, all interviews were recorded using a voice recorder.

3.4.8 Language and Translation

The language of the interviewer is critical in qualitative research (Welch & Piekkari 2006), because it helps to grasp the essence of the question and the depth of interview responses. Tsang (1998) emphasised that in interviews with participants, effective communication can be ensured when the interaction is in the respondent's language. Furthermore, it enables the respondents to express themselves fully as well as to understand the research topic of interest. It also assists the researcher to establish a good rapport and to initiate critical discussions in order to gather in-depth information during the interview.

The researcher, a native of the EGP region, had the advantage of speaking and understanding the local language as well as understanding the culture of the region. Having local language knowledge ensured three significant benefits. The researcher could: ensure the study respondents understood the questions and if needed the researcher could explain the questions more clearly; grasp what the respondent had expressed; and maintain rigor in the research in terms of reflexivity (Darawsheh 2014). Therefore, the interviews in this study were in the local Maithili language.

3.5 Data Management and Analysis

A detailed data management plan (DMP) was developed with the support of the USQ Library, before collecting the data. The DMP format is presented in Appendix G.

3.5.1 Data Analysis

Data analysis is considered the most complex, yet crucial, phase in research because only appropriate data analysis can lead to accurate findings (Thorne 2000). Smith et al. (2009) argue that in case study, the data analysis process must contain the researchers' initial notes on descriptive, linguistic and conceptual comments. Content and thematic analysis are two commonly used approaches in qualitative data analysis.

Content analysis is an umbrella term for various textual analysis techniques (Powers & Knapp 2010). It is a method of systematically coding and categorising large amounts of textual data in order to identify trends and patterns of words used, their frequency, their relationships, as well as the structures and discourses of communication (Grbich 2012). Content analysis examines who says what, to whom, and with what effect to describe the document's content (Bloor & Wood 2006).

Thematic analysis is an independent qualitative analysis approach that explores meaningingful patterns in data. In this approach, the researcher analyses data themes to find meaning and reporting patterns (themes) within data. This method is driven by a research question and a reliable qualitative approach to analysis. Due to the exploratory nature of the thematic analysis, research topics may vary after coding and finding themes.

Both content and thematic analysis appear to have the same goal: to analyse narrative materials from life experiences by breaking them down into relatively small content units and subjecting them to descriptive treatment (Sparker & Holloway 2005). Content analysis is an excellent way to report on the most common patterns in the data. (Grbich 2012). As a versatile and practical research tool, it has been stated that thematic analysis provides an in-depth and intricate explanation of the data (Braun & Clarke 2006). Thematic analysis entails searching for and discovering common threads that span an entire interview or group of interviews (Grbich 2012). Content analysis employs a descriptive method for both data coding and interpretation of numerical counts of codes (Morgan 1993). In contrast, thematic analysis offers qualitative, comprehensive, and detailed information (Braun & Clarke 2006). Considering the nature of the research questions in this study and in view of the discussion above, this study employed thematic analysis.

Three analysis strategies were used in this study: first, preparing and organising data as text, field notes and transcripts; second, identifying emerging themes based on codes and condensing these codes; and third, presenting the data as results.

The researcher transcribed the interviews and started by reading through the transcripts for immersion in the data. The detailed data analysis involved:

- identifying what is shared among the participants and what is unique to a participant;
- describing the experience, which transitioned to interpreting the experience;
- ensuring commitment to understand the participant's viewpoint;
- maintaining psychological focus on personal meaning-making within a context;
- generating themes according to the study objectives.

The interviews were analysed in line with the qualitative data analysis protocol. First, the researcher transcribed the interviews by reading the field notes and listening to the audio recordings. The text of the interviews was imported into NVivo software after transcription. Next, the themes and sub-themes were identified. The notes included the coding and categorisation of data and the subsequent identification of the main categories, themes and sub-themes (Patton 2002).

The researcher remained aware on the multiple realities about these women farmers' bargaining intentions, therefore the analysis of their responses was undertaken considering the responses from their counterparts who were also interviewed. For instance, there were specific questions asked to different categories of women farmers and key informants while similar questions in all categories have been asked to validate the results from all participants. For example, "Who is better at farm bargaining? Who bargains the most?", and Who can perform bargaining of better quality?". Therefore, the analysis took into consideration the responses from multiple respondents and endeavoured to unravel the reasons behind their answers.

Further, for research purposes, all opinions from participants were collected and analysed. The similar themes were gathered; identified how, under the same theme, different opinions had emerged among the participants; and examined how these themes related to the research objective. The researcher used a coding technique that categorised the discussion scripts, such as sayings, anecdotes and interactions; that is, the researcher noted questions and variant opinions from others (Kitzinger 1995) for developing the themes for analysis.

The demographic characteristics of smallholder farmers were collected in a checklist, entered in an Excel sheet and then transferred to SPSS software for descriptive analysis.

3.6 Ethical Considerations

To ethically undertake any research, two significant dimensions of ethics must be considered: procedural ethics and ethics in practice (Guillemin & Gillam 2004). The ethical dimensions of this study are discussed next.

3.6.1 Procedural Ethics

A primary requirement in the research process was completing an application form for consideration by the USQ ethics committee to ensure ethical participation of humans in the research (Guillemin & Gillam 2004). The researcher fulfilled the ethical procedure of USQ, where it is compulsory for any undergraduate or postgraduate researcher who wishes to undertake research involving human participants to obtain ethical approval from the Human Research Ethics Committee (HREC) before commencing research. A detailed application, using the USQ human ethics approval form, was submitted to the HREC after it was endorsed by the principal supervisor. The HREC scrutinised the research procedure in detail to ensure it would use a noharm approach to the study participants. Once all the requirements were satisfied, HREC granted an approval letter (Appendix C) specifying a time frame within which the research had to be conducted. The approval letter also mentioned that the HREC must be promptly informed about any change in the procedure during administration and that a final report must be submitted detailing the data collection process. The researcher received an approval letter before commencement of the research. Consent from the DSI4MTF project was received to conduct research among project farmers and to use the project's secondary data (Appendix D).

According to the USQ human ethics guidelines for a study involving human participants, two essential processes must be completed: informing participants about

the research and obtaining their informed consent. Hence, to ensure ethical compliance, the researcher developed and distributed a participant information sheet and a consent form before the interviews started. The participant information sheet provided all the necessary information to allow the participants to familiarise themselves with the research (Appendix E). The anticipated confidentiality protocol was also shared with them. The participant information sheet also gave them the opportunity to ask questions regarding the study that the researcher answered. To indicate that all the processes occurred ethically and to ensure their participation was voluntary and that no pressure was exerted on participants, participants were requested to provide informed consent by signing the consent form (Appendix F).

The consent form had a withdrawal provision, which participants were notified about before the interviews commenced. If respondents encountered any undesirable or upsetting questions, they could skip it by saying 'I do not want to answer this question' or completely withdraw from participating in the study (or withdraw their interview). All participants consented to be interviewed and did not indicate any of these concerns.

The data gathered for this study were handled confidentially. Participant confidentiality was maintained in various ways throughout the data collection, storage, analysis and write-up. For example, the book with field notes was handled solely by the researcher, and each research participant was given a pseudonym identifiable only by the researcher. All the interviews recorded were saved securely and participants were identified by pseudonyms in writing up the research. The hard copies of the informed consent forms were scanned and saved electronically and were then destroyed according to the Australian protocol for research confidentiality.

3.6.2 Ethics in Practice

Ethics in practice applies to the day-to-day activities performed during research (Guillemin & Gillam 2004). Komesaroff (1995) termed procedural ethics as *micro ethics*. In this regard, the researcher administered the interview questions politely, taking into account how the daily lives and livelihood of all study participants could be least affected by scheduling the interviews in the time available to them. For instance, although a prior appointment had been made with an input supplier in Bhagwatipur, he was extremely busy since it was the wheat planting season. Hence,

the researcher had to return twice before being able to complete an interview with him. Several interviews were conducted on the farm in the early morning or in the late evening after dinner to ensure that the daily schedule of the farmers was least affected.

Since the research involved discussions on decision-making and power relations in agriculture, some interviewees may have felt some discomfort in certain situations. For example, one respondent's daughter-in-law may have felt uncomfortable about answering questions about 'unequal agricultural responsibilities' in front of her inlaws. Within the patriarchal culture, which ascribes to strong gender roles and exerts pressure on women to be characterised as 'good' and the young must respect seniors, the researcher made sure that she felt at ease, comfortable and safe in the private setting where the interview was held.

In any study, no matter how extensive the preparation, there is still the chance that some unexpected events may occur. Interviews with the women farmers involved in DSI4MTF project in the Mauahi village took place in a similar fashion as those at the other three sites but interviewing the other farmers in the village turned out to be problematic. The same techniques were used to approach these farmers, but they refused to participate in the study. The researcher felt that their refusal was owing to a misunderstanding. Hence the researcher along with an IWMI staff member approached two women farmers working on their farm. One was approximately 40 years old, and the other, 25 years old. In the beginning, when the researcher engaged in building rapport, they responded and interacted well. The research team informed them about the objectives of the visit and the likely duration of the interview. Initially they agreed to participate in the study, but when the research team requested them to sign the consent form, they refused to participate. The senior lady then influenced the young women to not participate in the interview. As a result, the researcher thanked both the women farmers and shared that researcher respect their decision not to participate in the study.

These examples demonstrated the researcher's regard for ethical practice. However, dealing with the problem was equally important to complete the data collection process on the study site. As a result, the village youth who were involved in farming were approached, and through them, the local women farmers were recruited later in the day.

3.7 Research Credibility

In the positivist approach a researcher applies empirical methods, such as experiments, observation and trials, to examine the research problem, and establish rigor through measuring reliability and validity (Cypress 2017). In contrast, according to the naturalist or interpretivist approach, the researcher seeks to explore phenomena in a context or a real-world setting where findings unfold naturally (Patton 2002). The crucial difference is that quantitative methods seek causal determination, prediction and generalisation of findings whereas, qualitative methods aim to explore, illuminate and understand certain situations and conditions (Hoepfl 1997). Hence, there is debate about the relevance of reliability and validity measures within the two paradigms (Cypress 2017). Some researchers believe the term rigor in qualitative research is an oxymoron (Thomas & Magilvy 2011; Cypress 2017), meaning that it does not fit with the aim of qualitative studies. Furthermore, since qualitative studies are based on the human experience of certain phenomena, the time and context of the research can influence the outcome of the experience. In contrast, strictly controlled experiments are less likely to be influenced in this manner.

Nevertheless, both qualitative and quantitative researchers must test and demonstrate the credibility of their studies. (Brink 1993) argues that attention to credibility aspects can help to enhance a study's quality. The credibility in quantitative studies depends on instrument construction, whereas in qualitative studies, the researchers themselves are considered the instrument (Patton 2002). Thus, one can conclude that when quantitative researchers mention validity and reliability in research, it refers to credible research, whereas the credibility of qualitative research depends on the ability and effort of the researcher. In quantitative studies, reliability and validity are used as two distinct terms, but in qualitative research, these terms are not viewed separately. Instead, some terms are used interchangeably, such as credibility, transferability and trustworthiness (Golafshani 2003).

A qualitative researcher is encouraged to consider the matter of credibility with more caution for several reasons: For example,

- The study is subjective in nature, which often can cloud data interpretation; therefore, its findings are questioned and viewed with scepticism by scientific discourse (Brink 1993; Cypress 2017).
- Qualitative research per se is complex in many ways since it is less structured. Researchers can plan and implement a study simultaneously because they can change or constantly develop the plan (Cypress 2017).
- Preliminary steps, such as gaining entry to study sites, identifying participants, contacting the participants and negotiating consent and building trust, are generally accomplished before the design is fully implemented (Cypress 2017). These steps are repeated numerous times.
- Once researchers start data collection, they have minimal control and must remain flexible. They must continuously reassess and reiterate the research process.
- In many circumstances, the qualitative researcher acts as an instrument or primary mode to collect information that is not pre-designed. For instance, researchers can select several informal ways to collect information as needed.

Regardless of the strategies employed to achieve credibility, a study must enable replicability and transferability (Robson 2002). The four possible threats to a qualitative study are participant error, participant bias, observer error and observer bias (Robson 2002; Saunders et al. 2007).

In this study, credibility was maintained in the following ways:

- The information in the interviews were triangulated using probing questions.
- The approach of data collection from multiple source and analysis of the information obtained from various participants furnished a more accurate and complete understanding of the phenomena (Braun & Clarke 2013). This method maximised the depth of understanding and reliability of the results (Willig 2013).
- *Participant error* means that participants unintentionally offer insufficient or erroneous information during data collection. To minimise participant error, the researcher established rapport with the participants, which made them feel comfortable and enabled them to openly provide feedback on the research objectives. During the interviews, the researcher spent adequate time with

participants. Further, although it was the peak harvesting season, a comfortable time was arranged to conduct the interviews. Most interviews took more time than anticipated. The interviews were held in a private setting that provided a safe place for women respondents to feel comfortable and secure about expressing valid lived issues and experiences.

- Participant bias means that participants intentionally provided biased information during interviews. For example, the interviewees may have been prompted by the semi-structured interview guideline (Salzmann et al. 2005). The attitude of the interviewees may also result in biased responses and can affect the study. To ensure this did not occur, the researcher used probing questions to obtain actual information.
- *Observer error* is the random error that occurs owing to instrument error. This study used a semi-structured guideline for the interviews to reduce observer errors. All the interviews were administered by the researcher. Likewise, the researcher transcribed all the interviews and field notes alone to avoid any error.
- *Observer bias* or the researcher's bias is the intentional bias while conducting the research. The researcher's core values and beliefs could potentially influence the whole analysis process of the research. Critical evaluation of the logical progressions in articulating the research findings was applied to enhance credibility. Hence, the links between the actual data and the research conclusions were monitored throughout the thinking and writing process, which can be undertaken by reflexivity (Thorne 2000). The reflexivity of the researcher has been captured and explained in Section 3.9.
- The researcher has research experience of more than a decade. In addition, the researcher has participated in quantitative and qualitative studies at different points of the bachelor's and master's degree courses and a professional research career. The researcher has also undertaken several basic and advanced level training courses on research methodologies.
- The interviews were conducted in the local language and the guiding questions were asked in the participants' local language (the translated English version is presented in Appendix A).

- All the interview sessions were audio recorded and securely stored, which enhanced the credibility of the study.
- Research validity refers to the accuracy and truthfulness of the findings (LeCompte & Goetz 1982; Van Manen 1990). Validity also points out whether the instrument designed can measure what it is intended to measure (Brink 1993). Further, Campbell and Stanley (1963) categorised validity into two types: internal and external validity. Denzin (1970) defined these two types of validity in qualitative research as follows:
 - *Internal validity* refers to the extent to which the findings of a research are a true reflection or representation of the reality, and not just the effect of extraneous variables.
 - *External validity* refers to the degree or extent to which the representations or reflections of reality are justifiably relevant across groups.

In this study, all the semi-structured questions evolved from the literature review and the rigorous discussion with senior academics. A general review of the tools is important to ensure the clarity and coherence of the semi-structured questions, which establish the content and face validity of the tools(Robson & McCartan 2016). The interview protocol used in this study was evaluated by five experts from both academia and industry.

3.8 Limitations and Delimitations of this Research

In order to make research manageable a researcher often defines boundaries of limitations and delimitations of a study. These are important factor that can influence the generalisability of a research finding. The limitations are factors that are mostly beyond the researcher's control (Queirós et al. 2017). They are the threats to the internal or external validity explained in the research credibility section. The methodology had the following limitations: generalisation of the findings in the broader contexts, resource limitations in terms of time and funds, and some (only two as reported in section 3.6 Ethics in Practice) participants who were unwilling to participate or who dropped out from study.

Delimitations are the choices made by the researcher and describe the boundaries that the researcher has set for the study (Theofanidis & Fountouki 2018). Several delimitations were set to achieve the research objective. Owing to resource constraints, this study had five delimitations. First, this research only studied the bargaining intentions of women and the behaviour aspect is outside the scope of the study due to the resource limitation for the study. Secondly, the DSI4MTF project site in the EGP region was selected as the study site. This region was selected because it portrays deeply entrenched poverty and wide social stratification based on class, gender, caste and ethnicity and the landlord – tenant farmer relationship, which provided a larger scope to study the bargaining of women smallholder farmers who worked individually or in a collective in the agri-supply chain. Thirdly, the number of interviews in this study was selected purposively from selected villages according to the researcher's ability to manage the study within the constraints of time and finance for a doctoral dissertation. Fourthly, the analysis was based on the data received in the cross-section of time. Although ethnography could have suitably described the deep learning on the research subject, accomplishing such a design would have demanded a longer period in the field with the participants as well as cost, which was not possible owing to resource limitations. Fifthly, inclusion and exclusion criteria for participants were defined to answer the research questions of the study. Finally, given its focus on investigating gender, class, caste and intersectionality, the study was unable to capture the external factors that influence the bargaining intentions of women farmers.

3.9 Reflexivity

Reflexivity refers to 'analytic attention to the researcher's role in qualitative research' (Gouldner 1971, p. 16). A qualitative researcher's observation, interpretation, analysis and report reflect the researcher's culture, society, gender, class and personal politics (Creswell & Poth 2007). Further, the research journey of discovering how the researcher shapes the study and how the research output shapes the researcher is important and empowering on the basis of technique and skills gained during the process (Palaganas et al. 2017).

Reflexivity is a concept as well as a process (Dowling 2006). As a concept, it is a level of consciousness and self-awareness, which means being actively engaged in the research process (Lambert et al. 2010). As a process, reflexivity is introspection on

how a researcher considers the subjective nature of the study in the research process. Therefore, it is the ongoing process of the researcher's reflection on their values, and it helps to recognise, investigate and understand how their social background, place of origin and assumptions affect the entire research practice (Hesse-Biber 2011, p. 17).

Reflexivity that promotes rigor is significant in qualitative research. However, the process of reflexivity shows the degree of intentional or unintentional influence that the researcher exerts on the findings (Jootun et al. 2009, p. 42). A responsive researcher's reflexivity must ensure methodological cohesion by acquiring an adequate and appropriate sample and by complying with ethical practices (Morse et al. 2002; Castelló et al. 2021).

While this study approach acknowledges that relativism believes in multiple realities of human experience that can be subjective, the researcher also engages in reflexivity. This indicates that the researcher critically reflected personal values, position, power and privileges throughout the analysis.

3.9.1 Self-reflection

Proposing a research idea is an outcome of a series of undertakings in one's lived experience and academic or research journey. The research idea of gender and women's bargaining issues within an agricultural context in this study underwent a similar journey. The researcher's core value, 'equality', which is the central foundation of the research idea, has paved this research journey. Researching topics of gender and women's issues in agriculture in the bargaining context is inherently sensitive. Undertaking such research involves the responsibility and sophistication of the researcher and needs an in-depth understanding of the relevant research methods and skills. Further, Bryman (2016) observed that social researchers need to be reflective about the implications of their methods, values, biases and sociocultural context for their work; therefore, the researcher would like to reflect on the journey towards this research.

The researcher was born in a place located in the Eastern Terai of Nepal, which is situated in the EGP region. In the village, the researcher's family was considered privileged because it owned 20 *bigga* (13.54 hectares) of agricultural land, it had access to good-quality nutritional food throughout the year and it could provide

educational opportunities to the children. Hence, all basic life necessities were accessible to all the members of the joint family, which consisted of three generations, of which the researcher's generation was the youngest. Growing up in the joint family was a happy experience because many children were at one place, which provided ideal opportunities for socialisation. In undergoing this socialisation process, the researcher recognised the diverse gender roles in the family and the disparities between the genders. To elaborate further, a typical EGP family considers a boy child more valuable compared with a girl child. This fact portrays the gender disparity in the region that is also evident in much of the literature (Kelkar 2007; Tamang et al. 2014; Spangler & Christie 2020). Furthermore, unequal gender roles and responsibilities are evident at every stage of life; for example, the gender roles of 'husband as breadwinner' and 'wife as homemaker' offer limited choices to both genders and, in particular, to women since it gives them less economic independence. Owing to these cultural influences, the researcher's family, also privileged males, providing them professional prospects, while expecting the women to remain engaged in household activities.

At present, farming is widespread in the EGP region and a primary source of income for the majority of the population; however, it is considered a difficult and less lucrative occupational choice. Traditionally, farmers in the EGP region have possessed either no, or limited, literacy skills and have occupied the lowest economic strata in society. Since the EGP is a poverty-stricken region, a large proportion of the population is landless, and owing to negligible support from the government and the government policies, there is very little opportunity for farmers to upscale. However, a small group of farmers have acquired a large area of land. These landlords usually rent out their land to landless farmers. The researcher observed that men and women were engaged in gender-divided roles.

Moreover, the researcher's educational journey brought awareness about gender issues and helped to spark interest in related topics. When studying for a bachelor's degree, the researcher became familiar with the existing gender inequalities in society. Later, studying for a master's degree in Gender and Development studies offered the researcher an enriching environment to extend knowledge on such inequalities. This period was critical in that the researcher realised the global prevalence of gender inequality in several areas, including in the agricultural sector. Further, because the researcher grew up the Terai region of Nepal, the researcher was more concerned about the gender issues relating to agriculture in this region.

The researcher had the opportunity to participate in an IWMI action research project, delivered by the University of Southern Queensland (project lead), in three countries, Nepal, India and Bangladesh. The project entitled 'Dry Season Irrigation for Marginal and Tenant Farmers (DSI4MTF) in EGP regions' focused on supporting smallholder marginal and tenant farmers in the EGP region, particularly for sustainable agriculture in the dry season during 2015–2019. The researcher was part of the project from 2015–2016. This project initiated the researcher's interest in this topic, the specific region and the people in that region. The project also provided the researcher with the experience of becoming involved with the local farmer population. Since the researcher knew the local Maithili language, it helped to understand the farmers' stories about the gender and agriculture issues in the region in detail.

3.9.2 Journey towards Research Idea

The journey towards this research idea was driven by the economic and social situation of the EGP. As mentioned previously, in the global south, the EGP is a povertystricken region that embeds its population in social stratifications based on class, ethnicity, gender and tenancy. The economy of EGP comprises a part of Bihar, which is a state in India, and a part of Nepal and is based mainly on agriculture. The economy of Northern Bihar is mostly based upon government service-oriented activities and agriculture (Kumar 2018). In Nepal, agriculture accounts for 74% of the total employment but contributes only 36% to the gross domestic product (CBS 2014). Although agriculture is the primary source of livelihood in the EGP, it remains mostly male-dominated. However, this trend is changing because of male out-migration. In recent years, migration has accelerated globally, and the EGP region has also experienced a significant rise in out-migration particularly of its male population. The male out-migration is driven by the need to diversify the livelihood for their families and overcome poverty. A consequence of this phenomenon in the agricultural sector of the EGP region is that it has brought about a shift in the gender participation of farm producers; that is, more women have started to participate as primary farm producers. Those EGP women who presented themselves as farmers were performing either new or additional farm roles. Although women's participation in agriculture has a long history in the region and they have always played a limited role in decision processes, they have now increasingly emerged as the decision-makers on their farm (Pattnaik et al. 2017). Women who took the place of their male counterparts in farming became significant contributors in agriculture. This shift has resulted in empowerment opportunities. In addition, the existing repressive gender norms and cultural practices have also impelled them to challenge traditional practices (Leder, Shrestha, et al. 2019).

In support of the women farmers, the DSI4MTF project aimed to create community awareness about the existing gender division of labour by developing participatory gender training for the community. The training aimed to bring about gender awareness about unequal access and to find a solution to the situation. The researcher worked in a team to design and implement the training (Leder et al. 2016). During the training sessions, the researcher, who spoke the local language, found that participants were willing to share their feelings and experiences with the researcher when asked. The researcher experienced a deep connection with the stories shared by them. This exposure sparked a profound interest in the researcher's mind and a sense of responsibility towards the women farmers of the region. It also shaped the researcher's personal values. Listening to what they shared made the researcher curious about why they were not able to participate in agriculture and contribute equally despite their tremendous potential. It raised the question of whether this situation was caused by gender and sociocultural structures that impede and influence their participation and contribution.

3.9.3 Data Collection Experience

A surprising incident that occurred in Mauahi village during data collection is reported in this section. During the interviews with village women farmers, a women farmer refused to participate in the study. This incident occurred at the farm where the women and some children were weeding and harvesting. The research team tried to clarify the intention of the visit again. The older lady said that she did not want to take part in the study because she did not want to take part in any type of study that required her to sign a document, referring to the written consent form in this study, particularly when she was far from her husband. The woman referred to her husband as her guardian. The older lady also influenced the younger women, telling them not to sign any document since the act of signing may lead to them losing their property. This was an unexpected event, in which the participants did not want to participate in the study owing to their previous experiences in other situations. Even after explaining that the document was merely used for the purpose of the study and that all information would be treated as confidential, they refused to participate. That evening, the researcher tried to discover through informal discussions why they declined to take part in the study. A local staff member recounted past events of corruption when the women participants were not handed the daily allowance assigned to them but were asked to sign on the attendance sheet. Some also said that because of the high rate of illiteracy among women, they were not able to read the document and were therefore afraid to sign it. Thus, the researcher obtained extensive knowledge on the social and cognitive perspective of women farmers related to farming process by conducting this research.

3.10 Summary

The study aimed to explain the bargaining behaviour of women farmers in the EGP region. As the literature review chapter established, human behaviour can be studied by understanding their experiences, culture, attitudes, and beliefs; this chapter assessed methodological applicability of the available methods of this study and a subsequent qualitative study design was adopted. The research philosophy for this study was based on the interpretivist paradigm. Similarly, the ontological and epistemological standpoints were relativism and the deductive approach, respectively. Further, the study used qualitative methods. An explanatory case study methodology was applied.

Similarly, in-depth interviews were conducted with 52 participants -- 35 were women farmers and 17 were key informants who were purposively employed for data collection in this study. The study was conducted in four villages. Two were Kanakpatti and Koiladi in the Saptari district of Nepal, and the remaining two were the Bhagwatipur and Mauahi village in the Madhubani district of Bihar state in India. All four study sites are located in the EGP region. Since this study involved human participants, human ethical procedures were followed both in principle and practice. This study helped the researcher engage with the women farmers bargaining issues during the field data collection phase. The data analysis was done using Nvivo software. The interviews were transcribed and uploaded in the Nvivo software to identify the themes. Relevant nodes were generated to answer the research questions, and the themes that emerged from interviews were placed on each relevant node and thus thorough data analysis was performed. The next chapter on results will present the findings from the data analysis.

CHAPTER 4: RESULTS (PART I)

4.1 Introduction

Chapter 2 critically discussed the literature on the bargaining intentions of women farmers in the low-resource agricultural settings of the EGP. Chapter 3 outlined the research paradigm, research design and research methods used in this study. Owing to the considerable volume of results, the results based on the qualitative data analysis are presented in three chapters. Part I is presented in this chapter, Part II in Chapter 5 and Part III in Chapter 6.

Figure 4.1 summarises the chapter structure. The first section of this chapter outlines the research questions and describes the study sites and participants. Section 4.2 presents a descriptive analysis of study participants, and Section 4.3 describes the characteristics of the study villages. The existing agricultural practices in the EGP region are discussed in Section 4.4. Section 4.5 presents the findings relevant to RQ1: *What are the existing bargaining spheres and associated issues over which women farmers in the Eastern Gangetic Plain region bargain?* Sections 4.6, 4.7, 4.8 and 4.9 present the results regarding the intra-household, on-farm, market and intermediate farm bargaining spheres. Each section lists the bargaining issues in each sphere. Last, Section 4.10 summarises the chapter.

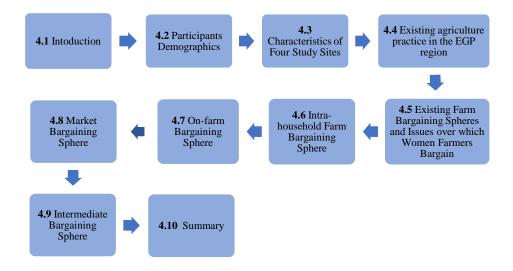


Figure 4.1: Structure of Chapter 4 (Results: Part I)

4.2 Participants Demographics

The selection of study sites and participants were discussed in Chapter 3. The study sample consisted of 52 participants—categorised as 35 women farmers and 17 key informants—who were interviewed. These study participants were mainly from four sites: Kanakpatti, Koiladi, (in Southern Nepal), Bhagwatipur and Mauahi (in Northern India). The key informant category included men farmers, landlords, input suppliers, middle people and DSI4MTF project staff at the four study sites.

Table 4.1 summarises the demographics of the women participants (n=35) and key informants (n=17). The majority of participants in women farmers (77%), were between 26–45 years of age, while in the key informant's majority were of age group 36-45 and above 55 years. Most of the women farmers (88.6%) and key informants were married. The education of the participants showed majority of the women farmers (65.7%) were illiterate while almost half (47.1%) had education above grade 10.

	Women (n=				
Variable	Frequency Percent Frequency		Frequency	Percent	
Age group					
18–25	2	5.7	1	5.9	
26–35	14	40	2	11.8	
36–45	13	37.1	5	29.4	
46–55	5	14.3	4	23.5	
> 55	1	2.9	5	29.4	
Sex group					
Men	0	0	15	88.2	
Women	35	100	2	11.8	
Marital status					
Married	31	88.6	16	94.1	
Unmarried	1	2.9	1	5.9	
Widowed	3	8.6	0	0	
Education					
Illiterate	23	65.7	5	29.4	
Grade 6 – Grade 10	9	25.7	4	23.5	
> Grade 10	3	8.6	8	47.1	
Total	35	100	17	100	

Table 4.1: Participant Demographics

Participant Identifiers

Participant data were anonymised by assigning them a unique identifier formed by combining the codes for the village, sex and participant type and a serial number. For example, the first woman farmer participant from Bhagwatipur village was identified as CWF1: 'C' is the code for Bhagwatipur village, 'W' represents woman, 'F' represents the farmer category and number '1' stands for the first woman interviewed in the village. Table 4.2 below shows the unique identifier codes used to distinguish the participants.

Category	Identifier
Village	
Kanakpatti	А
Koiladi	В
Bhagwatipur	С
Mauahi	D
Gender	
Women	W
Men	Μ
Participant type	
Farmer	F
Value Chain actor	VC
Key Person	KP
Serial Number	1, 2, 3

 Table 4.2. Codes Used to Create Participants' Unique Identifier

4.3 Characteristics of the Four Village Study Sites

This section describes the characteristics of the four villages that were the study sites for data collection. Their characteristics identified through field visit observations are shown in Table 4.3. Data were collected on the caste structure, social structure, remoteness, women's areas of involvement, the modes of transportation for women, market access, irrigation facilities, mobility access, decision-making by women farmers and their access to the weekly periodic markets for selling farm products.

	Saptari, Nepal		Madhubani, Bihar, India	
Characteristic	Kanakpatti,	Koiladi	Bhagwatipur	Mauahi
Caste	Tharu (Indigenous);	Singh (Upper Caste);	Ram (Dalits);	Paswan (Dalits);
	Ram (Dalits);	Mandal;	Yadav;	Mandal;
	Muslims	Mukhiya;	Mandal;	Brahmin (Upper Caste);
		Paswan (Dalits);	Mukihiya;	Muslim
		Muslim	Jha (Upper Caste)	
Social structure	Low inequality between landlord and tenants; more equal community in terms of gender and caste	High inequality between landlord and tenant; caste system; strong patriarchy	High inequality between landlord and tenant; caste system; strong patriarchy	High inequality between landlord and tenant; caste system; strong patriarchy
Remoteness	Near highway (a 10- minute walk)	Remote (more than 30 minutes from highway)	Far from highway (more than 20 minutes)	Near highway (10 minutes
Women's areas of involvement	Household; farm; market (home, farm and <i>hatiya</i>)	Household; farm; selling produce from farm and home	Household; farm; selling produce from farm and home	Household; farm; marginally in selling to local traders also
Modes of transportation	Bicycle;	Bicycle;	Bicycle;	Bicycle;
for women	motorbike, within the village and to the market	City-rickshaw	Motorbike (as a passenger)	Auto-rickshaw
Location of closest market (<i>Hatiya</i>)	Periodic market; 10 minutes' walk	Periodic market; 15–20 minutes' walk	Market/ Periodic market; 20–25 minutes' walk	Periodic market; 15–20 minutes' walk

Table 4.3: Characteristics of the Four Village Study Sites

	Saptari, Nepal		Madhubani, Bihar, India	
Characteristic	Kanakpatti,	Koiladi	Bhagwatipur	Mauahi
Irrigation facility	Mostly ground water irrigation: tube well and pump set; solar irrigation	Canal irrigation, ground water using pump set,	Mostly ground water irrigation-tube well and pump set, solar	Mostly rainfed; low level of underground water resources
Mobility access for women	Independent	Partly restricted	Partly restricted	Partly restricted
Decision-making by women farmers	Women participate in decision-making	Main decision-making by males; few joint decision-making	Majority subordinated; partly joint decision- making	Majority subordinated (higher among upper caste), decision-making by Dalit women; partly joint decision-making
Women's access to periodic markets for selling	Very high women's participation in the periodic markets	Moderate preference. Partly women prefer to sell from periodic markets	Nil by all the other castes except selling vegetables by women from traders (<i>Kujra</i>) community	Nil by all the caste except selling vegetables by women from traders (<i>Kujra</i>) community

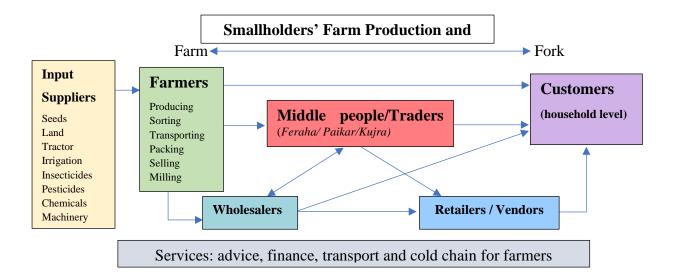
Source: Developed for this research

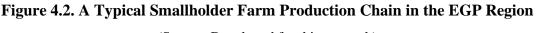
4.4 Existing Agricultural Practices in the Eastern Gangetic Plain Region

Before presenting the results relevant to RQ1, this section provides background information on the existing agricultural practices in the EGP region. This information is important because it will help to better understand the results outlined in this chapter and the discussion in the chapter 7. The EGP farmers fall in one of three categories: a landlord (who owns a large area of farmland), a smallholder (who owns farmland area up to 2 hectares) or the landless (who have no farmland). Tenant farming is most prevalent in the EGP region because landlords owned a larger portion of the land in the villages in the region. The *tenant farmers* either rented as *part tenants* (i.e. farmers who owned a small area of land and also rented-in a certain area of farmland from landlords or from smallholders who wanted to rent out farmland) or as pure tenants (usually the landless farmers who rented all the land they farmed from landlords or smallholders). Simultaneously, *absentee landlordism*—which means that landlords do not reside on or near the land that they own—was a common practice. Most landlords were found to rent out their land, whereas a few hired farm labours to cultivate the land themselves. Their farms were managed by a local kamtiya (manager), and the landlord's family visited their farm occasionally. Further, in the Kanakpatti and Koiladi villages, several landlords were absentee landlords, whereas in Bhagwatipur and Mauahi, they had rented-out their land. However, the Bhagwatipur landlord was also involved in farming. The information on agrarian relations and land tenure forms in detail existing in the Saptari and Madhubani can be found in the working paper (see for details Sugden et al. 2016).

4.4.1 Farm actors in the Eastern Gangetic Plain Region

The EGP farmers revealed that they must interact with several actors, such as input suppliers, wholesalers, retailers, middle people and individual customers. Figure 4.2 shows a typical relationship among the EGP farm producers and the stakeholders involved in farm production.





(Source: Developed for this research)

The smallholder farmers bought the necessary inputs, such as seeds and fertilisers, from input suppliers in the local area. They hired services such as irrigation equipment, threshers and harvesters from the local renters. A part of the harvested produce was consumed by the family, and the extra amount was sold to the buyers. In Kanakpatti and Koiladi (Nepal), farmers dealt with their produce in three ways:

- They sold their produce to individual customers or to traders in the local periodic markets. Often, the farmers sold their produce from home to customers in their village.
- The middle people or traders visited the farm to buy the produce and sold it to wholesalers or retailers/vendors, or they themselves sold it to customers.
- The farmers sold in bulk to the wholesalers directly.

In Bhagwatipur and Mauahi (India), most farmers sold their farm produce to *Kujras*. The *Kujras* represented the traders in the community and were assigned to collect and sell farm produce in the markets. Their social position was considered lower than that of the farmers in the local society. Most of the study participants expressed that they would prefer to sell their farm produce to the *Kujras* or traders rather than sell it themselves since they disliked the idea of being considered *Kujras*. However, during the study period, a few male farmers from the two villages had started selling their farm produce by themselves from door to door in the nearby villages.

4.4.2 Value-added Agriculture in the Eastern Gangetic Plain Region

The results revealed that EGP farmers were aware on the added value to their farm products, in two ways: by producing *high-value crops* or by processing their products for *value addition*. High-value crops are those that can generate more income compared to the other crops usually grown. The products can fetch high prices when they contain nutritional benefits or have higher demand in the market. For example, farmers at all four sites engaged in vegetable farming. A farmer revealed:

When I produce rice in my fields, I can produce only 70–90 kg per katta. It is sold at INR1100–1200 per quintal, depending on the trader's rate. This year, I planted eggplants in 1.5 katta. After consuming at home, I sold 9–10 quintal of brinjal that it produced. In the beginning, the price was high, so I sold at INR40. Gradually, when the production increased, there was abundant brinjal produced by many other farmers, so later, the price decreased to INR20–15 per kg. Hence, even if I deduct the cost spent for the production, I am surprised and impressed by the decent income from vegetable farming. (CWF8)

Some farmers produced high-quality crop varieties, for example a farmer in Koiladi in Nepal noted: 'I grow kariya-kamal, kala-nimak, which is a thin variety of scented basmati rice. The varieties are sold in high price' (BWF1). The farmers had identified that such high-quality crops were in high demand in the local market and those rice varieties were preferred by people with a higher income. Other local varieties of rice, such as *Kanchi Mansuli, Sonam* (Kanakpatti and Koiladi) and a hybrid variety, *MTU* 7029 (Bhagwatipur), were also high-demand varieties. Similarly, a farmer commented: 'I am doing banana farming for the first time in this village. I am hoping for a good harvest and selling for the next festival season' (CMF2). In Bhagwatipur, India, a scheme from the local Andrathari Block was introduced to support the local farmers to undertake high-value cash crop among which banana farming was one.

The farmers reported that organic crops were emerging as a good price giver items as it was identified as a high value crop by the locals. This view was also confirmed by an input supplier who was an individual customer for household consumption. He commented:

When I went to buy vegetables from the local market, a woman selling green vegetables said, 'I have produced this for my own consumption, without using any

pesticides'. I could see some of the leaves had holes due to insect bites, and she said it was the sign of being pesticide free. Organic vegetables are considered high-value crops that are sold at a good price these days. (AMVC1)

Value addition to farm products: The farmers also sold processed farm products, including parboiled rice, rice flakes and puffed rice, tomato sauce, potato crisps and jam. Moreover, they also performed processes such as sorting, drying and cleaning vegetables and making bundles of green leaves and radish before selling, to add value to their products. A woman farmer revealed:

The value addition to products needs extra effort and gives extra profit. Like, I prefer to wash radishes and bundle them before I sell them in the market. They are sold at a better price if I do so. Nowadays, many sellers bring washed radishes to the local market. (AWF2)

Similarly, another participant revealed: '*I grow rice, and a part of it I parboil. The parboiled rice can sell at an extra price*' (AWF9). Moreover, some dairy farmers produced *ghee* (clarified butter) from milk to sell locally. They typically sold their high-value farm products to traders or middle people or to consumers from their village. Some farmers had begun experimenting to add value through innovation. For example, a farmer in Bhagwatipur mentioned:

Green peas and chickpeas have brought a new way of earning to me. What I did, I bunched 7–10 green chickpea plants and sold these in Nanaur village at Rs 10 each. All the bunches sold out so quickly. There is more profit in selling the green plants instead of dried chickpeas as it is sold in higher price than when it is sold dried. It also saved a lot of work when sold in bunch; like, I do not need to dry, clean, sort; I just sell in the market. (CMF1)

The data revealed that small-scale farmers were unable to reach niche markets to trade high-value and value-added products because of certain barriers they faced, especially women farmers. These barriers were identified as:

- limitations of production quantity
- limitations of market access
- limitations of transportation for woman farmers
- lack of support in preparation for soil study for high-value crops.

In view of the discussion above, it is clear that if EGP farmers are given adequate, effective support, they will have the potential to produce high-value crops and value-added products.

4.5 The Existing Bargaining Spheres and Associated Issues over which Women Farmers in the Eastern Gangetic Plain Region Bargain (RQ1)

The results informing RQ1: what are the existing bargaining spheres and associated issues over which participants bargain in the EGP region? are presented in this section. As this research tend to highlight the farm bargaining areas from the perspectives of women farmers, the farm bargaining issues were explored by asking qualitative questions to women, men and landlords who were involved in farm production. For example, 'What are the specific farm issues that you need to bargain over?' and 'Where does the bargaining occur?. To help them recall the bargaining issues, it was suggested they talk about an example of a recent crop they had harvested and to think about what they bargained over to produce the crop. The key informants such as input suppliers viz. seed, fertilizers, chemical and middlepersons were asked; "On what issues do the farmers bargain with them? These questions gave a complete picture of farm bargaining issues. Such issues were later grouped according to the place of its occurrence to identify the farm bargaining spheres. Probing questions were also asked to help those participants who got stuck during the interviews. This was done to validate the response from the farmers and to complement the response to bring a clear picture of farm bargaining issues and spheres.

The answer to RQ1 on bargaining spheres is based on the response from all the 52 participants. According to their replies, a list of farm-related bargaining issues was prepared. In this study, the term *bargaining spheres* has been used to group these issues according to the place of its occurrence into four main spheres: household, on-farm, market and intermediate. Figure 4.5 depicts these spheres. Each sphere is attached to a block of issues that were found to take place in that sphere. *Bargaining issues* are any farm related topic or activities over which participants bargain. The four bargaining spheres and the associated bargaining issues are now discussed.

4.5.1 Intra-household Farm Bargaining Sphere

A farmer's household unit was identified as a place where the most farm-related decisions took place. It was found that for the participants, their intra-household space was an important place for several farm-related bargaining activities. The women farmer's family needs, gender role, social identity and cultural practices often interfered in the allocation of resources by the family. The following issues identified as occurring in the intra-household sphere involved bargaining by women farmers for farm processes:

4.5.1.1 Control over productive resources

In most of the families, farm-related productive resources, such as land, pump sets, tube wells, harvesters, sprayers, threshers and tractors, motorbike were owned by the male members of the family and the women farmers had access to them. However, decisions related to control of the farm resources were mostly made by the men farmers. The women farmers were identified as less likely to operate the machinery; therefore, they bargained with the male family members regarding the task performance.

4.5.1.2 Micro decisions related to farm activities

The farmer's household was identified as the place where several micro-level farmrelated decisions were made, such as decisions about crops; the selection of seed varieties and quantities; the purchase of labour; the time to irrigate; the time to start farm work the next day; and the allocation of farm tasks, for example, which individuals would participate in harvesting or selling at the local market. Similarly, decisions on whether to participate in farmers' meetings, training or exposure visits, or to meet extension officers were bargained over at home.

4.5.1.3 Time allocation for reproductive and social tasks versus productive farm tasks

The time used by farmers to perform productive tasks was compromised by everyday reproductive tasks (daily domestic chores, care jobs) and social tasks (community-related engagements). To be involved in productive tasks, the women farmers bargained over sharing the responsibility and workload with family members or their social networks.

4.5.1.4 Mobility control

Several woman farmers who were the daughter-in-law (DIL) and lived with their husband's joint family had less control over their mobility. To demonstrate respect to her parents-in-law, she had to ask for permission to go out, even for farm-related jobs. The women farmers were found to bargain with in-laws for such mobility. The lack of a well-developed transport system often made these farmers dependent on the male family members to drop off farm yield to the periodic market. Women farmers also mentioned that they needed to bargain with the male family members who could ride a bicycle or a motorbike.

Hence, the intra-household sphere was recognised as an important space for making major farm-related decisions and for bargaining on the women farmers' responsibility. Next, the on-farm bargaining sphere is discussed.

4.5.2 On-farm Bargaining Sphere

Production-related tasks took place on the farm. After selecting the crops to plant, an EGP farmer made a series of farm-related decisions that required bargaining, such as preparing the land; transporting seeds to the field and sowing/planting them; weeding; controlling pests; harvesting, storing, handling and processing crops. The on-farm tasks involved conducting financial transactions, investing time and executing responsibilities; hence, farmers bargained with family members, labourers or those in their social networks. The farm issues in the on-farm bargaining sphere that involved bargaining were as follows:

4.5.2.1 Preparing land

First, the family decided how to prepare the land—for example, manually or using an ox-plough or a tractor. They bargained on the per unit costs with suppliers, including for a rotavator/cultivator.

4.5.2.2 Sowing/Planting

The farmers decided on the crop to plant and ensured the seeds were available in the quantity required for their farm. Usually, the family stored the seeds, gathered from fellow farmers or had bought from input suppliers. The smallholders were found

sowing seeds or planting by themselves, but the farmers needed to hire labour for paddy transplantation. Nevertheless, most farmers in the EGP region followed a traditional practice termed *paichari* or *badlain* (in Mauahi), which means the *exchange of labour* among farmers. That is, a farmer would request fellow farmers for help to transplant paddy and, in return, would repay them by working on their farm. These farmers followed the daily wage payment method for the additional days if needed. This practice saved labour costs, but the farmers were found to bargain to decide whose field must be planted at the first. Nevertheless, if it was necessary to hire more labour, they had to pay the labourers based on daily wages and serve them lunch and snacks every day. The farmers reported that the entire village paid the same amount as labour wages and that they mainly bargained more for on-time task completion.

4.5.2.3 Irrigation

If the family owned the irrigation facility, women farmers bargained over who would irrigate the crops and when. Many women farmers mentioned that they bargained with their husband to divide the farm work involved in irrigation. However, if the family lacked irrigation facilities, they identified an owner interested in renting irrigating machine like pump-set, tube-well or boring water using motor to pull water from underground using electricity. Both parties must agree on the price for each activity that happened by bargaining. Prices were set annually for the entire village based on fuel costs.

4.5.2.4 Weeding

Weeding was a light job, so women farmers in the family performed it or hired labourers for it. The labourer's wage rate for weeding—termed *kamthiyaun* (in Madhubani)—was found to be less than that for other farm purposes and was identical for the entire village. The wage rate was not bargainable in money, but in terms of time. As a farmer explained, '*If the labours for weeding are not monitored, they would take many days to get paid for a longer time*'. Therefore, the farmer bargained with labourers to make a deal before they began weeding.

4.5.2.5 Fertilising

Decisions on the need for fertilisers, the means of transportation to the fields, the application methods and the individual responsible for each task were made by bargaining.

4.5.2.6 Applying pesticides and chemicals

The family decided whether their crops needed pesticides or chemicals. Through bargaining, they decided the quantity, the brand and the individual responsible for purchasing.

4.5.2.7 Harvesting

Timely harvest of the farm produce was critical to the smallholder family, and they managed the harvesting themselves. For some crops, such as paddy, the harvesting time frame is very short, so it must be harvested within a certain number of days after it ripens. Otherwise, the rice (also called as *tur or tura* in local language) will start to fall off the plant (*tur jhair jai chai*) as shown in the Figure 4.3, and it is difficult to pick it from the ground. Therefore, it is essential to identify when the rice ripens and to harvest it quickly since the farmer will otherwise it may incur a huge loss.



Figure 4.3. Fallen rice (*Tur/Tura* on the ground due to delayed harvesting (source: Researcher)

In addition, to the family's contribution of labour, the farmers may need to hire labourers to help them to complete harvesting as quickly as possible. The paddy harvesting wage, termed *boin*, was paid in a unique way: out of every 10 bundles of

paddy harvested, a bundle was paid as the wage (including towards lunch and snacks). Labourers who delivered the paddy bundles to the farmer's home were paid at a higher rate of one bundle for each set of eight bundles. The harvester was found to select the biggest bundle as their *boin*, showing the importance of bargaining in harvesting.

4.5.2.8 Threshing

The thresher used was hired. The hiring cost was found to be bargainable. The rent for threshing was measured using a tin system—for 10 tins threshed, one tin is paid as rent [1 tin = 10 Kg].

4.5.2.9 Milling

Produce such as rice and wheat need milling. The farmers transported the produce to the village mill on a bicycle or a motorbike or by carrying it on their head. The cost per kg was fixed but was bargained on for bulk milling.

4.5.2.10 Cleaning/Sorting/Bunching

The family members cleaned and sorted or bunched the farm produce before they sold or stored it. The farm produce could be sold at a higher rate after sorting and cleaning or bunching it, and hence, bargaining was found necessary to decide who would undertake the process.

4.5.3 Market Bargaining Sphere

The market bargaining sphere had two major bargaining domains, one, to purchase farm-related inputs, and the other, to sell the farm produce. The farmers' market bargaining needs were as follows:

4.5.3.1 Purchasing farm inputs

A farmer had to purchase many inputs, including seeds/seedlings, fertilisers, urea, Diammonium phosphate (DAP), potash, pesticides/insecticides and chemicals, such as zinc, boron and phosphorous, and had to bargain to obtain the best price.

4.5.3.2 Selling produce

Smallholder farmers produced multiple crops for sale. They sold to traders, middle people, wholesalers, chattiwala (informal buyer for grains and seeds at local markets), retailers and individual customers. The farmers were found to bargain on the price to maximise their profit.



Figure 4.4: Local Periodic Market (*Hatiya*) at Traffic Chowk, Kanakpatti (source: Researcher)

Figure 4.4 shows a picture from a local periodic market at Traffic Chowk in the Kanakpatti village. Although some of the farmers sold their farm produce from home or farm to the traders who visited their home or farm, several farmers preferred to sell in periodic markets called *hatiya* (in the local language) that were organised once or twice a week. All the four study sites provided a periodic market to the farmers to purchase or sell necessities. The sellers must pay rent to the market managing committee. Table 4.4 shows the marketplaces where these farmers sold their produce.

Village	Periodic Market (Hatiya) Day	Closest Market (Everyday)	
Kanakpatti	Traffic Chowk: Twice every week onWednesday & SundayKathaunaSaturday	Rupani; Rajbiraj; Kanchanpur; Inarwa; Golbazar	
Koiladi	Gajendra Narayan Chowk: Jiriya hatiya	Hanumannagar; Rajbiraj	

 Table 4.4: List of Periodic Markets at Study Sites

Village	Periodic Market (Hatiya) Day	Closest Market (Everyday)
Bhagwatipur	Andra Thadi Chowk: Monday Dumra Chowk: Wednesday Nanaur Chowk: Friday	Khutauna
Mauahi	Rampur: Tuesday	Babubari

Source: Developed for this research

The market sphere was a dynamic location where most of the purchases and sales occurred. It involved financial transactions; therefore, bargaining on market issues was essential.



Figure 4.5: A *Chattiwala* (Informal buyer) buying rice in the Local Periodic Market (*Hatiya*) at Traffic Chowk, Kanakpatti village, Saptari (source: Researcher)

Several smallholder men and women farmers were found to sell their surplus grains, especially rice or wheat (in small quantities, i.e. only a few kilos) at *Chatti*, a place in *hatiya Chattiwala* sits. *Chattiwala*, as shown in Figure 4.5, is a local informal grains buyer. Usually, a *Chattiwala* is a male accompanied by his male helpers to buy grains from the farmers and pay accordingly. They have a weighing scale to measure the grains sold. The *Chattiwala* is one of the busiest buyers in the *hatiya*; measuring occurs in a rush, and payments are also made in a rush. It is highly likely to get inaccurate measurements of the grain's quantity sold and, therefore, the farmers' payment. The farmers selling to *Chattiwala* need to be alert and bargain with him over the weight, and the price received. The *Chattiwalas* goes to several periodic markets

nearby to collect as many grains as possible and finally sell the collected grains to a mill at a higher price. The study revealed that the smallholder farmers were selling surplus grains to meet their emergency need for money. With the money paid, the resources poor farmers purchase their groceries or farm necessities. These *Chattiwala* made a profit by collect grains from several nearby hatiyas and selling them to a mill at a higher price. The smallholder farmers were found selling surplus grains to meet their emergency need for money paid, the resources poor farmers or farm necessities. These *Chattiwala* mate a profit by collect grains from several nearby hatiyas and selling surplus grains to meet their emergency need for money. With the money paid, the resources poor farmers purchase their groceries or farm necessities. These *Chattiwala* made a profit by collect grains from several nearby hatiyas and selling them to a mill at a higher price.

4.5.4 Intermediate Bargaining Sphere

In this study, any bargaining activity that occurred away from the household, the farm and the market was considered to occur in the intermediate bargaining sphere. Nonetheless, this bargaining was over critical farm-related issues that would benefit the farm, including land tenancy, cold storage, transport and institutions.

4.5.4.1 Land tenancy

The majority of the farmers in the study sites were either smallholders or landless, and therefore, they rented their land from landlords. The land tenancy pattern differed across the study sites. Two dominant types of rental agreements were observed: sharecropping and fixed rate agreements. In sharecropping, termed *batiyaa* or *adhiya* in the local language, as rental payment, the tenant farmer shared half of the produce with the landlord. In *batiyaa*, the *laar puwar* (farm by-products) were also shared equally. Similarly, in fixed rate agreements, termed *thekka* or *mankhab*, the farm rent was paid according to the yield per land area; for example, 8 Mon per *katta* [1 Mon= 40 Kg, and Katta =0.02 Hectare]. In this system, the farmer had to pay rent even if the yield was less than the rent amount. For example, if 10 Mon per *katta* was the rate fixed and farmers were only able to produce 5 Mon per *katta*. In *thekka*, the farmer did not always share *laar puwar* with the landlord if it was not covered in the rental agreement.

The results showed that the rent for the land tenancy was a farm issue over which farmers bargained. If the post-harvest yield was not to their expectations, they bargained with their landlords to reduce the rental cost.

4.5.4.2 Transportation

Managing transportation needs was an integral farm activity. It was observed that the smallholder farmers managed most such needs, such as delivering seeds and fertilisers to the farm and farm products to their homes and to the market. Typically, these farmers involved their family members, who loaded the yield (e.g. paddy and wheat bundles and potato sacks) on their head and transferred it to the destination on foot. Bicycles and motorcycles, borrowed from a neighbour when the family did not own one, were also used to transport heavy loads. In case family members were unavailable or unable to participate, the family hired labourers to transport the yield. They also used tractors or bullock carts as transport when the yield was significantly high.

Vehicles for transportation were usually hired from lenders or landlords. The usual destination for the produce from the field was the farmer's home, a processing mill, a collection point or a cold storage facility; sometimes, it was sent directly to the market for selling. The price of transportation and of obtaining space at the cold storage facility were considered important issues for bargaining.

4.5.4.3 Institutions

To receive benefits, the farmers bargained with those in the government system, such as the agricultural officers, the extension officer, rural and urban municipalities officers and the block facility, on several issues such as drought relief, access to electricity packages for lower tariffs and irrigation equipment or input supports.

The four bargaining spheres and related issues were discussed in this section in detail. The spider diagram is presented in Figure 4.5, which depicts these bargaining spheres to which are attached the block of issues that were found to occur in that sphere.





(Source: Developed for this research)

4.6 Summary

This chapter reported the results informing RQ1: *What are the existing bargaining spheres and associated issues over which women farmers in the Eastern Gangetic Plain region bargain?* The findings drew on the data analysis of in-depth interviews with 52 study participants. This chapter presented the descriptive analysis of participant socio-demographic variables. In response to RQ1, four major bargaining spheres were reported: intra-household, on-farm, market and intermediate farm bargaining. Each sphere was analysed further, and a list of bargaining topics related to women farmers that occurred in the respective bargaining spheres was created. This analysis culminated in a spider diagram (Figure 4.5) depicting the bargaining spheres and related issues.

The results discussed in this chapter demonstrated that although women smallholder farmers may have common farm bargaining spheres, the issues in each sphere may be unique and contextual and are guided by the culture and local norms. The details of the bargaining spheres and the list of bargaining issues can facilitate the recognition of the bargaining needs of women farmers. However, despite the current farm bargaining needs, the bargaining intention of the farmers might vary. Hence, the next chapter presents the results regarding the factors that influenced the bargaining intentions of the study participants in detail.

CHAPTER 5: RESULTS (PART II)

5.1 Introduction

The previous chapter presented the first part of the results, which informed RQ1. This chapter reports the results relevant to RQ2: *What are the background factors influencing the bargaining intentions of women farmers in the Eastern Gangetic Plain region?* The results of the qualitative data analysis presented in this chapter are based on the analysis of data collected through in-depth interviews from 52 study participants. The findings are primarily based on the women farmers' responses; the responses from the key informants were used to supplement the findings.

Figure 5.1 illustrates the chapter structure. Section 5.2 provides background information for this chapter, after which each subsequent section reports the themes that emerged from the data relevant to the background factors influencing the bargaining intentions of the study participants.

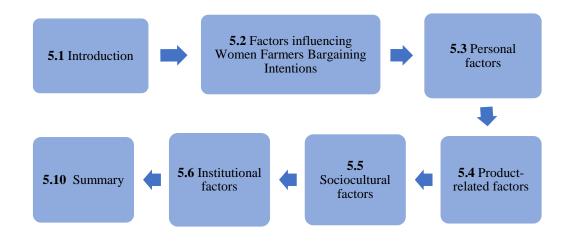


Figure 4.1: Structure of Chapter 5 (Results: Part II)

5.2 Factors Influencing the Bargaining Intentions of Women Farmers in the Eastern Gangetic Plain Region (RQ2)

This section discusses the results informing RQ2: What are the factors influencing the bargaining intentions of women farmers in the Eastern Gangetic Plain region? The interview questions used to explore this research question were as follows: 'What is

your opinion on farm bargaining?', 'What can affect women's farm bargaining intentions?', 'Are there any qualities a woman farmer needs to engage in farm bargaining?' and 'In what circumstances will you decide to bargain or not bargain on farm issues?'. These issues were further probed by asking: 'What personal qualities, product-related issues, sociocultural practices and institutional aspects affect women farmers' farm bargaining intentions?' All 52 participants were interviewed; however, the responses of the 35 women farmers were the main focus of attention, whereas the responses of the 17 key informants were used as supplementary data to clarify or identify contradictory information.

The results identified a wide range of factors associated with women farmers' bargaining intentions. The thematic analysis identified 18 themes. The 18 themes, which are elucidated in the next sections, can broadly be grouped into four major categories: personal, product-related, sociocultural and institutional factors. Table 5.5. describes the four broad categories of factors, each theme identified with its corresponding frequency and the ways in which these factors link with the TPB constructs. The table presents a snapshot of the factors linked to the formation of women farmers' attitudes, subjective norms and perceived behavioural control, which subsequently link to their bargaining intentions.

Appendix B provides Tables B1 which contain excerpts from the participants' interview responses from which the information presented in Table 5.1 was derived.

Table 5.1: Factors Influencing Women Smallholders' Farm BargainingIntention as Identified from Interviews (List of the Themes Identified as Factorsand Frequencies; N = 35)

Category	S. No.	Background Factors (Themes Identified)	Frequency	How Factors Are Linked with TPB Constructs
	1	Bargaining Competency	28	Perceived Behavioural Control
	2	Access to Information	16	Attitude
	3	Socio-demographic Characteristics	14	Perceived Behavioural Control
	4	Social Relationships	10	Attitude + Perceived Behavioural Control
Personal	5	Responsibility	11	Attitude + Perceived Behavioural Control
	6	Mobility	9	Attitude + Perceived Behavioural Control
	7	Availability of Options	5	Attitude
8	8	Urgency	4	Attitude + Perceived Behavioural Control
	9	Access to Resources	2	Attitude
	10	Landlord–Tenant Relationship	2	Attitude
	11	Product Quality	15	Attitude
rodu 	12	Product Quantity	5	Perceived Behavioural Control
	13	Product Demand	5	Perceived Behavioural Control
	14	Product Management	3	Attitude
Socio cultural	15	Gender Dynamics	23	Subjective Norm
Socio c	16	Myths	6	Subjective Norm
tional	17	Collective Farming	9	Perceived Behavioural Control
Institutional	18	Institutional Farm Structures	3	Perceived Behavioural Control

Table 5.5 clearly shows that the first 10 factors were grouped as personal factors that affect women's farm bargaining intention, followed by four product-related factors

and two each of sociocultural and institutional factors. A brief explanation of each theme identified in the table is presented in the following sections.

5.2.1 Personal factors

5.2.1.1 Bargaining competency

'Bargaining competency' was the most dominant personal factor that affected women farmers' bargaining intention. Among the 35 women farmer interviewees, 28 (80%), reported that their bargaining competency directed their bargaining intentions. This theme comprises the participant's knowledge, skills and abilities (Ley & Albert 2003) and is linked to their perceived behavioural control.

The women farmers' knowledge of two aspects in particular—that 'farm issues are bargainable' and that 'farm bargaining brings benefit'—illustrated their perceptions about bargaining intentions. Several women farmers recognised the beneficial results of bargaining. For example: 'As a farmer, mol-molai [bargaining] is very important' (CWF3); 'It is very important for me to earn by getting a good price' (AWF1) and 'To get a good price bargaining is important' (AWF2). Similarly, identifying the bargaining parties who can bring the best value was equally significant for farm bargain with a khaiwal [consumer buying for household consumption] who buys our product' (AWF4). In contrast, another considered bargaining to be irrelevant to farmers:

I do not think bargaining is that important, as the village operates on the knowledge that one farmer shares with other or one farmer seek[s] from another. In this way, everyone knows what the rate of the item is or services and that no one can cheat. (DWF1)

Thus, interviewees who perceived bargaining as insignificant were less likely to develop bargaining intentions.

In addition, women farmers' skills were identified as another 'personal factor' required for farm bargaining. The women farmer participants identified persuasive conversations, numeracy and literacy as skills useful to develop farm bargaining intentions. Participants who knew how to persuade a buyer or a seller were found to be more likely to develop bargaining intentions compared with other participants. For example:

The paikar [traders] ask for a lower rate; then, I say, 'I have worked hard in sun, there will be no profit if I give you at the rate you have asked, it is very low, but if you agree to come a bit higher, I can agree'. He agreed, and I sold to him. (AWF6)

In selling farm produce, the technique used to persuade a buyer was found to be an important quality that decided bargaining success as well as helped the motivated farmer to develop bargaining intentions. Another women farmer said: '*Women ask to reduce the cost, like, "Oh! the cost is really very high, please do not give in this price, can you reduce a bit" then the seller agrees*' (AWF1).

Similarly, lack of important skills for bargaining such as numeracy skills, literacy skills created negative intention to bargain because in the absence of skills there was possibilities for financial risk for smallholders. For example: 'Bargaining is my husband's job because I am not good at hisab [numeracy]. I did mistakes in calculation while dealing earlier. So, better I leave it to my husband' (AWF8). And 'I hesitate to bargain as I am illiterate, I am afraid to do mistake' (BWF7). The farmers were hesitant to bargain when they were aware of lacking skills needed to bargain.

Equally, the participants also noted that certain personal *abilities* of the farmers were useful for farm bargaining such as being *outspoken*, *loud*, *observant* or *shy* were linked to their bargaining. Among the personal abilities, some were beneficial to perform bargaining and were favourable to develop bargaining intention while others were not. Women farmers with favourable abilities for bargaining were *attentiveness* and *outspokenness*, developed positive intentions about farm bargaining, whereas *shyness* had a negative influence on their intention to bargain. Here, both the favourable and unfavourable *abilities* related to farm bargaining were found to be linked to the intention to bargain. A woman farmer stated that *personal attentiveness* can be useful to strategise bargaining since her husband had developed bargaining skills by observing market trends, which helped him to bargain well:

By his exposure, he has gained skills, like he goes very early to the market to buy the vegetables in bulk for the event [a family function]. He will not buy instantly; rather, observes the market for a while. If the produce he is looking for is abundant, the price will be competitive and have chance to go lower. But if the item he is looking for is less and there is no more item arriving there, might be that the price will be double in few hours. So, a buyer must be very attentive. (CWF8)

In contrast, many women farmers recognised shyness as a barrier affecting bargaining intention. As a woman farmer reported: '*Women who do not go to hatiya [local market] to purchase do not have experience to bargain, are less aware on how to do bargaining. They do not go to hatiya due to shyness*' (AWF5). However, a 50-year-old woman farmer mentioned that participation in meetings helped her to overcome shyness:

I recall when I attended my first meeting many years ago, I was very scared, so my hands and feet were shaking just to tell my name. But I have gained experience and confidence now. It has come from my participation in several meetings. (AWF9)

Although literacy was useful to develop farm bargaining intentions since it also provided numeracy skills, some farmers mentioned that despite being illiterate, they had acquired the abilities to bargain by *practising and gaining experience*. Their abilities, such as *critical thinking* and *dealing capably with the other party* improved by *repeated practice*, *learning from mistakes* and *fast learning ability*. A farmer responded: '*It took me time, but ultimately, I learned, I became non-hesitant and fluent to put my opinion*' (AWF6). Another farmer revealed:

I am an illiterate farmer. I have gained experience by farming for a long time. Earlier, when my guardians were responsible for farming, I did not care much about farm bargaining, but now, I must take our farm responsibility. So, by doing it myself several times, I can tell from where I can buy inputs, how much will it cost and how to reach there. (DWF3)

A woman farmer mentioned that she considered bargaining a *learned individual trait*, which is refined by practice, but since she knew how to gain bargaining abilities, she wanted the next generation to learn:

As I know, I will not be alive forever, I want my daughter and DIL to gain the confidence by learning and practising. They must take part in such events, like meetings and public activities, and overcome their shyness, learn how to speak and do activities that are logical. Thinking is very important. (AWF6)

Furthermore, it is clear that the knowledge, skills, and abilities of participants that were advantageous for the purpose of farm bargaining were aspects that could be developed and not set in stone. The barriers to bargaining intention, such as shyness, lack of skills and knowledge was found to improve by learning, practice, experience and exposure visits. For example: 'I scaled up my speaking skills there [meetings] because I was a shy person too. ... I feel it is important for a woman to be able to speak up' (AWF6). Likewise, another participant also stated:

Earlier, I felt shy to speak with people in our village. But later, as I started participating in trainings and exposure visits organised by project and other NGOs, I learned to be outspoken. Recently, I had participated in an exposure visit to Madhubani in India; there I met many women farmers from my community who were doing very good farming and earnings too. They were doing vegetable farming like okra and snake beans, which had given them good profit. I asked them about their journey; they said one need to deal with confidence, and I got really impressed. Now, I am at better position and happy that I have managed my farm myself. I have learned to improve farm yield and to gain profit. Now, I can also bargain well with traders, suppliers and customers. (AWF1)

An example of the farmers' belief that farm bargaining can be improved by practising is: '*I learned [bargaining skills] by asking everyone to understand how to do farming*'. (AWF7)

Farmers revealed that the more they practised, the more the experience they gained that helped them to bargain well: '*It took me time, but later, I became non-hesitant and fluent to put my opinion*' (AWF6). Several farmers mentioned that their experience had made them confident in bargaining and that they now felt comfortable to bargain.

The women farmers acquired personal qualities based on their *training and exposure*, which helped them to improve the knowledge, skills and abilities linked to their positive farm bargaining intentions. Training and exposure have helped women farmers to evolve their capabilities in holistic ways. Moreover, participants identified that once they gained experience in farm bargaining, they were able to develop confidence, which positively linked with their bargaining intentions. For example:

Earlier when I bargained, I felt uncomfortable. I used to refuse to participate in bargaining, but now when my husband and FIL are not present, I must purchase by myself. I have to do several dealings with traders and buyers. I must do a lot of

bargaining. So, now it has started to become comfortable. In my own opinion, I have improved a lot by practising, I have raised my confidence. I bargain more now. (BWF1)

In addition, to the response above from women farmers, views of key informants also reveal the importance of bargaining capabilities to women farmers as: 'There is chance of getting cheated while weighing by the chattiwala [rice or wheat buyer (middleperson) at the local market]; farmers must be attentive' (AMVC1). Similarly, an input supplier revealed that farmers can acquire knowledge on input supplies because of their participation in meetings: 'There is important role of NGOs and community cooperative that organise trainings to women farmers that has led them to do signature; otherwise, many women are still illiterate. Women farmers are now outspoken too' (AMVC1). A key informant working in a farmer's project in the study site mentioned, 'Nowadays, women farmers have improved a lot, they say, "As everyone speaks in the meetings, so I don't feel shy anymore". 'It has brought confidence among women farmers to speak'.' (BMKP4).

The personal attentiveness of women farmers to remain vigilant was also found to be a contributing quality to bargaining intentions.

The evidence from the above results shows that the farm bargaining intentions of women farmers were linked to knowledge, skills and abilities that could be improved by training and exposure. Their practice and experience helped them to acquire new abilities and provided them the confidence to strategise bargaining and avoid getting cheated. Thus, bargaining competency influenced women farmers farm bargaining intention positively.

5.2.1.2 Access to Information

Sixteen of the thirty-five women farmer interviewees (46%) reported that *access to information* influenced their bargaining intentions. Participants with access to information on key issues, such as *market information* and *product information* that were necessary to sell farm products, have shown stronger farm bargaining intentions. This information was linked to the farmers' *behavioural belief* formation that led to the generation of their *attitudes* regarding farm bargaining intentions.

The *market information* elements that the farmers needed were awareness of the presence of *high-value markets* or *niche markets* for their farm products and the *possibility of reaching these marketplaces* to sell their farm products, as these aspects were found to contribute to them developing bargaining intentions. Therefore, when a trader offered a price for their produce, the farmers who developed bargaining intentions, could reject or accept the offer based on this information. In *high-value markets*, the women farmers could sell their produce at a higher price and hence rejected lower offers from traders, preferring to sell at the high-value market instead. For example:

Last year, I decided to explore Rajbiraj market, and I took tomatoes on my bicycle to the market. I was surprised by the price I got there; it was double than the price I used to get in the local markets like at Traffic and Kathauna. So, now I have decided if I will not receive a decent price from traders compared with the marketplace, I can choose not to sell to them. (AWF2)

However, not all the women farmers with knowledge of the high-value markets preferred to sell their farm produce owing to reasons such as lack of transport, gender roles and mobility issues:

I sell rice at chatti, in the weekly market whenever I am in urgent need of money for groceries or medical ... the chatti person gives me money instantly. However, I know if I sell in chatti, the price is Rs. 10 less than if I sell in the Hanumannagar market. I carry rice on my head to chatti as it is close from my home. I cannot ride a bicycle. There are city rickshaws now to Hanumannagar, but I do not prefer because I must pay the rickshaw fare. (BWF4)

These issues showed that the farmers were likely to bargain when they had access to information on the markets and that the absence of this information negatively affected their intentions to bargain.

Another sub-theme in the access to information category was *product information*. A wide range of responses mentioned access to product related information such as the *product's current price*, *breakeven price* and *patterns of rates* related to a farm product. These aspects significantly influenced women farmers' intentions to bargain. The *product's current price* was the most reported information needed for a farmer to have the intention to bargain.

The comparable product price guided the farmers to determine their product's price; For example: 'If I find others' rate is NPR40/kg, then I also keep NPR40/kg as price of my product. ... Because for the same product if price is higher, customers will not buy' (AWF7).

Further, *breakeven price* refers to the price at which the produce must be sold so that the revenue equals the cost of producing it, which means that the farmer will not earn a profit or suffer a loss. The breakeven price helped them to 'recognise and accept price flexibility [can increase or decrease the cost price]' while selling. Farmers with information regarding the breakeven price of their product can develop bargaining intentions, as evident from:

There will always be customers who will reduce the cost price like some men will ask to reduce the cost saying, 'It is just from your home you can reduce the cost, don't make it expensive, it is not a commercial farming'. (AWF7)

Hence, the product price and breakeven price were useful information that helped farmers decide while selling:

When a trader came to buy tomatoes at my farm, he asked, 'Give tomatoes at Rs. 8 per kg'. Then I said, 'It is Rs.15 in market, then why should I give you at just Rs.8?'. He replied with an attitude, 'Then go and sell in the market'. But as I knew about the product rate, so I stick with my price. (AWF5)

The patterns of rates of a farm product helped them decide 'to accept or reject the price offered' by the traders. Therefore, often the traders assumed that because they bought in bulk and directly from the farm, thus enabling the farmer to avoid transportation costs, they would be able to buy at a lower rate and they also assumed that the farmer may be ignorant about the product's market price. For example: a women participant stated:

I do not need to bargain with paikar, as usually, I already have information on the price of the item I am selling. It is the same throughout the village. When I know it is the best price, then only I sell. (CWF6)

Similarly, another participant with information that the price of rice would increase after a few months decided not to sell at the current, lower rate: '*I am thinking not to*

sell rice now as the price will raise later. The government price is INR. 1800 per quintal now that will rise to INR. 2000-2200 per quintal' (DWF1). Therefore, product information, such as that on the product price, greatly affected how the women farmers developed their intention to bargain.

Similarly, the access to knowledge of farm supplies or services was found crucial to participants to develop bargaining intention, as its absence restricted their farm bargaining. For example: when a woman farmer felt she was less aware of the issues, she decided not to bargain: 'I am less aware about the pesticides and fertiliser used for farms. I ask my fellow farmers to buy for me' (AWF7). Another women farmer commented: 'I ask my FIL to bring ijoriya [white coloured fertiliser] potash' (CWF9). She did so because she did not have technical knowledge of input supplies. Another participant stated: 'It is not necessary for me to give my opinion on this matter. I hesitate to bargain as I am illiterate, I am afraid to do mistake' (BWF7). Where another family member who could undertake the necessary bargaining was available, the response was: 'My husband is the main decision-maker for the farm-related issues. He knows about the type, quantity and duration to apply of input supplies and buys them from the market' (BWF7). However, in the context of outmigration from the EGP region, several women farmers learned, experienced and practised farm activities, including bargaining. A seasonal migrant's wife revealed, 'I know about farming and can make farm-related decisions' (BWF1).

In contrast, a women farmer revealed how she felt that expensive is always better. For example: '*When I buy the input, I believe expensive is good, the cheaper one is less good*' (DWF1). This view can be viewed as a misconception of product price which implied that when farmers believed that the quality of an expensive input was better than that of a cheaper one, they were likely to avoid bargaining.

In addition to the ways the women farmers were affected by access to information, the key informants revealed that knowledge of the *product price*, such as of inputs and services, differed by gender. A seller mentioned: '*Women farmers most of the time bargain to reduce the cost. However, the price they offer is mostly based on hachuwa [assumption]. We tell them if we cannot give in that rate'* (BWVC1). An input seller verified how many women farmers used informal ways to ask for a certain input supply:

Men farmers knows more about the price. For women, they come because their husband is not here with them and they're farming. Regarding the price on the packet, many women can read the MRP (Maximum Retail Price). But they do not ask for the input by the name. For example, a farmer will ask, 'I am going to plant wheat, give me tarka and uparka inputs used'. When they say tarka, it means input used inside soil, i.e. DAP, and uparka means above the soil, i.e. urea. (CMVC1)

The lack of product information resulted in the following situation:

I say that there is different brand, and that is expensive and there are cheaper brands too. But their strength may not be same as the expensive one. Sometimes, women buy the cheaper one and then come back to tell 'It did not work, give the good one'. I say you should buy a stronger one. (BWVC1)

These results demonstrated that women farmers had less access to product and input information compared with male farmers and that the lack of information influenced women farmers' intentions to bargain. Therefore, access to information was found to influence women farmers' bargaining intentions. Equally, with greater knowledge, women farmers gained confidence in bargaining, overcame their fear of bargaining and argued assertively to support themselves.

5.2.1.3 Socio-Demographic Characteristics

The data showed that fourteen of the thirty-five women farmer interviewees (40%), indicated that socio-demographic characteristics influenced their bargaining intentions. Particularly four socio-demographic characteristics i.e. the gender of farmers and gender of bargaining opponents, marital status, education level, and age were identified to link with farm bargaining intentions. These socio-demographic characteristics formed part of farmers' perceived behavioural control and its impact on farm bargaining.

The *gender* of the farmer was found to link to their bargaining intention. For example: 'Males buy at the cost price, but women always do kich-kich [haggle for price]. They request to reduce as, "Please reduce the price, can you give at Rs. 5 or Rs. 10 less? But males think nagging as womanish' (AWF1). It shows the women engaged in farm bargaining in the region. The interview data also indicated that there were more women middleperson [traders] who purchased from the local farmers in Kanakpatti village: *'There are many women middle people come to buy vegetables from the villages. ... I overall take care of my farm. ... I feel fine to bargain with them'* (AWF2). It was also noticed that the *gender of bargaining opponent* was crucial for the women farmers to develop bargaining intention. For example, farmers mentioned they felt comfortable when they had *female bargaining opponents* [middle people or traders] than bargaining with men:

I am comfortable to bargain with a woman seller because I feel connected with her and talk frankly so I can bargain well. It is not that I never buy from men sellers, but it is uncomfortable to bargain with a man. (BWF1)

Likewise, another sub-theme for women farmers bargaining intention was the *educational status*. Similarly, another women farmer mentioned that being illiterate was a reason she did not participate in bargaining. As she explained:

My husband is the main decision-maker for the farm-related issues. He knows about the type, quantity and duration to apply of input supplies and buys them from the market. It is not necessary for me to give my opinion on this matter. I hesitate to bargain as I am illiterate; I am afraid I will do mistake. (BWF7)

One women participant confirmed: '*I am illiterate, I am not good at hisab [numeracy]. I did mistakes in calculation while dealing earlier. So, better I leave it to my husband*' (AWF8). Education was found to be linked to the development of attitudinal beliefs and in turn influenced perceived behavioural control and the realisation of their inability to bargain. Surprisingly, it was found that the higher the education, the lower was the bargaining behaviour and vice versa.

Likewise, *marital status* of the women farmers, was linked to their perceived behavioural control which influenced their bargaining intentions. It was identified that in an women-only household, the women farmers avoided bargaining considerably because of the lack of male family members since they feared it would cause arguments with male farmers or traders. For example:

In this village, the labours here do not listen. I must go to call them a number of times at their home before the labours came to work. If I had more members in

family who could contribute on farming, I am sure I would have progressed a lot. Unfortunately, I am a widow farmer. ...I only have two sons who are still young and now are not with me. Currently, I am working alone. (AWF7)

Similarly, another women farmer mentioned:

My husband died three years ago and, unfortunately, this year my FIL also died. So, in our family, my MIL, two young sons and I are here. There are disagreements in our farmers' group that the powerful male group members try to dominate our say in the group. We cannot argue when they are unfair because being widow women makes us [my MIL and I] feel weak, and I cannot take stand for myself. (BWF2)

Thus, the woman farmer reported having to face challenges as a widowed farmer, which led to a negative impact on her bargaining intentions.

Moreover, intra-household farm-related bargaining was linked to the *age* of the members involved. For example: '*I do not bargain for household work with my MIL*' (CWF3). The age of women farmer participants was found to be important for farm bargaining intention. The intention to bargain was linked to age as the intention was negatively influenced when the bargaining was done by younger to the older age person, as in this case in which a DIL could not bargain with her MIL since her MIL was an elder.

Besides, the responses from the women farmers that showed the socio-demographic characters was important, the view from bargaining opponents are also noted. An input supplier revealed that it was true that there were more women bargainer at his shop but surprising their knowledge on input supplies was lower than men's:

In my shop, both men and women come to buy seeds. Out of them, 80% of the farmers know about the quality of seeds and which one to buy. So, when they come, I give them what they ask for. But among those 80%, number of men are more (around 80%) who have knowledge on seeds while women are about 20% only who know about the seeds. (BMVC1)

It was supported by the response from a male input seller as he remarked that illiteracy was the reason he needed to provide a detailed explanation to the women customers who bargained: '*Both men and women ask equally about the input products, but I need*

to explain more to women because they do not understand, and I think it is due to lack of education' (DMVC1). Next, a woman input seller shared to bargain while purchasing is common for women farmers, but *literacy* of the women farmers affected their bargaining intentions:

Illiterate or less educated women farmers bargain more. The educated women look at the MRP on the product and hence do or do not bargain. I am a woman seller, but yes, that is fine with me because I also do bargain when I buy something. (BWVC1)

These excerpts illuminate that gender, gender of bargaining opponent, educational status, marital status, and age were linked to the women farmers' willingness to bargain. Several women farmer participants believed that bargaining or haggling on the price of input supplies was a woman's role which was positively linked to their farm bargaining intention, and therefore women farmers should bargain because of their gender, while some shared when the bargaining opponent were women it was comfortable to women farmers. Besides, the actual bargaining situation from the point of view of input suppliers was different as they revealed the women farmers lacked actual knowledge on inputs and hence, the bargaining becomes just for shake of bargaining not the real as needed.

5.2.1.4 Social Relationships

The *social relationships* theme was found to influence the farm bargaining intentions of women farmers. The participants specified four social relationship aspects that were important to them, which influenced their bargaining intention: *family encouragement*, *seller-customer relationship*, *interdependency* and *social network*. These aspects were linked to behavioural beliefs that led to attitudes, including the control beliefs leading to perceived behavioural control of the farmers.

The encouragement received from family was identified as being important to the women farmers since some commented that they perform well when they receive encouragement and support from their family. For example:

I am equally able to do farm bargaining like my husband. But I was not like this before. In last 7–8 years, I was not able to do things like now. My husband encouraged me for this so, I also kept doing. (CWF7)

Further, 'My family support me in all ways so that I can take part in the agriculture; that is why I am making pretty good profit from it' (AWF5).

The women farmer participants revealed that the farm-related buying and selling process is determined by the existing *seller–customer relationship*. As two participants stated:

When we bargain to reduce the cost for the tractor ploughing, the owner considers and reduces Rs. 10–20 in lump sum at the end. The seller considers the reduction because we are their pakdal party [regular customer] who needs ploughing for 3 bigga of land around the year. (CWF3)

'I know you, I come to your shop all the time and you are not reducing the rate.' So, then the seller will agree to reduce. Local seller farmers are also the relatives of the customers who come to buy and for that reason they manage the relation by reducing or adding small quantity more to what customers purchase. Women sellers are more around the hatiya. (BWF8)

Hence, these relationships benefitted both buyers and sellers and resulted in positive, stronger bargaining intentions in buyers.

Similarly, bargaining while selling to the network was determined by the parties' *interdependency*:

The one who is elder in the village are the known person like FIL and BIL, and when they bargain, we consider their request; it is difficult to deny. Because although they are indirectly related to us, we are interdependent on each other. I need their help for my farm-related activities, like while weighing to sell, finding a trader and borrowing equipment. (CWF3)

Thus, there was mutual benefit among these interdependent parties as well as flexibility towards each other, as in their bargaining intention. Further, the women farmer participants replied that apart from their family members, they depend on people in their social networks, such as their relatives, neighbours, friends and traders at the market. For example:

As now it is mobile's era, we call to friends in the Khutauna market, and hence, we get aware of the market price. ... the trader also has the price information from the

market, and so, we can tell if he is telling the truth or not. If both the prices match, then we agree to make a deal. (CWF8)

Women farmers married to migrant workers also sought support from their social networks: '*The use of social networks is very important here. When my husband is not here, I manage my tasks by taking help from my networks*' (CWF7). In addition, '*The information from the networks help me to bargain for the price*' (CWF8). Therefore, farmers seek support from their family and network. This support is found to be useful in developing positive farm bargaining intentions.

5.2.1.5 Responsibility

Farmers' sense of *responsibility* towards the farm appeared to strongly influence their bargaining intentions. It was linked to their attitudes and perceived behavioural control related to farm bargaining intentions. Several farmers mentioned that this factor was an important reason to engage in farm bargaining. For example:

It is my responsibility to manage everything. I need to work hard on our farm. I take overall care of my farm. As these radishes [she was tying radishes into bunches during the interview] that now I am bunching, I have worked myself to plant them, I took care while they grew, and today in the morning I pulled and washed them. I will sell them to the local market. So, when I do everything, I also bargain during the process by myself. (AWF2)

Hence, when farmers felt a sense of responsibility towards their farm, their intention to bargain to gain income was greater. A woman farmer distinguished between her bargaining intention before and after being accountable for her farm and said that when she realised she was responsible for her farm, her accountability to bargain for the process increased:

After my marriage, I lived in a joint family. At that time, my BIL was the main responsible person for our farm. We followed his instructions while working. I never gave my point of view during that time, just did what I was told to do. Later, when we [my husband, children and I] got separated from the joint family, we had our share of land and must farm on our own. So, I must manage it, I prepared plans and executed. Now, I have to think how I can make profit and bargain well. (CWF2) Since her husband was a migrant worker, the wife had to take charge of the farm. Hence, she intended to bargain for her farm products, unlike earlier when she was not responsible. Many other women farmers married to migrant workers had the same experience: '*Nowadays, selling is women's job because men go to foreign for employment and they are not in the village'* (AWF5). Participants mentioned their responsibilities in all areas of farming, for example: '*But you also have responsibilities when you are selling your produce'* (AWF7).

A woman farmer participant mentioned that even when spouses lived together they had two different occupations, with the spouse responsible for farming being concerned about farm bargaining:

In my family, I am more responsible for the household chores, farming and selling of the farm products. For example, when the production is less, it is my responsibility; he is not much concerned with the amount of production. He says, 'Let it be whatever is produced'. (BWF8)

This finding shows that a sense of responsibility towards farm products was linked to the intention to bargain.

Within the context of the outmigration of the husband, and the gender and cultural roles of women farmers, many women farmer participants faced challenges in working towards fulfilling their responsibility to their farms. However, many of them used their agency to bring about a change, which influenced their farm bargaining intention as well as their prosperity. For example, a women farmer from Mauahi village mentioned:

I was extremely shy person [when a newlywed] and could not speak with others. But now, I am a mother of three children, and if I do not raise my head who else would, there is no other adult than myself in my family. Therefore, it became necessary for me to manage things here and speak up to bargain or else our family would face its consequences. (DWF3)

In the outmigration situation, many women like her who were very timid took the lead to manage their farms. All of this was the result of their agency, which brought about such positive changes. A women farmer from Koiladi village who was in a similar situation asserted: It is considered a gender role that a DIL should not speak with FIL and BIL, but as the circumstance needs that I have to participate in farming and my husband is not with me, I have to talk. So, I started to talk with my in-laws but with respect that is a modification. I put ghunghat [purdah], and then I talk with respect. So, they also do not feel disrespected, and hence, they help me with my farm job when I cannot perform it owing to my small kids. (BWF1)

Thus, it was found that using agency, the women farmers identified a peaceful way to perform their gender roles as well as their farm roles. Further, a woman farmer in Kanakpatti revealed that riding a bicycle not only made it possible for her to carry a heavier load to the market but also helped her to manage her time effectively. She mentioned:

There are many women in our village now who can ride bicycle who earlier were not able to ride it. ... Last year, I decided to explore Rajbiraj market and took tomatoes by riding a bicycle. I was surprised by the price I got there; it was double than the price I used to get in the local markets like at Traffic and Khutauna. (AWF2)

Earlier, women were not allowed to ride bicycles. Many women farmers found farming difficult because of the hardships involved. Simultaneously, their responsibilities towards their family were increasing. They discovered that riding a bicycle could bring them new market avenues and increase their profits. Here, riding a bicycle was found as the use of their agency. It was recognised as a breakthrough by certain women farmers who gained new opportunities by riding a bicycle for the first time. This finding shows that the cultural practices that restricted women from gaining mobility, thus creating dependency on a male family member and hindering their access to local markets, had created challenges for the study participants. They were found to be using their agency to find a way to discern what would work in the context of embedded cultural and gender complexity.

5.2.1.6 Mobility

Mobility emerged as an important theme while exploring the factors influencing the intention to farm bargain. The theme was found to be linked with the attitudes and perceived behavioural control of women farmers regarding bargaining intentions.

From the interviews, it appeared that the *mobility* access of women farmers was embedded in the culture, the economy and the local practices. They perceived that their access differed from that of the male farmers in the EGP region. Further, the results showed that certain mobility beliefs and practices were linked to bargaining intentions. Participants mentioned beliefs that restricted their mobility, for example: '*In our culture, women are not as free as men to travel or go to anywhere*' (BWF1); '*Men are like birds. They keep on flying from one place to another, but for women, she must stay at home*' (AWF4) and '*Women in the village will not go to drink tea in the market, but men will go and even if he does not have the money, his friends will buy him tea and paan [betel leaves]*' (AWF7); Thus, mobility was a liberty experienced more by men than by women.

A woman's mobility was not in her control because she had to seek permission from her guardian when she required to go out. A women participant stated: '*When I go out, I must ask my MIL because she is the guardian of our family until date*' (AWF2). The prevalence of this practice was confirmed with delight by one mother-in-law:

I have three daughters-in-law, and they ask me before going anywhere. If they go to work on farm, market or to their maternal home, they first ask to me. They do what I tell. My DILs are very obedient they respect me a lot. (AWF9)

It showed that women farmers needed to receive their guardian's permission to go out, for example to the market, which is often considered important in farming. Similarly, a participant clearly mentioned that her in-laws were unhappy when she participated in the farmers' meetings: 'As a woman, I experience mobility restriction. If I go to participate to the farmers' meeting or trainings organised in the village, my family would not appreciate it' (BWF2).

Some women mentioned that although their mobility was not restricted, the duration they could spend outside the home was limited due to women's gender roles:

My husband takes a round of the market and searches for the best product and price before he purchases. When he finds it, then he bargains and purchases the product. ... He goes to market in leisure, but women do not have leisure time. She has one task after another and that keeps continuing. But when I go to the hatiya [local market], I purchase in hurry because I have no choice; my responsibility towards my two kids at home who are waiting for me is always in the back of my mind. (BWF1)

Moreover, some women said that mobility restrictions were an outcome not only of culture but also of economic and personal factors, such as the lack of money to pay for a city rickshaw fare. Conversely, the skill needed to ride a bicycle was the reason they did not choose to go to the market to sell their products. For example:

I sell rice at chatti, in the weekly market, ... I know if I sell in chatti, the price is Rs. 10 less than if I sell in the Hanumannagar market. I carry rice on my head to the chatti as it is close from my home. I cannot ride a bicycle. (BWF4)

In addition to the mobility circumstances presented by the women farmers, the results were also verified from an input supplier view as: '*Both male and female farmers come here to buy inputs, but overall, more male farmers come to my shop*' (AMVC1).

While in contrast, another input supplier shared that some women farmers who could afford to pay the transportation fare showed their mobility:

Bicycle is the most common means of transportation in this area. Many men come to market by riding their bicycle to buy fertilisers and seeds. But in comparison to men, there are less women who ride a bicycle to the market. However, as now the city rickshaw is in operation, it has increased women's presence in the Hanumannagar market. (BWVC1)

These responses confirmed the linkage of mobility with the women farmers' bargaining issues. First, the freedom to go out of the home was an issue that was perceived as being partly restricted in the study areas for women farmers. Second, even after women farmers went to the market, they were concerned about returning home quickly because domestic chores and childcare were their primary responsibility.

5.2.1.7 Availability of Options

Another important theme that emerged from the interviews was the *availability of options*. Several participants stated that to have options, strengthened the bargaining intention of women farmers. It was discovered that this theme was linked to the behavioural beliefs supporting the attitudinal factors of the farmers. Based on the

findings, two key aspects were identified to be linked with the availability of options, referred to as the *availability of customers* and the *availability of tenants*.

In the context of this study, the participants elaborated that sellers knew that the customers would bargain, but the *availability of customers* gave strength to the farmer's bargaining intentions. It appeared that when they found a good deal, they accepted it, but when they did not receive the best deal, the availability of customers mattered, which strengthened the sellers' resolve to reject the deal. For example:

Yes, every customer would like to bargain for price. I consider their price at times depending upon the market price for that day. I often remain firm on my price. It is then the customer's choice if they want to buy at my price or find another seller. I do not regret, as there will be more customers. (AWF10)

Likewise, the *availability of options* for tenants or landlords affected the involved parties' bargaining intentions. For example:

If I compare the farm expenditures in last 20 years and now, the diesel to irrigate was Rs. 11/litre and now it is Rs. 75/litre; to hire machine for irrigation, it was Rs. 20/hour and now it is Rs. 200/hour; and the milling was Rs. 1/ Tin rice, while it is Rs. 8/Tin now [1 Tin=10 Kg], so everything has become expensive. But the rent to the landlord was adhiya shared cropping since then until now. There is no input support from the landlord since then until now. These things remain unchanged. There is no profit to the farmers. That is the reason I have reduced the rental land area by half. I cannot completely leave tenancy from the landlord because, earlier, the landless people like Mushar, Chamar, Muslim people came to buy rice, wheat and pulses from us but now all of them are doing their own farming. They do the tenancy for landlords. So, the landlord can easily find someone to rent their land. (CWF3)

The above results showed the response from women farmers and revealed the importance of availability of options could affect their bargaining intention positively and this view was similar to the responses from input sellers and landlord (key informants). The input suppliers who knew they would find other buyers preferred to make a better economic deal by rejecting the less profitable ones, as:

A customer will buy from the seller where they find it cheapest. So, if I keep high price, the customers will ask the rate here and thinking it is expensive here will go to another shop. There are only three licenced input sellers in this area, and there are informal sellers who sells input at the hatiya [local market]. So, I must consider all those things. Regardless, I guarantee for the input sold here, and explain to customers about the quality of products. Some customers compulsorily bargain. Before coming to this shop, they do a price check in 3–4 shops. Although this is a wholesale shop, they come here and still bargain. Especially to such customers, I say, 'I do not want to sell to you. I will have many genuine customers. (DMVC1)

Hence, being aware that they will have other customers strengthens the sellers' position, and hence, they could avoid customers who were not serious about buying or were seeking low rates:

Every customer bargains. Customers sometime give reference of other shops as 'I asked in another shop, the price of the item was Rs. 20 but in your shop, it is Rs. 25'. Customers sometime try to influence the seller by many means. Then, I calculate even if I get Rs. 1 profit, I sell it, but I easily deny if I am in loss. I believe there will be plenty of customers. (AMVC1)

Another study participant, who was a landlord, mentioned:

The rent we are charging is very low, so, farmers do not bargain. At present, farmers are growing 80 kg/katta, we have not asked to share the by-products laar puwar. The rent that they are paying to us is 22 kg/katta. This time I have increased by 2 kg per katta. Next time, we are planning 30–35 kg per kata and laar-puwar [rice straws] also must be shared. ... Yes, the farmers say, 'Do not increase the rent'. But I know if they leave the land where will they go? I would say, 'My field is in my backyard. If you think it is not a good deal, you may leave my land. I will keep it fallow. By this, my field will a take rest too'. I just take 10 kg/katta for the wheat because I know the input and the labour for wheat is a lot so we will not increase it, but for paddy we will. Currently, there are many farmers renting our land. If one farmer leaves the land, the villagers will know it and another one will come to ask. (CMKP1)

In this way, the landlord has tried to pressurise farmers because of the availability of tenants. He was aware that if one tenant leaves, another will ask to rent and that if they leave, their livelihood is gone. Therefore, in this situation in which tenants were easily available, the women farmers were less likely to bargain. Thus, availability of options

gave power and intention to bargain to both the women farmers and the bargaining opponents.

5.2.1.8 Urgency

The next theme identified was *urgency*. Several farmers revealed that any sort of urgency determined their bargaining. For instance, farming is the livelihood of smallholder farmers. They depend upon their farm yield for household consumption as well as for managing their household's daily needs. Therefore, they have less choice and less bargaining power when they have to fulfil any urgent financial needs. The bargaining intention of women farmers in this situation was diminished. This theme, *urgency*, was linked to *attitudes* linking to the *behavioural beliefs* of the farmers.

Farmers who had to sell and collect the sales proceeds in a limited time preferred to avoid bargaining. For example:

The Paikar [trader] offered the price and I accepted it. I did not bargain because I was afraid that he will not buy, and I will not get another buyer soon. So, what he offered, I had to accept because I needed money for household expenses like children's education, groceries, also I had to go to Delhi so needed money urgently. (CWF7)

Another farmer mentioned:

I sell rice at the Chatti [location where informal buyers for rice or wheat Chattiwala are present] in the periodic market whenever I am in urgent need of money for groceries or medical. There, I can sell any amount of rice and the Chatti person gives me money instantly. Although, I know when I sell in Chatti, the price is Rs 10 less, than that if I sell in the Hanumannagar market. (BWF4)

Urgency negatively affects their bargaining intentions not only when selling but also when purchasing. In this case, they prefer a brief period of bargaining and close the deal quickly.

It was sold to a paikaar [trader]; he was a Brahmin paikaar who wanted to buy to give daan [donation for religious purpose]. I said if the price is 8000, better I will not sell my cow because it still giving milk. But, in actual, the place where I keep the cow was getting congested, so we should sell it. We had to choose which one to sell and which we want to keep; we decided it thinking which one is more profitable to us. I sold it because it was a good deal; he paid more because the buyer was in urgent need. (CWF4)

Thus, farmers' *urgency* to sell their products affected their *behavioural belief* and influenced their bargaining intentions in a negative way.

5.2.1.9 Access to Resources

The women farmers' *access to resources* was identified as an important factor that was linked to their bargaining intentions. The access to the resource theme, linked to the development of behavioural beliefs that support bargaining intentions. The *lack of productive farm resources* initiated negative bargaining intentions.

The resources used in farming, such as the land, irrigation equipment [tube wells, bore wells, pump sets], water sources, ploughs, tractors, harvesters, threshers, electricity or fuel and financial resources, are essential to farm production and are also defined as productive resources in some studies (Parveen 2008). The access to such resources indicates the farmer's self-sufficiency; however, in the EGP region, even a landlord with a large landholding may not own all the necessary resources. Conversely, resource-rich landlords or owners were also involved in large-scale farming and renting of equipment to smallholders. Some individual sellers who only owned the equipment also rented it out. Therefore, smallholders who lacked productive farm resources rented from the landlords or the renters. The findings show that the smallholder farmers often lacked productive farm resources. A woman farmer stated that this deprivation had created a dependency on the rich farmers, which eventually lowered farmers' farm bargaining intentions:

He [male large farmer] used a tractor to plough the land overnight and planted all the cauli seedlings early next morning. The seedlings he planted belonged to the group members, and the members had taken care to water the seeds. The next day, when farmers woke up, they were surprised to see all that had happened. The women farmers in the group could not raise their voice due to their dependency upon him. I do not have access to productive resources, such as an ox plough and a tube well. I cannot prepare my field to transplant the seedlings without his help. He did conspiracy to the women farmers by not giving the ox plough so that women farmers could not prepare their farm on time to transplant when the seedling were ready. ...We are also dependent on him to plough and irrigate our land because he is the only one who has boring and pump set machine close to my land. If the project pump set is not available on time, then we need to use his pump set. So, if we quarrel it may have its consequences, which will be difficult for me because I am a widow. (BWF2).

In this situation, the controlling of seedlings by the male large farmer was exploitative and unethical, which the woman farmer was aware of. However, due to her lack of productive resources she restrained herself from showing her disagreement and prepared herself for the outcome. She was afraid of the vicious cycle of dependency in that if a bargaining conflict arose, he could exercise his power to restrict his rental resources when she needed these. Simultaneously, the situation deteriorated when such owners had a monopoly on services. Hence, the lack of resources jeopardised the woman farmers' bargaining strength.

Another woman farmer noted that her lack of financial ability made her dependent upon her husband for decision-making. As she said:

So, if I have money, I can take farm decisions by myself, but at many times when there is no cash with me, then I need to call my husband and ask about how to do it, and if he has money, he sends, or if not, then he suggests how to arrange it. (BWF1)

Therefore, in the study context, the ownership of productive resources was identified as a prominent factor that influenced the bargaining intention of the women farmers. However, the patriarchal nature of society gave less credibility to a woman's opinion than to a man's decision power. Men perceived women as minors who always needed a guardian. This practice denied women direct access to productive farm resources.

5.2.1.10 Landlord – Tenant Farmer Relationship

Finally, within the context of tenancy-based farm production, the *landlord – tenant farmer relationship* emerged as an important theme that guided farm bargaining intentions. The extent of the relationship between the landlord and the farmer created an enabling or hindering environment that further assisted women farmers to develop bargaining intentions. This theme developed the tenant farmers' behavioural beliefs, forming their attitudes towards the bargaining process.

Rental payment history determined the character of a good tenant. Hence, if they paid rent on time, they developed a favourable relationship with the landlord. For example:

Our landlord often considered our request to reduce rent when we faced unprecedented events like a flood or drought. They do it because we are a reliable tenant. We pay our kuut [rent] on time. If we had not paid the rent on time in the past, he might be reluctant to agree to what we ask for. In my opinion, landlords having farming experience can understand the hardship of a farmer during disasters. But, in contrast, the landlords who do not have farming experience themselves might be unwilling to understand it. (AWF2)

Therefore, tenant farmers who pay on-time developed a favourable relationship with the landlord, which allowed them to bargain if necessary. It was found from the interview responses that when they had a good relationship, the likelihood of bargaining success also increased. Further, in the social structure of the village which was characterised by inequality between the classes of landlord and tenant farmer, the landlord was more likely to have a stronger bargaining position. Repetitive bargaining failure led the farmers to avoid developing bargaining intentions. For example:

We do not say anything to our landlord. Because I know how he is—he will not listen to what we request even when we are in difficult situation. The landlord will say, 'If you are facing difficulties to pay adhiya [the rent] of the land, then you may leave the land'. (CWF9)

Therefore, the landlord – tenant farmer relationship was observed to have benefits, but the women farmers mentioned that it was difficult to maintain a favourable relationship with an acquisitive landlord. Landlords could increase the land rent in times of good harvest since they had a higher position in this power relationship.

5.2.2 Product related factors

5.2.2.1 Product Quality

The theme *product quality* was the third highest (15 of the 35 farm women or 43%) reported theme in the factors affecting farm bargaining intentions. Farmers mentioned that the *product quality* was important for farm bargaining and played a key role in establishing bargaining intentions. In this theme, issues related to farm products, such as *fresh and good* produce, *perishability* and *value addition* to products, were

identified as influencers of their bargaining intentions. This theme was influential in developing their behavioural beliefs related to their attitudinal beliefs.

Several farmers from all the four study sites reported *fresh and good* products mattered significantly in bargaining with buyers. A woman farmer compared the importance of product quality, stating that similar to how people prefer a beautiful, good girl for marriage, buyers prefer purchasing good-quality farm products. For example:

When your harvest is good, it is well fruited, fully developed and looks healthy, then it will pay you back good. It will give you good price in return, same as a good girl is preferred for marriage. The demand will depend on the quality of crop. (DWF5)

Farmers knew that if their product is better than that of others, they can demand a higher price. For example, a woman farmer stated:

Buyers bargain all the time. If I mention NPR50 per kg for cauliflower, based on the rate of it on the market, a customer will ask to reduce the price, but I remain firm on my price because my produce is of very good quality and freshly harvested from my farm. I tell, 'It is my price; if you want, take it, if not, you can buy from others and can go. (BWF8)

Further, 'As our produce is local and fresh it could sell at NPR5–10 more than the produce that is sold by traders in the local market' (AWF5). Farmers said that in such a situation they could ask for a higher price and could refuse to bargain. They also stated the best aspect was that their products were in high demand because of the freshness and good quality. A farmer mentioned that she determined the product price based on its quality:

I will ask traders and farmers who are selling cauliflower, 'What price are you selling?'. I ask some of them to generalise the price on that day. For example, if I find others' rate is NPR40/kg, then I also keep NPR40/kg as price of my product. This is the same way I keep the price every week. Because for the same product if price is higher, customers will not buy. However, if my product is fresh compared to other sellers, I can keep a higher rate too. So, the price of product depends upon the quality and freshness of the product, not on the seller's characteristics. (AWF7)

Another farmer stated fresh and good quality products enhance their competitiveness in the market: '*The most important thing for a farmer*'s bargaining power is the quality of their yield, i.e. a good quality receives a better price, it can sustain in the competitive market' (AWF4). Therefore, having good and fresh quality yield was identified as an essential factor that strengthened farmers' bargaining and was found to be positively linked to their bargaining intentions.

The *value addition* to the farm products was identified as a sub-theme in the product quality theme that affected the producer farmer's bargaining intentions. Value addition demanded extra efforts, such as washing the produce and making bundles before selling, such as in the case of radish and green leafy vegetables:

I prefer to wash radishes and bundle them before I sell them in the market. They are sold in better price if I do so. Nowadays, many sellers bring washed radishes in the local market. Similarly, I also grow rice and partly I parboil it. The parboiled rice can sell in an extra price. (AWF9)

Another farmer mentioned:

Although the high-quality rice like Kariya-kamal, Kala-nimak (scented variety of basmati) yields less and its by-product is more, it gives me more benefit. It can be sold at high price compared to the high yielding regular Mansuli variety. (BWF1)

Farm products' *perishability* was identified as another sub-theme in the product quality theme. For example, a woman farmer emphasised that the perishability of the product determined the farmers' bargaining intentions:

Some items like green leaves, tomatoes and green vegetables are perishable in nature. Perishable means it can get spoilt quickly if temperature is not maintained. The perishable items get high price value when it is sold fresh. I try to sell all of them by the end of the same market day. Because if not sold, I need to take them back home and need to come back to sell another day. However, such items must be stored in cold temperature and in our village or nearby there is no cold storage facility in large or small scale and not any farmer has freezer to store the produce in the village. So, if the produce is not sold by the end of the day, a farmer bears loss. Hence, if some customer bargains, I sell them at a lower price too to prevent loss due to dry out, losing its weight or getting rotten. (AWF7)

To the views presented in this section from the women farmers, it was found necessary to understand the views on product quality from input suppliers' point of view. It was found similar to the ideas shared by the women farmers. The input suppliers confirmed that when the product's (input's) quality is optimum the buyers (farmers) were willing to pay more. As input suppliers at all the four study sites confirmed this: '*The customers who know that if they buy from my shop, they will get good and tested seeds, those will pay the price without any bargaining*' (BMVC1). Further:

The seeds sold in this shop are of good quality and guaranteed. It means if the seeds do not germinate, they will be replaced. This gives seed security to the farmers. Hence, they appreciate and most often purchase my seeds. Not only Kanakpatti, people from other villages also now started to recognise me and they want to purchase from me. (AWVC1)

Another supplier said:

Customers ask for a good-quality input and are willing to pay the price. They say, 'I want a good variety that can give me a good yield', and we show them the available options and prices and guarantee on them and they buy accordingly. (DMVC1)

Hence, it is evident from the results that having *good and fresh* quality yield, *value addition* to products and *perishability* determined the product quality. Further, these were essential factors to strengthen women farmers' bargaining as sellers and were positively linked to their bargaining intentions.

5.2.2.2 Product Quantity

The *product quantity* theme appeared to influence farm bargaining intentions. The data indicated that a bulk buyer received discounts. The theme was linked to the product and played a key role in influencing farmers' control beliefs leading to perceived behavioural control affecting their bargaining intentions.

Farmers asked for discounts on purchasing inputs in bulk, which the sellers also considered. For example: '*I will say, "See, I will purchase your seeds in bulk. Can you reduce Rs. 5/10?"*. *This way they will reduce the overall cost*' (AWF2). Moreover:

When a customer buys in a bulk quantity and bargains to reduce the price, I do it but not to a buyer who purchases 1/2 kg or 1 kg. Sometimes, I also offer to reduce the price if I have to sell in a bulk quantity. (BWF8)

The participants also accepted that when they did not purchase in bulk, they did not ask for discounts: 'When I will buy vegetables or seeds in small quantity, I will not bargain. I think why to bargain just for Rs. 2 or 4; it should be done when we buy in a large quantity' (BWF1). Thus, when farmers bought a smaller quantity, the benefit in terms of a discount was also less, and hence, if they were successful, they received just a small benefit, whereas for a bulk quantity, the benefit when they received discounts was large. Therefore, the farmers' intention to bargain for a bulk purchase was positively related to developing a bargaining intention and vice versa.

However, farmers did not prefer to buy all the inputs they required in bulk because of lack of financial resources. A women farmer commented: '*If I buy inputs in large amount, it is cheaper but if I buy less amount, then the cost is less and manageable. I make plan to buy as much as I will need for my land*' (DWF3).

In addition, to the above views from women farmers, an input supplier confirmed that they sold at lower rates to bulk buyers than to those buying small quantities: '*Women customers bargain on fertilisers. They bargain to reduce price when they are buying in large quantity. I reduce when they buy in large quantity—like if they buy whole sack*' (BWVC1). Hence, the product quantity while purchasing was related to buyers' and sellers' attitudes through which they developed their bargaining intentions.

Therefore, despite knowing that buying in bulk can lead to a substantial discount, they could not always buy in bulk. From the data gathered, product quantity in the context of this study could be defined as a theme for developing bargaining intentions, and it was valued by the sellers and buyers to save cost, time and achieve a quick sale.

5.2.2.3 Product Demand

Another important theme that emerged from the data was *product demand*. This theme linked to the behavioural beliefs supporting the attitudinal factors and control beliefs impacting on perceived behavioural control, which in turn influences women farmers bargaining intentions.

The study found that the EGP market also followed the economics of supply and demand for products. In this study, the product prices were determined by two

important elements: first, the time of selling a product, that is, the peak season and offseason, and second, the produce quantity available in the market.

The women farmer participants commented that when the demand for an item was high, the price rose and again if the quantity available was less (shortage), the price increased more than usual. Further, these processes occurred regardless of the seller's gender. For example, women participants mentioned: '*It does not matter who is selling; if the demand is high, a farmer will receive a good price value, but when there is plenty of produce available in the market, the price will decrease*' (BWF3); and

The price of input can be slightly flexible depending upon the season. Like in the peak season for farming, price of inputs goes up and will be lower during the off-season. For example, the price for one sack, Rs. 2500 during off-season may rise to Rs. 2800–3200 if the demand increases. (BWF1)

Similarly, a woman farmer mentioned that women farmers' bargaining intentions are linked to the time of selling. The time refers to seasonal or off-season crops. For example:

If a farmer can sell during aguta, one can get a very good bargain; for example, last year I had planted brinjal in 1 katta of land and was able to produce 9–10 quintals of the vegetable. ... We sold brinjal to the trader from Dumra from home. At the beginning, the price was high, so we sold at INR40 per kg. Gradually, when the pachuta season approached, the production increased and there was abundance of brinjal produced by many other farmers too. So, later the price decreased; then, I sold at INR20 and again decreased to INR15. This is the same for other vegetables too, that at first, the price will be high, then later it will reduce, and again it will little raise a bit. (CWF8)

In farming, the sowing and ripening time of a farm product is crucial from economic perspective. When a farm product is planted prior to its regular timing of cultivation and therefore it matures earlier than the one planted at regular time, it is termed *aguta*. Similarly, the crop that gets prepared to sell when majority of the products seller had also brought to sell in the market the product is in abundance in the market, so this timiling is called *pachuta*. The farmers' bargaining intention was higher during *aguta* due to less product and high demand. Likewise, during *pachuta*, the peak season, their intention to bargain and the price they received both decreased. A participant revealed:

If I can sell cauli or any vegetables during the aguta season, that means I am selling my produce before other farmers or traders can sell the item; festival time or marriage season I will sell in a very good price. As the demand will be high at that time the produce will be sold out quickly. (BWF8)

Another farmer reaffirmed:

The vegetable production is affected by timing of production. There are three important selling time slots that influence the price of the produce: early season, mid-season that is also the peak season and the late season, for every crop and specially for vegetables. For example, when the cauliflower production is ready to sell in early season that is in Asin and Kartik [September and October] months, the price rate is 120–130 but after Mangsir 15 to Poush [November–December] the rate starts to fall up to Rs. 30–50. In the month of Magh [January-February], the price goes down, but again when the marriage season comes in Mangsir [November], the rate becomes Rs. 40–50. (BMF2)

Therefore, a farmer can develop a positive intention to bargain when their produce is an early-season (*aguta*) produce.

5.2.2.4 Product Management

The *product management* theme showed three important situations when the farmers' bargaining intention was linked to the management of their products. First, during selling when a farmer's estimated *cost price is collected*, they allow the customer to bargain and do not adhere strictly to their prices because 'Accepting customer's bargaining also depends upon whether the cost price is already collected. If so, then a trader or a farmer will not hesitate to reduce the price' (BWF8). Second, when it is the time for market closure:

Accepting customer's bargaining also depends upon the situation and the item I am selling. I usually make Rs. 2–4 flexibility with the price, but when the market starts to close and I still have items to be sold, then, I will reduce the cost to clear up the stock. (BWF8)

Third, when farmers do not have the appropriate *storage facility*, they tend to accept the customer's bargaining, as evident from this example:

The government price of milled rice is INR. 1800 per quintal now, and it will rise INR. 2000-2200 per quintal later. I am thinking to sell when the price goes higher. I have plastered floor and can store my harvest at my home. The rice is completely dried now. I can store either by threshing or without threshing. Traders come at home to buy rice when it cheaper, and they store and sell when the price goes higher. But I will not sell now and will wait until the price goes higher. (DWF1)

Thus, the *product management* theme influenced the attitudes of women farmers and impacting their control beliefs. The three main situations when their project management approach was influenced were when they had collected the cost price of the produce, when it was time for the market to close and when they lacked storage facilities.

5.2.3 Socio-cultural factors

In this socio-cultural factor related to women farmers bargaining intention identified two important themes gender dynamics and myths that linked to create participants normative beliefs.

5.2.3.1 Gender Dynamics (Male privilege, gender roles, hegemonic masculinity)

The gender dynamics prevailing in the four study sites in this study were found as a crucial theme to impede the women farmers farm bargaining intentions. Gender dynamics refer to sociocultural concepts about gender and the power relationship and it explains the way people behave and interact in a gender-specific ways (Song 2017). The gender dynamics included sub-themes as *male privilege, gender roles and hegemonic masculinity*. The results showed *gender dynamics* as a factor which linked to the subjective norms of the women farmers and shaped their normative beliefs. These beliefs compelled them to outline bargaining intentions which was mostly found to constrain them to form farm bargaining intentions that is described below.

The first sub-theme *male privileges* were found linked to women farmers' farm bargaining intentions. Men were culturally privileged and considered of higher value than women. For example, some women farmer participants established that male privileges were given:

We give more value to men because even if a man is retarded, he can earn, he can go to do farm labour work at another place, but a woman cannot. No matter how smart she is, a woman must remain at home. (BWF4)

A woman farmer, who was the wife of a migrant worker, said, 'I believe women's household chores is acceptable as woman stays at home, and man must go out to earn. ... so, when my husband comes in holidays, he does not help me in the kitchen' (DWF4).

Men's ability to generate income was the reason provided for their higher value. However, even if a woman generated income for the family, male privilege remained unchanged: '*No matter how much a woman does, she will never be valued like a man*' (AWF6). Further, even after a tiring day on the farm, domestic chores were always a woman's task: '*It would not suit a woman, if her husband cooks and she just eat, it is quite a shame for a woman*' (BWF4). Here, men may not always demand to be valued more than women, but the women in the family follow this cultural practice without questioning.

The above notions showed males' cultural privileges in the *Mithilanchal* region. This higher value attached to males created a power imbalance between the women farmers and the input suppliers, tractor owners and harvesters since most of them were males, thus negatively influencing women farmers bargaining intentions.

Second, the sub-theme *gender roles* were evident in the responses of the women farmers, illustrating their farm bargaining intentions. Several participants discussed how their gender roles appeared to influence these intentions. For instance, a woman farmer insisted that owing to her gender roles she could not find inputs at the best price, whereas her husband could:

When I go to the hatiya [local market], I purchase in hurry because I have no choice, my responsibility towards my two kids at home who are waiting for me is always in the back of my mind. So, my husband gets the best price and quality items in our family. He goes to market in leisure, but women do not have leisure time, they have one task after another. (BWF1)

Another participant stated, 'Women do not have leisure time due to their chores and farm work. Therefore, I ask and give money and request to bring seeds for me to my

neighbour who is going to Agrovet or market' (BWF2). It was found that the women farmers had gender roles that interfered with their farmer role and this affected their intention to bargain. They reasoned that owing to their gender roles, they often hesitated to take part in the farm bargaining process since it required time and that they needed to compromise on the time they had for domestic chores. Others mentioned they avoided participating in the market space because of their gender roles. As a woman farmer mentioned, owing to her gender role, she always aimed to save time by selling her farm products quickly and hence has compromise on the benefits. For example:

Due to my household responsibilities, I cannot harvest quickly. It's late as I can't give all my time to farm. ... Yes, as traders come to our home, they give us less price. I find selling to the paikar [traders] is better because although they give me the less price than selling into the market, it saves my time that I can use at another work [domestic tasks]. (CWF2)

This view was also supported by another participant's response:

It provides better profit when a farmer sells produce in the market, but as I must take care of my small kids and farm work daily, I do not get enough time to sell like that. So, my first preference is to sell the farm produce to the vegetable buyers who come to purchase at my home. (CWF8)

Likewise, some women farmers were found to sell at a lower price and in bulk to traders just to save time for household chores. A woman farmer stated:

Often, traders want to buy from farmers in the local market. They want to buy in bulk, so they offer a less price to us. But I prefer to sell to them as it saves my time. Once I sell all my produce, I am done for the day and I can return home to do my household chores or whatever I want to do. (AWF4)

Third is the existing *hegemonic masculinities* that emerged as a sub-theme playing a key role in women farmer's bargaining intentions. The data analysis provided evidence on how women farmers gave up bargaining to maintain their power relations. This socio-cultural theme influenced their normative beliefs integral to their subjective norms which in turn influence the bargaining intention of the women farmers. The

findings revealed that the power relations dynamics pushed women farmers into a disadvantaged position which consequently, affected their farm bargaining intentions.

The findings highlight that the existing power relations among the stakeholders and the women farmers created unrealistic and unequal bargaining positions. Most of the farm stakeholders—for example, landlords, farm labourers, tractor drivers, thresher operators, mill agents and traders—were men, and hence, as women, the farmers tended to have a weaker bargaining position. Several women farmers experienced male dominance in their farm and nonfarm-related works. For example:

I feel the men farmers in our group oppresses women farmers. ... a male in our farmer's group shows a rough personality and once verbally abused and hit a woman farmer whose cow entered his Mungbean field. He hit her so hard in front of so many people that she was lying on the ground. He never hesitates to verbally abuse women; that is why we do not like to stay near him. (BWF2)

It was found that women farmers' intentions to bargain were negatively affected in such an exploitative situation, and they gave up dealing with such men farmers owing to the existing power relations. Moreover, the intra-household gap in the status of men and women farmers extended to other domains, such as farms and markets. A women participant shared her experience:

Women farmers in the group speak, but there is no value for what women are speaking. For example, a woman farmer gave some suggestion to the secretary of the group who is a male. Shamelessly, he said, 'When my wife cannot speak in front of me, then why are you to suggest me?'. She then complained about this to women staff of the project, and she brought this issue to the notice of the project members; they later came and supported the women in their favour. It helped the women farmer a bit, but such incidents are continuous. There is another incident when a male farmer lied and manipulated the women farmers in the group. I felt I was cheated. When we denied what he suggested, he was trying to scare us and out of fury he said, 'From now, I would never step at you house', and then the situation degraded; finally, I felt unworthy to remain in the group, so I left it. (BWF5)

From the above response it was found that the existing power relations between a woman farmer and a male landlord were so stressful that the women farmers avoided

bargaining with the landlords. This view was confirmed from one of the landlords who mentioned:

This is the village of the lower-class peoples. When we hire labours, they want to grab as much money as they can. At present, the rent we are charging is very low. ... this time we will increase the rent. ... the farmers will say, 'Do not increase the rent'. But where will they go if they leave the land? I would say, 'My field is in my backyard. If you think it is not a good deal to you, leave my land. I will keep it fallow. My field will take rest'. (CMKP1)

As a result, the findings indicate that the prevailing gender dynamics in terms of male privileges, gender roles, and hegemonic masculinities were creating an unequal positioning situation that formed negative normative beliefs about their bargaining intentions. Furthermore, current gender dynamics adversely impact the attitudes and perceived behavioural control of women farmers who have firmly adopted socioculturally ingrained gender roles, compromising their farm bargaining intentions.

5.2.3.2 Myths

Myths were another theme identified that reduced farm bargaining intentions in the socio-cultural factors. Myths are the hypothetical beliefs of a society. They influenced the subjective norms and created the *normatic belief* of farmers. The study revealed that the women farmers observed myths as difficult or almost impossible to overcome. For example, a myth regarding 'ploughing must be done [strictly] by men in the EGP's farming practice' was reported by several participants in all the four study sites: 'the only task that a woman cannot do while farming is ploughing' (BWF3).

Although the belief and the accompanying stories were not identical in all the four sites, ploughing by women was found to be linked to unfortunate incidents that affected the whole village and, in particular, the women who ploughed and was punishable by the community. For example:

If a woman ploughs there will be drought, older women said. I often wonder about it and realise that if woman can use a hoe to dig, then why cannot she use a plough. I believe as women must do all the domestic tasks at home, so she does not get enough time to use ploughs and this became a trend. Men have leisure time, and they go around the village, but women have number of things to do. (AWF1)

A Kanakpatti women farmer stated that this belief was linked to their ancient Hindu mythology:

Women can do everything in farming, except ploughing, which was only done by men and still only men do it. Because in Treta yug [a period in Hindu mythology], King Janak had no children [lack of successor]. A wise man in his palace suggested he call a rishi [enlightened guru] to find a solution. A rishi came and he said that if King Janak holds a laagain [the wooden stick of a plough] to plough the field, it will bring the solution. During that time, Ravan [the King of Lanka, who was notorious owing to his deeds] collected tax from all the rishis; he was brutal and killed many rishis too. The rishis who survived collecting the vikshya [donated food obtained through door-to-door requests]; it was the only thing they had, so how could they give it to Ravan. The evil Ravan turned even more evil by asking for the blood of rishis who could not pay the tax. The rishis then collected their blood in a vessel, and when they were going to give it to Ravan one Rishi dug the land and hid it. Later, it was found that the land where he had hidden it was King Janak's land. And when King Janak dug the land, the vessel turned into a baby, and in this way, he found the solution to his problem for childlessness and drought. Goddess Sita appeared as a baby. So, people linked ploughing as a male's job because of the story. In our village even the Muslims (Kujras) followed Hindus on ploughing only by men. (AWF5)



Figure 5.5: Oxgen Plough Used in the EGP Region (source: Researcher)

A woman farmer expressed the reasons that a woman must not plough as follows:

Old people say that if women plough, there will be drought. The whole plough is made up of wood, and rope is used to tie the oxen (Figure 5.5). The plough's handle is called bareri. Laagain is the wooden part that touches the ground and has a sharp plough attached made of iron. Laagain holds the oxen. Paalo is the wooden block that has holes to tie the oxen with rope. According to traditional belief, a woman should not touch the laagain as when the laagain is tied with the oxen, it is considered God Mahadev. Although women can worship Mahadev, they do not touch the laagain. When a field is ploughed, it is done vertically from one end to another of the farm. The ploughing creates a line on the field by digging. A pregnant woman must not cross such lines drawn by the plough. If she must cross, then she must throw some soil over those lines to erase it before she crosses. There is a strong belief until date that if a pregnant woman crosses such lines, the baby to be born might die due to hypoxia; that is, the baby's breath stops for as long as the time required to dig that line from one end to another by the plough. Some also say that the baby to be born will be marchhiya [retarded]. I came to know about these things from my mother and have clearly told my daughters strictly not to do so. (CWF3)

The women farmers strongly believed these myths. They could not break the rules and added that they may need to pay a charge if a woman does plough, for example:

Nowadays, women do farming. There is only one thing that only men can do: ploughing with ox. That is a rule, and if not followed, then there is a 'don' means charge or a fine. If a woman ploughs, she must pay 'don' to the community. (AWF2)

Hence, the myths were found to remain deeply embedded in people's minds and negatively influenced farmers' farm bargaining intentions.

This illustrates that the deep-rooted socio-cultural practices embedded in the gender dynamics and existing myths were barriers to the women farmers' bargaining intentions.

5.2.4 Institutional factors

5.2.4.1 Collective Farming

The *collective farming* theme was also identified among the factors affecting farm bargaining intentions. Several women farmers revealed that their engagement in collective farming, compared with that in family-owned, individual smallholder farming in the EGP region, was more positive in relation to the effects on their farm bargaining intentions. Further, this theme was identified as linked to their control beliefs as part of their perceived behavioural control and subsequent influence on their bargaining intentions.

The smallholder women farmers who had limited opportunities to increase their farm products often expected to produce more at a reduced cost and intended to profit well. A women farmer compared her expenditure as an individual farmer with that when she engaged in collective farming and mentioned that the collective expenditure was less because it was shared. She commented: '*Farmers divide the cost associated with the maintenance of the wear and tear of the sunflower pump. When we divide the cost, … we do not need to pay a lot, we only have to pay one-eighth' (AWF2).*

Further, in the tenant/landlord relationship, the landlord typically had more power. When the landlord intended to increase the rent, the individual tenant farmer had no power to oppose the decision, but through collective bargaining, they were able to disagree with the landlord's decision. For example:

The tenancy rent is decided among the landlord and tenant at the beginning for farming. But as the landlord found tenants having a good production, he decided to increase the rent. He called all the farmers, and then he said that as the production is good so the rent will be increased. But it raised a huge dissatisfaction among the tenants. All the farmers then said that they will leave the land if he will raise the rent. That made the landlord to drop the idea. (CWF2)

Thus, it was found that collective bargaining exerted a higher pressure than when each farmer bargained separately; as a result, the bargaining was successful.

Mauahi village is located in a drought-prone area. The farmers in the local collective group had rented land at a fixed rate from the local resident landlord. As the climatic stress of drought hit, in one season, they were unable to produce as expected. They knew that the landlord would not consider reducing the rent, given that he had not listened to individual farmers in the past. However, they thought they should try to convince him, and hence, they went together to him with their request for rent reduction. To their surprise, the landlord reduced the rent. As a women farmer who was a member of this collective group mentioned:

In the first year, the landlord and tenants had jointly decided 12,000 per year per bigga as a rent for collective farming. ... In second year, drought hit the village. We faced difficulties to pay the rent, so we collectively bargained with the landlord and he reduced the cost to 10,000 per year. We were further able to bargain that if we only produce one crop i.e. paddy then the rent will be less. So, if I do not do wheat then the rent will be 7000 only. As the wheat cultivation is expensive, we choose not to produce wheat. The landlord agreed to our request. (DWF3)

Hence, the intention to bargain as a group brought a positive outcome because it was performed collectively. Therefore, after finding collective bargaining useful, a women farmer suggested that this strength could be introduced in other areas related to farm bargaining issues. For example:

The price of the input items is fixed. There is no bargaining for input items. Still, we ask but the shopkeepers do not reduce the cost. In this situation, if all the farmers will ask, then maybe the price will be reduced. But if only one person asks, then the price will not be reduced. (DWF7)

It is clear from the finding above that when farmers bargained collectively, there were several positive influences on bargaining intentions; however, this study also noted some adverse outcomes for bargaining intentions. For instance, the characteristics of the members in the collective group was important. If the group members had unequal backgrounds and power relations, the collective farming reproduced the unequal power relations among the group members. For example, in the Koiladi village:

The group members had collectively purchased trays using farmer's fund. They prepared soil trays and planted seeds of cauliflower. The farmers were surprised to see that ... he planted all the cauli seedlings. The women farmers in the group could not raise their voice. (BWF2)

Another farmer said, '*How can I bargain with a man who is loud and verbally abusive in nature, as he is a man and rich as well*?' (BWF3). Thus, unequal power relations existed among the members of the collective group. The inequalities were based on gender since men were considered to have a higher status than women. Furthermore, the rich amongst the members were in a higher position than the poor and the farmer who had farm assets was in a higher position than the one who lacked assets. With such unequal power relations, the bargaining intentions were negatively affected. The

powerful members in the group exerted their power over the weaker members, and the weaker members avoided bargaining because they were dependent on the powerful farmers. For example:

The women farmers in our group do not have access to farm resources—like plough and irrigation facility. They could not prepare their field to transplant the seedlings without his [the man with farm resources] help. He did a conspiracy to the women farmers by not giving the ox plough so that women farmers could not prepare their farm on time to transplant when the seedlings were ready. ... We are also dependent on him to irrigate our land because he is only one who has boring and pump set machine close to my land. If the project [DSI4MTF] pump set is not available on time, then we need to use his pump set. So, if we quarrel it may have its consequences, which will be difficult for me because I am a single woman. (BWF3)

In collectives, other factors, such as access to farm resources, were equally important in the absence of farm resources, which negatively influenced bargaining intentions. Thus, the findings show that collective farming was a useful way for the smallholder farmers to develop bargaining intention; however, unequal power relations among the members based on age, class, gender, ownership, access to productive resources or marital status were found to interfere with yielding the same results to all the participant members.

5.2.4.2 Institutional Farm Structures

The *institutional farm structures* theme was found to influence farmers' bargaining intentions. Institutionalisation was observed as a panacea for smallholder farmers' bargaining intentions and could also resolve many other farm issues. The theme exerted its influence on control beliefs, which affected the perceived behavioural control of farm women participants. Therefore, when there are well-institutionalised farm conditions present, women farmer participants could develop positive farm bargaining intentions.

An example of the effect of the lack of institutionalisation on bargaining intentions was found in Mauahi village. A woman participant described how she was caught in an unwanted life-threatening situation when she irrigated her fields: There is a canal in our village from where nearby villagers irrigate our fields. However, the water use lacks any governance rule; whoever gets there first, they get water first. So, during Khariff [monsoon] season, we built a furrow to bring water from the canal to the paddy fields. At that time, village farmers monitor the act to prevent water passage from ours to theirs. We were digging the passage from morning as everyone wanted to plant their paddy on time. It took so long that we stayed there monitoring until 2-3 am. ... That day was a horrible experience for me, and I said to myself I would rather let the field dry but would not take such a step in the future to water my fields. The field is mostly rainfed. I felt ashamed to tell such story to villagers. (DWF2)

This incident showed that when an irrigation system is not institutionalised, there will be conflicts among the water users. In such situations, women are the most affected, and were found having intention to quit farming without bargaining.

In addition to the above, there are several subsidies and government programs to support the EGP farmers for instance agriculture-related subsidies on seeds, fertilisers, machineries and irrigation (water extraction); agriculture electricity at subsidised rate provision; and many more. In addition, key informant responses verified how the lack of institutional structure adversely affect women farmers. Since Bihar is a welfare state the participants commented that the government ensures to supports its farmers during a climate crisis. During such circumstances a native farmer who want to receive relief support funds must submit an application form. However, there could be complications, for example:

To apply for the drought relief fund, a farmer must fill the khata (account) number and khesra (registration) number of the farm plot that was affected by drought. Unfortunately, a tenant farmer does not have the official land lease paper; hence, they do not have the details of land. In usual practice, the landlord and tenant farmer do agreement verbally. The need for only a verbal agreement is due to landlord's fear that if they provide land details to the tenants, they may claim the land after farming for certain years. So, when the government subsidies are given to the climate-affected farmers, instead of the actual farmer who bore the consequence of drought, the landlord who has access to the details can claim and receive the fund as, 'Who wouldn't want to take the free money?'. (CMKP2) Against this backdrop, due to the landlords' perceived fear that tenants would claim their land, they avoided a formal contract. This practice had serious negative consequences as a result of the semi feudal exploitative behaviour of the landlords, who maintained unequal positions in relation to their tenants. In Koiladi and Bhagwatipur, some landlords took benefit of the verbal contracts and exerted their authority to take advantage of tenant farmers in addition to the rent paid. Some landlords asked their tenants to work on their farm and do household work such as domestic chores, ploughing kitchen garden, weeding and taking care of livestock as a free unpaid work. The tenants who had no other options of earning an income followed their landlord's instructions for fear of losing their tenancy which may drag them into poverty.

If a dispute arose, the verbal agreement for rent could be called off at any time and no intervention was possible since there was no written agreement. A landlord mentioned:

At present, the rent we are charging is very low. I saw this year the crop yield is quite good. I am thinking to increase the rent this year. ... I know the farmers will say, 'Do not increase the rent'. But where will they go if they leave the land? I would say, 'My field is in my backyard. If you think it is not a good deal to you, leave my land. I will keep it fallow. My field will take rest'. (CMKP1)

Hence, the landlord had a great deal of influence on their land and therefore on the tenancy agreement. Consequently, it was found that the lack of an institutionalised agreement process negatively influenced the bargaining intention of the farmers.

The next section addresses the third research question and its associated sub-questions which focus on women farmers' attitudes, subjective norms and their perceived behavioural control.

5.3 Summary

This chapter answered RQ2 regarding the factors affecting the women's farm bargaining intentions. The 18 sub-themes (factors) that emerged can be grouped into four broad themes (categories). The first theme is personal factors, which comprises 10 factors related to individual bargaining competency, access to information, socio-demographic characteristics, social relationships, responsibility, mobility, availability

of options, urgency, access to resources and landlord – tenant farmer relationship. The second theme is product-related factors that influence women's farm bargaining intentions, namely, the quality, quantity, demand and management of products.

The third main theme, sociocultural factors that influenced the bargaining, has two main sub-themes (factors): gender dynamics (mainly three types: male privilege, gender roles and hegemonic masculinities); and myths that shaped farm bargaining intentions. The final main theme, institutional factors, has the two sub-themes of collective farming and institutional farm structures. The chapter also identified how each of the 18 factors was linked to the TPB constructs that influence bargaining intentions.

The next chapter presents the results regarding the relationship between the TPB constructs, namely attitudes, subjective norms and perceived behavioural control, and women farmers' farm bargaining intentions.

CHAPTER 6: RESULTS (PART III)

6.1 Introduction

Chapter 5 presented the results informing RQ2 regarding the factors influencing the bargaining intentions of women farmers in the EGP region. This chapter builds upon the results presented in the previous chapter and presents the results informing RQ3, which are underpinned by the TPB: *How and why do women smallholders' attitudes towards existing farm bargaining issues; the perceptions of significant others in their lives (subjective norms); and the belief they have in their own bargaining ability and skills and that bargaining is within their control (perceived behavioural control), influence their intention to bargain? Since RQ3 explicitly focuses on women farmer's attitudes including subjective norms, and perceived behavioural control in relation to their farm bargaining intentions, the responses from women farmers (n=35) were analysed to inform the finding in this chapter.*

Figure 6.1 depicts a flow diagram that summarises the chapter structure. In Section 6.2, women farmers' attitudes towards existing farm bargaining issues are presented. Section 6.3 focuses on the subjective norms influencing their bargaining intentions. Section 6.4 presents the results regarding the perceived behavioural control influencing their bargaining intentions. Last, Section 6.5 concludes the chapter by summarising the main topics discussed in the chapter.

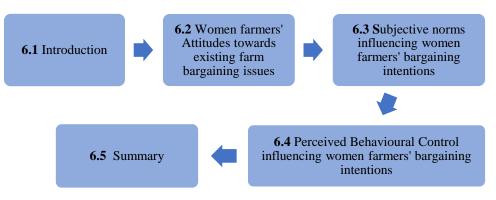


Figure 6.1: Structure of Chapter 6 (Results: Part III)

6.2 How and Why Do Women Smallholders' Attitudes towards Existing Farm Bargaining Issues Influence Their Intention to Bargain? (RQ3.1)

This section discusses the results informing the first sub-research question RQ3.1, by exploring how and why women smallholders' attitudes towards existing farm bargaining issues influence their intention to bargain.

Open-ended interview questions were asked, such as 'How do you feel about farm bargaining and its significance to farmers?' This question was followed-up and/or probed through questions on 'willingness to bargain', 'liking or disliking bargaining', 'feeling bargaining is easy or difficult' and 'who they perceive are good at bargaining'.

Table 6.1 summarises the themes and the frequency in which they emerged from the interviews. Most of the attitudinal responses of the farmers were guided by their involvement in purchasing and selling farm-related produce.

Attitudinal Themes Identified	Frequency of Occurrence
Women are Better at Bargaining	20
Bargaining Importance	10
Attitude towards Gaining Benefits	9
Traders (Middle people) Gain most Profit	8
Bargaining Necessity	7
Difficulty Bargaining	4

Table 6.1: Farm Bargaining Attitudinal Themes that Influence BargainingIntentions (n= 35)

Six attitudinal themes were identified: 'women are better at bargaining', 'bargaining importance', 'attitude towards gaining benefits', 'traders (middle people) gain most profit', 'bargaining necessity' and 'difficulty bargaining'. A brief analysis of each theme is presented next. The results represent the responses from the women farmers, although responses from the key informants were used to illuminate the results. Appendix B provides Tables B2, which list the themes and the associated quotations from the participants' interview responses.

6.2.1 Women Are Better at Bargaining

The theme 'women are better at bargaining' was the most reported attitudinal theme (in 20 of the 35 interviews: 57%) relating to bargaining intentions at all four study sites. For example, participants stated that 'bargaining is a women's habit'(CMF2) and 'Male farmers considered bargaining as "womanish"' (AWF1).

A woman farmer confirmed this sentiment which illustrates that the attitude of 'women are better at bargaining' influences their intention to bargain:

I think to purchase the same item and quantity from the local market, the amount of money my husband and I will spend will not be the same. The amount he will spend will be a lot more. For example, for the items I pay Rs.100, my husband will spend Rs. 200. The reasons are he not only avoids bargaining but also picks expensive items. But as a woman, I will bargain and try to convince the seller to reduce the cost. (BWF8)

Although the findings revealed that women were perceived as being better at farm bargaining the interview data also revealed that a few woman participants believed their male partners were better at bargaining; for example: '*In our house, my husband does good bargaining than me*' (BWF1).

Most of the women farmers indicated they perceived themselves to be better at bargaining than their male counterparts. This perception of women farmers was supported by a male key informant from Bhagwatipur, who commented: '*No doubt it's my wife who is better at bargaining. If we decide to sell at Rs. 25, she can still sell at Rs. 30, and she says she sold at Rs. 25 and saves Rs. 5 for herself*' (CMF2).

Further, an input supplier confirmed that the women farmers were the ones who haggled when buying inputs: '*Haggling for price or nagging to reduce the cost was often performed by women farmers*' (AWVC1). Another input supplier agreed that women always haggle for a better price, unlike male customers; however, some male participants also mentioned that '*the rate they ask for is based on guessing*' (BWVC1).

In contrast to the input suppliers' perspective, a trader found it easier to persuade women farmers, and hence, he preferred to deal with them rather than men: '*I need to*

pay more when I buy from a male seller. So, when I call for sellers selling their livestock, I prefer it is a woman seller' (AMVC2).

The findings show that although women farmers tended to perceive themselves to be better at bargaining, the key informants, especially the input suppliers and traders, revealed that women farmers' bargaining was weaker compared with that of the men owing to various reasons, as discussed in the following sections.

6.2.2 Bargaining Importance

Almost a third of the women farmer participants (10 of the 35 women farmers: 29%) spoke of 'bargaining importance' to farmers. This attitude reflected the necessity to engage in buying and selling activities. For example: '*I must buy almost everything* ... *seeds, seedlings, urea, DAP, potash. Hence, I need to bargain for everything. It is very important for me to save by getting a good price*' (AWF1). One farmer revealed that customers often ignored the hard work and cost associated with farming and that the ability to bargain for the price is an advantage: '*Customers* ... *like some men will ask to reduce the cost saying, "It is just from your home, you can reduce the cost. Don't make it expensive*"' (AWF7). Hence, it is clear that bargaining is vital to farmers.

There were also contradictory views. For example, a woman farmer stated that bargaining is unnecessary because in her view the cost cannot be changed: '*I do not think bargaining is important as the village operates on the knowledge that one farmer shares with others or one farmer seeks from another.* ...so, we must follow the pattern' (DWF1).

Therefore, it could be inferred that women farmers who considered bargaining important may also have had a positive intention to bargain. Conversely, those who did not hold this view and stated that bargaining was not important also showed no intention to bargain.

6.2.3 Attitude Towards Gaining Benefits

Another important attitudinal theme identified in the interview data was *attitude towards gaining benefits*. A quarter of interviewees (nine of the 35 women interviewees: 26%) revealed that their intention to bargain was influenced by their attitude towards gaining benefits from farm bargaining. This attitude was influenced

by two types of benefits: *economic benefit* and *time benefit*. Most of them mentioned economic benefits as the primary motive. For example, 'For women, if she can bargain, she can save some money' (AWF2), and 'When we farm and bargain to sell, it gives us profit' (AWF3). Further, the benefit also influenced women farmers' intentions to bargain with customers; for example: 'More profit can be made when we will bargain with a consumer who buys our product for household consumption' (AWF4).

The attitude towards *time benefits* also influenced their intention to bargain, especially in the case of women farmers who had other household work responsibilities and chose time saving rather than price gain. These two examples illustrate this finding well:

I get good price in market for my yield as compared to selling to a trader, but as they come to our home, they give us less price. Still, I find selling to a trader is better because although they give me the less price than selling into the market, it saves my time that I can use for other work. (CWF2)

Another farmer stated, 'As a farmer, I prefer to sell in a single go so that I can complete selling for the day quicker' (BWF4). Hence, they not only intended to bargain for price but also for time

6.2.4 Traders (Middle people) Gain Most Profit

Eight of the 35 women farmers (22%) revealed that the 'traders (middle people) gained most profit' out of farm produce sales, as clearly demonstrated from a woman farmer's response: 'If a farmer sells to the customer, a farmer benefits the most, but if sold to a trader, then the trader makes the most of the profit' (AWF2) and 'I do not sell to paikar or feraha (traders) because they give less price of the produce. Feraha earns most out of the selling to others in the process' (AWF1). Both the comments showed that the women farmers' attitude was that 'traders gain more profit', which affected their bargaining intentions negatively.

Figure 6.2 depicts a flow diagram showing the main actors involved in farm product transactions and reveals the middle people or traders involved in the process who make most of the profits by selling the farm products.

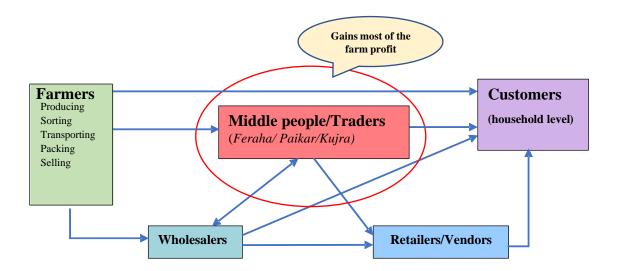


Figure 6.2: Main Actors in Farm Product Transactions

6.2.5 Bargaining Necessity

The attitude '*bargaining necessity*' emerged as an important theme (in seven of the 35 interviews: 20%) related to why women have the intention to bargain. Bargaining necessity was expressed as follows: '*Being a small farmer, the quantity of my produce is also small, so I need to sell in a good price. Hence, it is necessary to bargain well for good selling value*' (CWF5). Moreover, the response 'to sell in a good price' showed the intention to bargain, which was linked to the farmers' bargaining necessity. Further, many farmers agreed that irrespective of their likes or dislikes regarding bargaining, bargaining is a necessity for farmers. For example:

I was a shy person who could not speak with other people. For farming, I needed to communicate with others and bargain. The change was not easy, but it was necessary. I felt if I do not speak that is going to cost me more in everything. (AWF6)

The findings further revealed that women's 'bargaining necessity' was associated with male outmigration, as clearly mentioned in the response of a woman farmer whose husband had migrated: '*My husband is working in Bombay, ... when he is not here, I take care of all the works here. I decided to overcome my shyness and bargain with the male traders*' (DWF3). Hence, the smallholder farmers' sociocultural context and their individual needs showed their bargaining necessity, which then also had a positive impact on their intention to bargain.

6.2.6 Difficulty in Bargaining

Another theme that emerged was 'Difficulty in bargaining' with four of the 35 (11%) interviewees indicating that this played a role in their intention to bargain. One farmer explained her bargaining experience as a difficult task: '*He* (an input supplier) is a very rigid seller and never discounts the price of the inputs. I do bargain to reduce the cost, but he finally takes the full price. So, now I do not bargain' (AWF8). Likewise, another women farmer mentioned: 'To hire labours... I must request or beg them because they would not listen. After requesting a reduced price for many times, then only they will show up on the field. It is very difficult' (AWF7). She further added:

For my farm yield, I can decide what the selling price will be. But in reverse, when I must purchase, I remain at the other end. I have to depend on what price the input suppliers tell, and there may be not possibility of bargaining. (AWF7)

This example illustrates women farmers' attitude about how difficult the process of bargaining is and how it influenced their intentions to bargain in a negative way. Further, when they found farm bargaining to be difficult or not possible, they hesitated to bargain. However, some women farmers appeared to overcome this barrier and proceeded to bargain regardless of the difficulty because they saw it as an important measure needed to become successful at farming.

6.3 How and Why Do the Perceptions of Significant Others in Women Smallholders' Lives (Subjective Norms) Influence Their Intention to Bargain? (RQ3.2)

This section presents the results informing the second sub-research question (RQ3.2), which further inform the third research question (RQ3). This RQ explores the question: *How and why do the perceptions of significant others in women smallholders' lives (subjective norms), influence their intention to bargain?*

The related interview questions included: 'Are there any prescribed roles for men and women at home or at the farm? Do such roles affect women's farm participation and bargaining? If so, how?'. This was followed by probing questions: 'Is your role as a farmer influenced by what your community will think of you if you do anything other than the prescribed roles?'.

Table 6.2 presents the results regarding the themes identified following the thematic analysis of the interviews. It shows six themes relevant to 'subjective norms' and the frequency of their occurrence in the interviews. The discussion that follows will show that the first four subjective norm themes, 'gender norms', power relation', 'local norms' and 'gendered farm practice', formed negative farm bargaining intentions, whereas the theme 'encouragement' built positive farm bargaining intentions.

Appendix B provides Tables B3, which list the themes and the associated quotations from the participants' interview responses.

Table 6.2: Subjective Norm Themes and Frequency of Occurrence in Interviews(n=35)

Subjective Farm Norm Identified	Themes	Frequency of Occurrence
Gender norms		10
Power relations		6
Shyness		6
Local norms		5
Gendered farm practices		3
Encouragement		3

As discussed in Chapter 2, subjective norms can be described as the way other influencers can affect an individual's perception of behavioural expectations (Ajzen 1991, p. 106). Subjective norms develop normative beliefs that formulate intentions relevant to women farmers' bargaining intentions. However, the role of subjective norms in building intentions can be direct or indirect, meaning that according to the TPB, subjective norms associates with intentions directly or can influence individuals to form attitudes or perceptions regarding behavioural control, thus leading them to develop bargaining intentions indirectly. This finding revealed that the existing subjective norms were potential enablers or inhibitors of the bargaining intentions of women farmers. The six themes— 'gender norms', 'power relations', 'shyness' 'local norms', 'gendered farm practices' and 'encouragement'—are discussed next.

6.3.1 Gender Norms

The interviews showed the presence of *normative beliefs* that directed women farmers' daily lives, particularly their farm participation and farm bargaining. It was clear that the EGP society exhibited sociocultural values that created *normative beliefs* to assist the society to function. The *normative beliefs* describe the values associated with being a 'good woman', and these were internalised by most of the women farmers and further influenced their farm bargaining intentions. The data showed that the predominant subjective norm influencing bargaining intentions was 'gender norms' (in 10 of the 35 interviews: 28%). One participant clearly stated that her farm bargaining intention was governed by her inherent beliefs about becoming a good woman, as she replied:

I avoid talking with unknown traders, as there is a saying, 'aurat aur peti band hi behatar', meaning a woman and a suitcase, both are better when closed. It is not necessary for a woman to be open and frank with everyone. Shyness from the outside world is a treasure to a woman. (CWF3)

Similarly, 'I do not prefer to talk to traders as a woman is not appreciated talking with men. It is not a virtue of a good woman' (BWF1). Hence, such beliefs restricted women farmers from openly bargaining on farm issues that were considered essential for farming.

The data showed that gender norms provided limited choices to women, which further restricted their intention to bargain and to fully participate in farming. As one participant revealed:

I get limited choice to travel and take part in farmer's activities. I think woman's primary responsibility is to do household chores. I avoid purchasing and selling vegetables, as I do not get enough time due to the responsibilities of my domestic chores. (BWF3)

In addition, all four sites are situated in the *Mithilanchal* region, which is '*rich in traditions, cultures and religion*' (DWF2). It means a woman must carry the cultural baggage associated with the family's prestige in 'what she performs' and 'how she does things', as demonstrated by a participant:

I liked to ride a bicycle and used to ride it before my marriage. But in our culture, women after marriage do not ride a bicycle. What will people comment, 'Look! Falana's [referring to the name of her FIL] DIL is riding a bicycle, she is not ashamed'. It is not good for a woman to divide legs to ride a bicycle. ... I could have bicycled to the local market, and it would be quite easier for me to sell and purchase produces, but I avoid it. (DWF4)

Another participant stated:

I need to think what others will say if I talk to traders visiting our home. I hesitate, because in my community an adult woman is soft-spoken, shy, respects elders, not talkative and does not talk with stranger men. If a woman shows such virtues, she is a 'good woman' whom people admire. It also boosts her desirability as a potential bride to a groom's family. An outspoken girl is not liked enough. (AWF6)

It was clear that the community's acceptance and admiration of a woman depend upon their displaying the characteristics of a 'good' woman. Therefore, women are found to maintain a good image and the reputation of their family by following the gender norms upheld by the community. Similarly, the gender norms that define a woman's gender roles as performing household chores and staying indoors, and reducing the time spent in the farm and on market activities through which most of the farm bargaining occurs, are illustrated by the following example:

I get limited choice to travel and take part in farmer's activities. I think woman's primary responsibility is to do household chores. I avoid purchasing and selling vegetables as I do not get enough time due to my domestic responsibilities. (BWF3)

This example illustrates how women farmers were guided by gender norms. However, it also resulted in other consequences. Women responsible for domestic chores not only had an added work burden but also had limited opportunities to take advantage of the mobility allowed by farm activities to expand their economic stability.

Farm practices that have been guided by gender norms have potentially weakened a woman farmer's bargaining ability because she restricts herself to thinking about what

other people will say about it. This response explains the thought process of a women farmer:

When a trader comes to buy our farm produce, he offers a rate claiming it is the market price on the day and we must sell accordingly. We might get cheated if we lack the information. Hence, to verify the price, we call to sellers at the bazar (local market). We both, my husband and I, have mobile phones, but mainly my husband finds the price in the bazar. This helps us to decide our cost price, and hence, we sell to traders. Mostly, I sell when my husband is at home. But if not, I call him to find the market price and he calls me back with the price and my relatives help me to sell. In our family, my inlaws also stay with us and most of the villagers knows each other, while some are our relatives too. I avoid talking to the traders as it helps to display my good character and reputation of my family. (CWF8)

The data showed that women farmers were concerned about what people would say if they broke the norms and this concern potentially affected their intention to bargain. A women participant revealed that the normative belief that a widow should not talk with an unknown male had limited her bargaining intentions. She expressed: '*I do not prefer to sell my farm produce at home. I prefer to sell in the local market. I am a widow farmer; in our village, the villagers backbite if a woman farmer talks to a stranger*' (AWF7). Similarly, another women added: 'As extension officers are male, *even if a woman knows him, she will not talk due to social pressure to not talk to an unknown male*' (AWF10).

In both situations, women farmers hesitated to meet, discuss and bargain with men regarding their farm issues, therefore limiting their potential as entrepreneurs.

A few women farmers engaged in practices beyond their prescribed gender roles. A farmer expressed her experience in a similar situation:

When I participate in farmer meeting or trainings in the village, my family do not appreciate it. They often taunt me with an example of a lady recently elected as a woman representative for our village committee. Her participation in the village committee is not appreciated by many people. Often, people make fun of her name that how she being a woman is trying to become a man. She must take part in the meetings and deliver speeches that often occur in a public space, so is criticised by many. Her farm work remains incomplete, as she is gone for the whole day for the meetings with men. Villagers remark by doing such, she has gained nothing, still poor as not earned a katta of land. Rather than getting involved in such position, if she focused on doing tenancy, she could uplift her situation better. I cannot convince my own people, so better I avoid going to meetings and training and just focus on my farm tasks. (BWF2)

This situation illustrates that even when a woman courageously challenged the existing gender norms, she still feared that she would be criticised and that her actions may not be accepted by her own family. Moreover, she may be defamed and described as a negative role model by the entire village once other women farmers learn about her actions.

These findings have demonstrated that restrictive gender norms were a barrier for women farmers and led to negative farm bargaining intentions. The women preferred to convey the image of a 'good woman' rather than a 'good farmer'. Thus, the women farmers could be categorised into two groups. The *first* group comprises the women farmers who followed the existing gender norms by securing the image of a good woman and avoiding farm bargaining. The *second* consists of those who practised farm bargaining beyond the norms and liked to participate in the market (public) spaces, negotiate with traders (male strangers), discuss with extension officers (male and/or strangers) and attend meetings and trainings (in the public area where most people are male). However, in several instances, such women farmers were criticised and defamed for not following the gender norms and faced gender challenges for participating in farming. Consequently, women who faced these *normative challenges* developed an unwillingness to be involved in farm bargaining.

6.3.2 Power Relations

The accumulation or absence of power is based on a hierarchical structure in a society, such as patriarchy, the caste system or the landlord-tenant relationship. This creates an unequal power relation between the actors involved. The data identified 'power relations' as a theme for subjective norms since it created unequal bargaining positions

for women farmers at all the study sites. The data analysis provided evidence on how women farmers gave up bargaining because of the unequal power relations they encountered in their everyday lives. A participant revealed that owing to unequal power relations, the position of the landlord was higher than that of the tenant farmer:

We do not say anything to our landlord. Because I know how he is—he will not listen to what we request even when we are in difficult situation. The landlord will say, 'If you are facing difficulties to pay adhiya [the rent] of the land, then you may leave the land'. (CWF9)

Consequently, the data showed that such power relations often weaken women farmers' bargaining power. A woman farmer in an intricate power relation with her landlord commented as follows on how a woman must respect the landlord and her inlaws, husband and elders owing to their higher position in the village: 'Our landlord is related as elder BIL to us, so my husband and I, we both respect him and obey what he says' (CWF3). Often, an individual positioned at a lower hierarchical position must show respect to the person at a higher position. Therefore, a farmer had to respect his landlord, and if the landlord was also related (BIL) as mentioned by the farmer, it placed woman farmers at an even lower position while bargaining on the land tenancy. This practice placed women farmers, in particular, in a weaker position, as expressed by a participant: 'My SIL and I both do not speak in front of FIL to show respect. I have never talked with FIL, not face-to-face or on mobile' (AWF10). As a result, male dominance was established, and they expected obedience from women members even in a formal farmers' group. For example, a farmer group member mentioned how the male secretary had tried to verbally overpower her by saying, 'When my wife cannot speak in front of me, then why are you speaking' (BWF5). Another woman farmer mentioned what her husband felt: 'He feels a degraded man [if he] listens to a woman' (BWF7).

Similarly, a woman farmer participant explained how power relations affected her participation and intention to undertake farm bargaining:

I am a member of a project's farmers' group undertaking in our village. My FIL, BIL are also members of the same group. It was difficult for me to speak in the group, as in our culture, as a DIL, I must not speak in front of, or with,

FIL and BIL. I must pay respect. For me, it was an awkward situation to talk with them in the group activities, so I remained quiet most of the times. (BWF1)

Likewise, gender and the accumulation of resources created an unequal position for women farmers' bargaining intentions, as illustrated by the following: '*He grabbed the cauli seedlings that belong to the farmers group, but no one fought because he has many farm assets that we also need*' (BWF2). Therefore, the culture of respect and valuing males in patriarchy and the lack of resources were found to collectively weaken the farm bargaining position of women farmers. This evidence shows that the women farmers often avoided bargaining because of the unequal power relations in their culture.

6.3.3 Shyness

Another control belief theme that emerged was 'shyness'. Study participants mentioned that their 'shyness' played a role in their developing a negative intention towards the farm bargaining process. Six of the 35 participants commented that 'shyness' was the reason they hesitated to bargain. For example: '*At many places, women feel shy and cannot bargain*' (BWF1), and '*I feel shy to go to* hatiya [market] and when I bargain. So, I avoid bargaining' (DWF4). Another participant mentioned how she avoided going to the market to purchase or sell farm requirements because she felt shy:

There are thousands of people roaming in the market [Bajar me hajar log ghumai chai]. I feel shy to deal with traders in the market or at home. ... My husband buys for us from market and prefers to sell to paikar [trader] who come to home. If he is not at home, I ask paikar to come next time when my husband is present, I do not sell. (CWF3)

As pointed out previously, in the sociocultural context of the EGP region, women are considered a symbol of family prestige and must display virtuous behaviour. Section 5.2.3.1 (in Chapter 5) on gender dynamics that discussed male privileges, gender roles and hegemonic masculinity on gender norms has revealed the expected virtues of women farmers. This view was explained by a response of a 32-year-old married woman farmer:

After my marriage, I came to this village. ... I was very shy to speak with anyone. Also, a newlywed is shy in our culture. My behaviour was like that for many years. Then, gradually, as our family expanded and our needs started to grow after having children, and my husband migrated to Bombay for work, I decided to support in earning livelihood, so, I got involved in farming. I could not talk well with traders due to my shyness. I did not bargain. (DWF3)

Another woman farmer explained that shyness was the reason that she did not bargain with a person in a higher position based on that person's gender, other resources and strong personal attributes:

I disliked how the male group member grabbed our seedlings. But I am shy and afraid of him. I cannot negotiate with him because he is a loud and a verbally abusive person. And I will not get involved as my family also restricts me to get into such issues. (BWF2)

This view illustrated how women farmers tended to avoid unnecessary bargaining with male farmers owing to two main reasons. The first was her shyness, and the second, her unequal position in comparison with her status as a woman farmer because she lacked the productive resources to contend with a powerful male farmer who owned productive farm resources.

However, it seems that the participation of women farmers is growing in farming now that more women have realised that being shy may not be as useful as speaking up in farm bargaining: '*Now, I feel it is important for a woman to be able to speak up*' (AWF6), and '*Women do not shy to bargain for the price [laughs]; not only for vegetables, but women can also bargain for other consumables*' (AWF5). Therefore, the data showed that although 'shyness' can be considered a dynamic quality that can hinder farm bargaining, it can also be transformed by awareness and determination to participate in farm activities.

6.3.4 Local Norms

Local norms emerged as another theme in subjective norms. Women farmers explained how social practices, such as the types of rental tenancy played a significant role in

developing the bargaining intention of women farmers. The study sites had two types of rental tenancy practices: *adhiya* and *mankhab*. The word *adhiya* is derived from a Hindi word *adha*, meaning half. In the *adhiya* practice, all the farm yield is shared equally between the landlord and the tenant and constitutes the rental payment. The *mankhab* practice is also called *thekka*, *bataiya* or *kuut*. *Mankhab* is a combination of the Hindi words *man* and *khab* in which *man* or *maund* is a unit of measurement of weight and *khab* means 'to consume'. Hence, in *mankhab* the deal is made at a fixed rate. In this fixed rate tenancy, farmers must pay the fixed rent to the landlord regardless of circumstances but can retain anything extra that they produce. The two practices may be modified slightly according to the deal that the landlord and tenant finalise by bargaining. One woman farmer commented:

I must pay the rent decided for my tenancy, I cannot bargain. In this village, it is a practice that once the rental tenancy is confirmed between landlord and tenant it must be paid in mankhab [at a fixed rate] or adhiya [sharecropping]. The landlord will take it anyways, and everyone does it. Our livelihood depends upon our farm yield, but it is damaged during drought, flood and hailstorms. I fear to lose the land. (CWF3)

It was identified that the landlord generally had greater authority on the land tenancy. Both *adhiya* and *mankhab* have advantages and disadvantages. Farmers may be affected by natural disasters, such as drought, arid/dry or flood conditions, or hailstorms, which affect the yield. Hence, many farmers avoided risk by choosing *adhiya*, whereas others said that fixed rates are good for profits. In *adhiya*, landlords closely monitored the farm to verify that every crop produced was shared equally. Landlords who had livestock even asked tenants to divide the paddy straw equally since they used it as livestock feed. In this way, the data showed that bargaining intentions were based on the tenancy type the farmers chose.

In addition, it was found that local norms strongly influenced women farmers' ability to formulate bargaining intentions. This influence led to a certain mindset among farmers that was difficult to change. In the Bhagwatipur site in Mahbubani, a group of people called '*Kujras*' were the only locally assigned people to sell vegetables in the *hatiya* (weekly market) or from door to door after buying it from the farmers in the villages. The producer farmers did not sell their vegetables themselves because they

believed selling was the *Kujras*' job. When producer farmers were found selling vegetables, they were stigmatised, and hence, the fear of being stigmatised made them avoid selling vegetables, as the following example shows:

In our village, selling of vegetables is done by Kujra-community people; their role in community is to buy and sell vegetables in the market, and they are considered of lower-class status. ... finally, I took the bottle gourds to Nanaur hatiya [market] on bicycle. While riding, some girls and neighbouring women saw me going to sell bottle gourds and they started to tease me, saying, 'Hey! Are you going to become Kujras?'. I reached the market and sold all the bottle gourds. I came home back with mixed feelings: I was happy that I was able to sell all and earn money, but I could not forget how my friends and other women made fun of me. Later, I decided to quit and never tried to sell anything again. (CWF11).

Locally, the *Kujras* were positioned at a lower status than farmers. Hence, owing to the fear of being regarded as belonging to a lower-status group, women farmers avoided selling vegetables. As one farmer stated: '*I am aware that if I go to sell my farm produce in the local market, the villagers will gossip on me, "Oh! Look how she has come to sell vegetables; she has become a* Kujarni" (CWF1). Another women farmer who had started selling quit doing so after being teased by her friends and neighbours:

After, I came home with a mixed feeling as I was happy that I was able to sell all and earn money, but I could not forget how my friends and other women made fun of me. Later, I decided to quit and never tried to sell anything again. (CWF11)

For a young woman, being teased by family and friends can seem like an insurmountable obstacle and can negatively affect her intention to bargain.

In addition, the data showed that women farmers wanted to continue their local norms—even though it was identified as flawed. As a woman farmer stated:

I feel proud when I sell milk. But it is matter of losing my dignity when I go to sell vegetables in the market. My relatives and the people who know me would think I am degraded. My status will be lowered, and people will make fun of me. People will believe I have degraded to the level of Kujras by selling vegetables. (CWF8)

Thus, the fear of being devalued as *Kujras* led to the avoidance of selling as well as negative bargaining intentions. Another woman farmer, who mentioned that a farmer's place is on the farm and not in the marketplace, showed her lack of preference to bargain as follows:

I am a farmer who does farming; if I spend too much time in markets, then, the time I will spend in the farm will be reduced; then, I cannot produce well. That is why I prefer not to spend more time in the market. (CWF8)

Hence, the data showed that such strong internalisation of the local norms influenced their farm bargaining in a negative way because the women farmers only sold their vegetables to the traders who visited their home to purchase the produce. Hence, the farmers frequently did not seek a competitive price since they avoided selling the vegetables themselves.

6.3.5 Gendered Farm Practices

The data revealed the existence of gendered farm practices at the study sites. For example, '*the rental dealing is made between a male landlord and a male tenant*' (CWF3).

Another women farmer commented:

I do not get involved in the tenancy agreement; it is confirmed by my husband and the landlord. If a male from the family is not present, then anyone from the village, like relative or neighbouring male who can ask for rent, must take part. Women do not deal in the land matters. But later, during harsh situations, even I can tell the landlord to reduce the rent. (AWF2)

This view showed that women's participation in land tenancy issues was minor. Another farmer in Kanakpatti village stated that '*women sell farm produce*' (AWF5) and use the money to buy household essentials. This action was further justified as, '*Women know about her kitchen's essentials like vegetables, salt, turmeric, spices that* need a refill, so she uses the money to buy it' (AWF7). In contrast, 'The shopping is mostly males' job' (CWF7), in Mauahi site in Bihar. Likewise, 'Using pump set, machinery, electricity, irrigation mostly by men' (BWF2). Contacting traders to enquire about the price of items was also viewed as a man's job; as a woman farmer reported, 'Even if I have a mobile phone, I never call traders' (CWF8).

This gendered farm work division can exacerbate the task division between men and women farmers; however, it may also hinder women from practising certain tasks, such as buying and selling goods and services for farming, potentially restricting their opportunity to practise and gain expertise in bargaining.

6.3.6 Encouragement

The final theme identified in the data was the encouragement received from a family member or a role model. It was observed that most (five out of six) of the subjective norm themes, 'gender norms', power relation', 'shyness', 'local norms' and 'gendered farm practice' caused the formation of negative farm bargaining intentions, whereas the theme 'encouragement' resulted in positive farm bargaining intentions. For example: '*My husband supports my farm decisions and work.* ... *He also encourages me to participate in trainings*' (AWF4). The data showed that encouragement accompanied by motivation helped to develop bargaining intentions and, ultimately, bargaining behaviour, as illustrated by this comment: '*support from husband, ... also motivates me ... improves my confidence*' (BWF1).

Simultaneously, negative role modelling and discouragement caused negative intentions to bargain:

Ifeel when I participate in farmers' meetings/trainings, my family do not like it. ... they share a story of a lady recently elected as a woman representative for our village committee who is strongly criticised for being disoriented from farming with no outcome. Our culture is to listen to our elders, and when they say to bargain is getting into a controversy, we do not practice. Because we need support to stand beside us, and when elders tell only to focus on farm, nothing else, women farmers get discouraged and avoid bargaining, and so do I. (BWF2) The results showed that the positive encouragement for farm bargaining was mainly found in the households where the male member (husband) had out-migrated or worked as a seasonal migrant. In contrast, the data showed that in a women-only household where a widow woman farmer was influenced by her widowed mother-in-law, the situation was quite different because the mother-in-law, as the role model, did not support the engagement of women in farm bargaining.

6.4 How and Why Does the Belief of Women Farmers in Their Own Bargaining Ability, Skills and Control Over Bargaining (Perceived Behavioural Control), Influence Their Intention to Bargain? (RQ3.3)

The results presented in this section inform the third sub-research question RQ3.3, and RQ3, by exploring how and why the belief of women farmers in their own bargaining ability, skills and control over bargaining (perceived behavioural control) influenced their intention to bargain.

The interview questions asked were 'Are you capable and confident to execute bargaining behaviour? Are you capable of overcoming challenges or barriers? Do you have the skills, or the means required to exhibit farm bargaining?'.

Table 6.3 summarises the perceived behavioural control themes and the frequency of their occurrence in the participant interviews. Appendix B provides Tables B4, which list the themes and the associated quotations from the participants' interview responses.

Table 6.3: Perceived Behavioural Control Themes and Frequency ofOccurrence in Interviews (n = 35)

Perceived Behavioural Con	ntrol Themes Frequency of Occurrence
Identified	
Confidence	13
Flexible or Fixed Rates	11
Comfort	5
Skills	5

As discussed in Chapter 2, perceived behavioural control can be defined as individuals' perceptions of their own ability to perform a specific behaviour (Ajzen 1991, p. 106). This is guided by the person's *control beliefs*, namely, the perceived barriers or shortfalls to perform the behaviour (Ajzen 1991, p. 106). It deals with how an individual develops perceived behavioural control determined by a self-evaluation of the control belief, through weighing it positively or negatively.

The four themes that emerged from the data, 'confidence', 'shyness', 'comfort', 'knowledge' and 'skills', are discussed next. It was evident from the data that farmers perceived behavioural control has an essential role in developing their intentions to engage in farm bargaining behaviour.

6.4.1 Confidence

The most frequently reported theme in this category was 'confidence'. Thirteen of the 35 women farmer participants (37%) stated that confidence was linked with their intention to bargain, and hence, they will bargain if they feel confident. For example:

I can sell on my own and I am fine to bargain and do it well. ... I purchase the items needed for my farm and ghumti shop [a small village grocery shop built with wood and a tin roof] for which I again need to bargain. I look to bargain when I must sell or buy any goods. (AWF1)

Some participants mentioned that the regular practice of bargaining had developed their confidence: 'Sometimes, when they [father-in-law and husband] are not in the village ... I am responsible for farm dealings. When I regularly get involved in it, I feel confident to bargain. I can bargain and make my choices' (BWF1). In contrast, a few women farmers reported that they avoided bargaining because they lacked confidence and they sought help from neighbours; for example: 'I do not prefer to bargain. I go shopping with neighbours and friends and ask them to help in bargain for me' (BWF7). Hence, the data showed that when women farmers' felt confident, they had a stronger intention to bargain.

6.4.2 Flexible and Fixed Rates

The *flexible and fixed rates* of a farm item or service emerged as another important theme from the data. The women farmers mentioned that they tend to bargain over items that have a flexible rate. For example: '*There are some things while purchasing whose price is fixed and there are some things whose price is flexible*' (AWF3). Similarly, when farmers identified that the price for an input that they needed was flexible, they developed a positive intention to bargain. For example: '*Usually, the seed price is flexible, so, I bargain while purchasing. I usually buy input from Rudrapur or Nanaur* chowk' (CWF3).

The participants also revealed that they knew when items and services were at a fixed rate:

The village operates on the knowledge that one farmer shares with other or one farmer seek from another. In this way, everyone knows what the rate of the item is or services and that no one can cheat. So, we must follow the rules. (DWF1)

In addition, the participants added that they did not tend to bargain for the items with a fixed price: 'Some items like the costs for hiring tractor and labours are already fixed, and I have to follow them' (AWF2); 'The price of the input items is fixed. There is no bargaining for input items' (DWF7); and 'It [cost for milling] is fixed. The rate to mill rice is Rs.10 per tin (10 kg) and for wheat is Rs. 2.5 per kg' (DWF4).

A key informant, an input seller, also supported the notion that women farmers were not likely to bargain when they knew the cost was fixed: '*Women/men farmers, they know that I provide the wholesale rate of the input, so they do not bargain with me*' (AWVC1) and '*If a farmer knows the price of inputs of a cooperative seller is not fixed, so they do bargain there*' (AWVC1).

In view of these results, it is evident that while price *flexibility* led to positive bargaining intentions, *fixed* rate items negatively affected the intentions of women farmers to bargain.

6.4.3 Comfort

Feeling 'comfortable' to bargain was identified as another control belief that influenced the farm bargaining intentions of women farmers. Some women farmers commented on how the situation of feeling uncomfortable with bargaining has changed for them over time. For example, '*initially I felt in my whole life, I had never done any selling. I feel uncomfortable to argue on price, so I mostly avoid it*' (CWF1). However, it was found that when women repeatedly practised their bargaining actions, their bargaining skills improved. For example, '*Earlier, when I bargained, I felt* dikkat [*uncomfortable 1... I have improved a lot by practising. Now, I have started to feel comfortable to bargain*' (BWF1), and '*Yes, I can bargain, I gained it by my experience*' (DWF5).

This change illustrated that feeling uncomfortable with bargaining hindered women farmers from developing bargaining intentions, whereas practising and gaining experience increased their comfort with bargaining.

6.4.4 Skills

Five of the 35 women farmers indicated that having bargaining 'skills' contributed positively to them feeling in control. In contrast, a lack of skills had the opposite effect. For example, the lack of numeracy skills discouraged women farmers' from participating in farm bargaining: '*Bargaining is my husband's job because I am not good at numeracy*' (AWF8). There were also other circumstances in which women farmers who engaged in bargaining did not achieve any profits from bargaining owing to their lack of numeracy skills. For example:

If women have speaking power [bargaining], they can be successful, but sometimes, despite that they can speak, they do not make significant difference because they make their argument without thinking. ... they are loud, but they are weak in mathematics and cannot do correct calculation when they sell or purchase their goods. (AWF4)

A woman farmer revealed that her confidence to bargain was also linked with the monetary limit of the transaction. For instance, women felt confident to bargain when a small amount of money was involved but hesitated to bargain in high-value deals, which prompted them to seek support from male family members such as their fatherin-law or husband. In one participant's words:

I ask FIL that 'Do you want the price?'. I look forward for guardian. I have never sold the goat on my own. If it is of less amount, then I can do it by myself, like Rs.50, 80, 100, I can do myself. (BWF4)

Further, women farmers who lacked bargaining skills found it difficult to bargain and hence avoided it, saying that they would not succeed. For example, '*No, they will not agree or listen to us. They will say, "If it is that difficult to pay the rent of the land that is* adhiya, *then leave the land*" (CWF3).

Therefore, the presence or absence of bargaining skills, such as how to express one's feelings about one's produce, how to ask for the cost of inputs to be reduced, how to remain firm on the price and how to ask in a persuasive manner, is an important perceived aspect integral to the behavioural control women farmers' experience when they bargain.

6.5 Summary

This chapter presented the results related to the TPB constructs for the women smallholder farmers' bargaining intentions. Table 6.4 depicts the summary of identified TPB themes and its influence on farm bargaining intentions. Six attitudinal themes emerged that influenced the women farmers' bargaining intentions. It was found that attitudes such as women are better at bargaining, bargaining importance, beneficial attitude, traders (middle people) gain most profit, bargaining necessity and difficulty bargaining influenced their bargaining intention. It was also found that when a woman farmer held attitudes such as women are better at bargaining, bargaining is important, there are benefits in bargaining and bargaining is a necessity, she had a stronger intention to bargain. The reverse was also true. In situations in which traders (middle people) gained the most profit, as well as when women viewed bargaining as a problem, women participants held a negative attitude towards bargaining.

The chapter also outlined the results relevant to RQ3.2 regarding the impact of subjective norms on women farmers' bargaining intentions. The results indicated six themes that influenced bargaining intentions: gender norms, power relations, shyness,

local norms, gendered farm practices and encouragement. It was clear from the results that the subjective norms based on the normative beliefs of women farmers affected their willingness to engage in farm bargaining.

Themes	Influence Positive/Negative	
Farm Bargaining Attitudinal Themes		
Women are Better at Bargaining	Positive	
Bargaining Importance	Positive	
Attitude towards Gaining Benefits	Positive	
Traders (Middle people) Gain most Profit	Negative	
Bargaining Necessity	Positive	
Difficulty Bargaining	Negative	
Subjective Norm Themes		
Gender norms	Negative	
Power relations	Negative	
Shyness	Negative	
Local norms	Negative	
Gendered farm practices	Negative	
Encouragement	Positive	
Perceived Behavioural Control Themes		
Confidence	Positive	
Flexible or Fixed Rates	Positive/Negative	
Comfort	Positive	
Skills	Positive	

Table 6.4: Summary of identified themes and its influence on bargaining intentions

Last, RQ3.3 was explored, which examined the perceived behavioural control of women farmers and its impact on their bargaining intentions. Four themes were identified that linked to women farmers' bargaining intentions: confidence, flexible and fixed rates, comfort and skills. The ability to perform bargaining also emerged as an influencer of perceived behavioural control. Three themes, confidence, comfort with bargaining and the skills to bargain, influenced their farm bargaining intention.

Whether the rates for farm inputs and services were fixed or flexible also affected their intentions to bargain.

The next chapter critically discusses the results in view of the literature, outlines the theoretical and practical implications of the results, offers recommendations for future research and outlines the study's conclusions.

CHAPTER 7: DISCUSSION, RECOMMENDATIONS AND CONCLUSION

7.1 Introduction

Chapter 1 briefly introduced the research by explaining the research background, justification, objectives and the thesis in brief. Chapter 2 explained the theoretical underpinnings and study context (i.e. geographical context and women smallholder farmers' bargaining intentions). Further, an existing literature gap was identified, which assisted in formulating the research questions. In view of the research questions and theoretical underpinnings, an initial conceptual framework was created. Chapter 3 justified the methodology selected for this research by highlighting the research paradigm and design and detailed the investigation methods used to answer the research questions and for data analysis. Chapters 4, 5 and 6 presented the results from the thematic data analysis of the interview transcripts related to RQ1, RQ2 and RQ3, respectively.

In this chapter, the results are discussed in the context of the literature and compared with the broader body of knowledge to answer each research question. Sections 7.2, 7.3 and 7.4 present discussions of results according to each research question (RQ1, RQ2 and RQ3 respectively). Following this, various implications are identified, including those for theory, practice, policy and future studies (Sections 7.5 and 7.6). Sections 7.7 and 7.8 present the limitations and future scope of the research, respectively. Section 7.9 discusses the impact of the coronavirus disease 2019 (COVID-19) pandemic. Last, Sections 7.10 and 7.11 present a conclusion and summary of the entire research, respectively. The outline of Chapter 7 is presented in Figure 7.1.

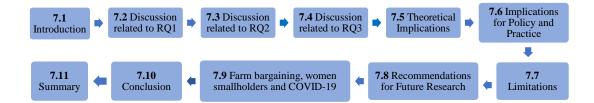


Figure 7.1: Structure of Chapter 7

7.2 Existing Bargaining Spheres and Associated Issues Regarding Women Farmers in the Eastern Gangetic Plain Region

There is a consensus in bargaining literature that bargaining motives may vary, given that multiple issues prompt individuals' need to bargain (Visser & Ferrer 2015). This finding is valid for women farmers in the EGP as well. Women farmers perform various farming activities and play several roles—housewife, farm worker, seller and buyer. Each role requires bargaining, in which various situations and spheres present bargaining motives. To the researcher's best knowledge, no study has been conducted until date for identifying such spheres. However, one study has presented the bargaining model for marriage as 'separate spheres' and explored the various circumstances and outcomes (Lundberg & Pollak 1993). Therefore, the present study contributes to farm bargaining literature by examining: *What are the existing bargaining spheres and associated issues over which women farmers in the Eastern Gangetic Plain region bargain? (RQ1)*.

This exploration has significance in understanding farm bargaining, because farmers must have basic knowledge on issues regarding farm bargaining. Welsh (2009) noted that market structures are changing dramatically; in such situations, smallholder farmers' vulnerabilities may increase if they have minimal awareness of bargaining issues. However, such bargaining issues may vary according to the context and the farmers' bargaining motives can also vary according to their goals. By exploring bargaining issues in the EGP, this study identified that bargaining issues could be grouped into four bargaining spheres: intra-household, farm, market and intermediate.

Farmers conducted most farm-related bargaining from home. This study identified several farm-related bargaining issues and decisions made at home and grouped these under the intra-household sphere. The sphere included issues on which women farmers bargained, such as selecting crops to plant, sharing domestic work and care burdens, gaining mobility (travel), allocating time to be spent on the farm, storing farm products and managing finances, as well as bunching, sorting and deciding on the seller. Intra-household farm bargaining was affected by sociocultural practices, power dynamics, gender roles and various beliefs (i.e. behavioural, normative and control). Predominantly, intra-household bargaining issues relate to non-economic motives. However, in the EGP, farmers store and sell their farm products at home after the

harvest. In such situations, women must bargain on who will sell the farm products, which involves economic motives.

The second sphere, the farm sphere for bargaining, covers a range of farm production issues, including bargaining to arrange land preparation, transplanting, irrigating, weeding, harvesting and transporting products. Smallholder farmers are resource-poor, with limited capital and infrastructure, and lack productive farm resources, irrigation facilities and equipment. Therefore, these resources must be rented—a process in which bargaining is crucial. The third, the market sphere, is the primary domain for economic transactions regarding purchasing farm inputs and selling farm products. In the EGP, the local *hatiya* was the location in which smallholders sold and bought farm products. Because the *hatiya* is informal (primitive) and offers a variety of supplies, price haggling is common, and thus, bargaining is crucial. The last, the intermediate sphere, contains bargaining issues that do not fit in any of the other three spheres but are very important in farming. Such issues include bargaining (a) in cooperatives and cold chain facilities, (b) for transporting farm products and (c) between landlords and tenants.

Women farmers' overlapping roles means that they must bargain in different domains; therefore, their position in one sphere connects to another. Although the bargaining spheres are separated by their place of occurrence, women farmers' bargaining intentions and associated issues are not completely isolated. Ferree (1990) noted that a household or family could not be in entirely separate spheres; instead, it results from historically congested dimensions of race, class and gender. Women farmers' bargaining intentions in one sphere could be linked to their roles in other spheres. The present study has listed all the bargaining issues that this study has found have been grouped according to the place of occurrence. Understanding the spheres is helpful because they give a contextual glimpse of bargaining issues in the EGP and women farmers' needs, which can assist policymakers to improve women farmers' bargaining position.

7.3 Factors Influencing Women Farmers' Bargaining Intentions in the Eastern Gangetic Plain Region

The TPB asserts that background factors have the potential to indirectly affect behaviour through behavioural, normative and control beliefs (Ajzen 2011b). Behaviour could be affected by a wide range of potential background factors, including age, gender, ethnicity, class, education, nationality, religious orientation, personality, general attitudes and values, intellect, past experiences and exposure to new knowledge. These factors vary across the different behavioural domains (Ajzen 2011b). The literature review revealed that such factors are not explored in the domain of farm bargaining. Therefore, to fulfil this gap, the present study explored the factors affecting women farmers' bargaining behavioural intentions by conducting in-depth interviews with women smallholder farmers in the EGP. The research question examined was: What were the factors that influence the farm bargaining intentions of women smallholders in the EGP region? (RQ2). On analysing the in-depth interviews, 18 themes were considered to potentially affect women farmers' bargaining intentions. These themes were grouped into four factor categories: personal, product-related, sociocultural and institutional.

7.3.1 Personal Factors

Personal factors involve themes relating to people—bargaining competencies, access to information, social relationships, socio-demographic characteristics, mobility, responsibility, availability of options, urgency and access to resources. Bargaining competencies is one of the most important personal factors affecting women farmers' bargaining behaviours. Hondeghem (2011) considered competencies to comprise knowledge, skills and abilities, which are transferrable to the context of bargaining. Bargaining knowledge has a crucial role to play in bargaining behaviour. Knowledge regarding bargaining issues can influence farm bargaining in multiple ways. For example, if farmers are knowledgeable about whether farm issues are bargainable, their perception on control beliefs gets affected; if it is perceived that farm bargaining is beneficial to gain profit, farm bargaining attitudes are affected.

Similarly, skills play a significant role in bargaining. Numeracy skills crucially affect women smallholder farmers' bargaining behaviours. Women farmers in the EGP have

low numeracy skills; consequently, women generated negative control beliefs that affected their PBC and subsequent bargaining intentions. Women must be literate to gain such skills; however, unfortunately, the literacy rate of women in the EGP is very low (Carter & Darbas 2014; Sugden & Nepal 2016). Women's low literacy is one of the reasons for their low bargaining competency. When women are less competent, their PBC and attitude are affected; consequently, their bargaining intentions and behaviours decrease. Hence, it is very important to increase women farmers' bargaining competency.

The study identified information access as another personal factor that has influenced women farmers' bargaining intentions. In addition to poverty and violence, access to information is a significant challenge faced by women in developing countries (Primo & Khan 2003). The present study defined access to information as challenges facing women farmers that affect bargaining intentions through control beliefs. Farmers with market information regarding good selling prices can bargain with traders for a better price or can choose another trader if one trader has offered a low price. However, market access is also important. For example, even if the locations of markets with good selling prices are known, being unable to access these markets results in weakened bargaining intentions. Further, farmers' bargaining intentions can be positively influenced when they can access information regarding farming products or services.

A range of product-related information was identified that could influence bargaining and farmers' bargaining intentions, including products or services' current rates and rate patterns and break-even prices. However, access to such information is associated with mobility, which was found to be gendered. Men are more likely to receive this information because they have social networking and information-sharing opportunities with other village farmers—this is not possible for women in the EGP because social norms bind them. Limiting women's access to information could restrict their engagement in economic opportunities and prevent them from gaining resource control, making their position weaker and more vulnerable and affecting their bargaining intentions (Fletschner & Mesbah 2011).

Similarly, social relationships are another personal factor that can influence women farmers' bargaining intentions. Participants reported four aspects of social

relationships that can affect farm bargaining intentions—family encouragement, seller–customer relationship, interdependency and social networks. People evaluate the cost and benefit of bargaining initiation according to their perception of relational effects and punishments or rewards (Reif & Brodbeck 2014). However, the present study discovered that the identified aspects affected farmers' behavioural beliefs (i.e. these build attitude towards bargaining behaviours) and developed control beliefs (i.e. these shape PBC for bargaining intentions).

Likewise, four socio-demographic characteristics—marital status, education level, age and gender—were identified that critically influence bargaining intentions. It is supported by the findings from Clark et al. (2016) which found that socio-demographic variables such as age, gender, education, income and location can vary farmers' attitudes; which already Ajzen and Fishbein (2005) have verified that attitude can influence intention. The present study noted that socio-demographic characteristics linked with farmers' control beliefs affected their PBC and, subsequently, their farm bargaining intentions. In particular, it was found that widowed women reported problems in hiring labour and bargaining with male counterparts. The effect of marital status on bargaining intentions is a novel finding in studies on behavioural intentions. Education is another socio-demographic characteristic that affects women farmers' bargaining; often, under-educated women cannot read price labels or other relevant information when purchasing farming products.

Undoubtedly, features of socio-demographic variables lead to low or high levels of bargaining intentions in women farmers. Bargaining intentions could drastically reduce when a woman is affected by multiple unfavourable characteristics; for example, if a woman is widowed, elderly and illiterate, she would have lower bargaining intentions and be more vulnerable. It is crucial to use the intersectionality approach to identify the nature of social categorisation (an individual's class, ethnicity, gender, place of origin and education: Kuran et al. 2020). This discussion leads to the conclusion that single women in the EGP, especially those who are widowed, face increased bargaining challenges. These challenges result from the society's patriarchal nature—women farmers are less valued than male farmers, and when a woman's husband dies, it becomes tough for her to continue with farming. These situations tend to involve challenges for women farmers' bargaining, and thus, their interest in

farming could diminish over time. Therefore, it is recommended that the government support single and widowed women who pursue farming.

Mobility was identified as another factor that influences farm bargaining intentions. The present study found that mobility is gendered-women farmers' mobility was restricted by family members and cultural and social norms. For example: 'In our culture, women are not as free as men to travel or go to anywhere' (BWF1); 'Women in the village will not go to drink tea in the market, but men will go' (AWF7); and 'Men are like birds, they keep on flying from one place to another, but for women, she must stay at home' (AWF4). Therefore, men have more liberty to be mobile than women. Mobility restricted by social norms and deliberately constrained by family members can reduce women's access to social networks and the associated benefits (Anukriti et al. 2019). Moreover, restrictive norms for mobility help to develop women farmers' subjective norms. Mobility has multiple implications for women farmers' bargaining: It can affect their knowledge on bargaining issues, item prices and ideal purchasing locations, as well as experience in bargaining practice. These aspects are very important to build women farmers' confidence in bargaining. Further, the mobility of women farmers has been linked with their perceived behavioural control and attitude since mobility influences their behavioural and control beliefs regarding bargaining intentions.

In addition, farmers' sense of responsibility towards their farm appeared to be positively linked with their attitude and PBC and related to their farm bargaining intentions. Further, when women farmers' farming accountability increased, their accountability for bargaining increased. Some of the study participants reported that women in joint families do not have farming responsibilities or participate in farm bargaining; however, when separated from the joint family, women's bargaining responsibilities and participation increased. This could result from an increased asset share that, in turn, increased farm bargaining authority. Similarly, an Indonesian study regarding women's bargaining power found that women with more asset shares have increased domestic authority than women with fewer household assets (Pangaribowo & Tsegai 2019). The relationship between shifting responsibilities and increased authority and bargaining behaviour should be explored more extensively.

Likewise, the availability of options was another personal factor that influenced farm bargaining intentions. Hernandez-Arenaz and Iriberri (2018) has mentioned that the more the options, the stronger is the bargaining position. The present study identified an association between availability of customers and the availability of tenants for land tenancy with farmers' bargaining intentions. Farmers bargain for the price and decide whether to accept or reject deals depending on the availability of customers: '*Every customer bargain for price. I consider their price at times depending upon the market price for that day.... I do not regret, as there will be more customers*' (AWF10).

Farmers have more bargaining power for purchasing when there are more shopping options for the desired product (Bonanno et al. 2018). A farmer with more bargaining power is more confident and has an increased PBC. Therefore, available options positively influence farm bargaining. However, mobility restrictions for women present challenges to enjoying such available options because they are time-poor and thus cannot visit a variety of shops to check pricing and quality (Rao 2012). In the context of farmer–landlord bargaining, the present study found that when landlords have more available options of tenant farmers, farmers' bargaining intentions weaken because they are afraid of losing the tenancy. Moreover, farmers are more vulnerable because there are no proper regulations or policies currently that support farmers' tenancies (Yellosa 2019). In such situations, farmers' bargaining positions are lower and if they do not receive support from the state, they might lose interest in farming.

Moreover, urgency was another factor that affected farmers' bargaining intention. It was argued that the bargaining outcome would be affected by the urgency of the person bargaining (Cramton 1984). The study found that farmers' bargaining intentions and control were lowered when they acted in urgency; for example, when they urgently required money or wanted to sell perishable items quickly to prevent losses, the farmers remained at the lower bargaining position.

The present study found that access to resources was crucial to women farmers' bargaining intentions. Agarwal (1997) asserted that access to productive resources in the household is a function of women's bargaining power. Moreover, it was found that women's productive resources strengthen their bargaining position in the household (Meier zu Selhausen 2016). The present study demonstrated that women farmers' bargaining intentions were adversely influenced when they lacked access to various

farm resources (e.g. irrigation and land preparation facilities). For example, when farmers did not have farm machinery (an essential productive resource), they depended on their bargaining opponent who owned the machinery, which produced farmers' negative control beliefs and adversely affected their bargaining intentions. Moreover, access to, and control over, resources is crucial to ascertain a fallback position and help to strengthen women's bargaining position (Agarwal 1997). Therefore, dependency on resources, fallback position and the associated consequences of farm bargaining require further exploration.

This section discussed how personal factors could influence women farmers' bargaining intentions in diverse ways. Understanding women farmers' personal factors helped explain farmers' behavioural and control beliefs that affect attitude and PBC that influences farm bargaining intentions. This is particularly important because all women farmers possessing similar personal factors might have differing bargaining intentions. Therefore, it is recommended to consider the intersectionality of women farmers' characteristics when studying and designing support to strengthen their bargaining.

7.3.2 Product-related Factors

Themes related to farm products were grouped into four product-related factor categories—quality, quantity, demand-supply and management. The present study revealed several product-related factors that influenced women farmers' bargaining intentions.

7.3.2.1 Product Quality

The present study found that product quality was linked with farmers' willingness to bargain. Key themes regarding product quality were fresh and good produce, perishability and value addition. Prior studies have identified that farmers' bargaining power depended on the quality of farm products (Lu et al. 2008; Kamdem et al. 2010; Fałkowski et al. 2017). Bargaining power affects farmers' PBC, which in turn affects farmers' bargaining intentions. Specifically, good product quality led to farmers perceiving more bargaining power and bargaining intentions. Further, this intention became stronger when farmers realised that their product is better than others on the market, and thus, they bargained for a higher price. Conversely, farmers had lower bargaining intentions and perceived less control regarding perishable farm products products that are not sold promptly will spoil and remain unsold. In early market times, when demand is high and perishable products are fresh, farmers have increased bargaining intentions. Farmers' bargaining power can be boosted by preserving perishable products through maintaining the required temperature. However, a temperature-controlled storage facility would be required for this purpose, and thus, this might not be possible for smallholder farmers in low-resource settings either because such a facility does not exist or because they will not be able to afford it.

7.3.2.2 Product Quantity

The present study revealed that selling or buying farm products in bulk influenced the EGP women smallholder farmers' bargaining intentions and increased their control belief. The farmers believed that any bulk transaction should involve a cheaper rate because of bulk discounting (i.e. lower per-unit price) (Hendel & Nevo 2006). Therefore, they perceived a degree of discretion over the transaction and intended to bargain accordingly; for example, '*I will purchase your seeds in bulk. Can you reduce Rs. 5/10? This way they will reduce the overall cost*' (AWF2). Conversely, farmers reduced their monetary gain when bulk-selling their products but sold their products quicker and gained time for household chores and farm activities. It is concluded that bulk-buying positively influences bargaining intentions; however, women smallholder farmers' ability to bulk-buy farm supplies depends on their access to financial resources and storage facilities at home. The lack of such resources and facilities negatively influenced bargaining intentions.

7.3.2.3 Product Demand

Markets are competitive when the product price is flexible (Porter 2008). A reason for rising prices is the high demand for a product from multiple buyers in the market, which intensifies competition (Kamdem et al. 2010). The present study found that the EGP market followed the economics of product supply and demand.

In the present study, product prices were determined by two important elements: (1) the time of selling a product (i.e. the peak season and off-season) and (2) the produce quantity available in the market. Moreover, it was found that women farmers' bargaining intentions were linked with the time of selling a product. When a farm

product is planted before its regular cultivation timing, it matures earlier than one planted at the regular timing. Farmers' bargaining intentions are higher during this time because the product quantity available is less and the demand is high. Conversely, in peak season, if the majority of a seller's products are available in plenty for purchase from various sellers in the market, the seller's bargaining intentions and settled price both decreases. Similarly, a study in Nepal reported that growing off-season vegetable products increased farmers' income significantly (Suvedi et al. 2017). Therefore, farmers can develop positive bargaining intentions when their produce is an early season one.

7.3.2.4 Product Management

Product management was another factor that influenced women farmers' attitudes and control beliefs. Three main circumstances affected their project management approach: (1) collecting the cost price of produce, (2) the market closing time and (3) the unavailability of storage facilities. First, when farmers collect perceived cost price for their far, product, they intend to accept low bargain offers and do not strictly adhere to their prices when bargaining. Second, when it is time to close the market, farmers develop the negative control belief that they will not be able to bargain for a better price, and thus, they sell their products at lower prices to avoid carrying these back home. Third, such negative control beliefs are further intensified when farmers do not have the appropriate storage facility for products. Similarly, a study in Nepal revealed that a lack of storage space compelled women farmers to sell perishable products (e.g. leafy vegetables, tomatoes and mushrooms) at a lower price towards the end of the day (Tuladhar & Bushell 2018). Therefore, building a storage facility that can be easily accessible by farmers could boost their bargaining position.

7.3.3 Sociocultural Factors

The social and cultural themes that influence women farmers' bargaining intentions were grouped into two categories: gender dynamics and myths.

7.3.3.1 Gender Dynamics

There are multiple elements to gender dynamics—male privilege, gender roles and power relations. Regarding gender roles in bargaining, negotiator roles are considered

to suit men and not women (Kray & Thompson 2004; Amanatullah & Morris 2010). This gender difference privileges men (either perceived or actual privilege) more than women in negotiations, which can strongly influence bargaining intentions (Babcock et al. 2003; Bowles et al. 2005; Miles & LaSalle 2009; Stuhlmacher & Linnabery 2013). The present study found that in the EGP, men were culturally privileged and believed to have higher value than women, which influenced women's normative beliefs and affected their bargaining intentions. Although men might not specifically demand to be valued more than women, the women in the family follow this cultural practice without questioning it. The high value attached to men creates a power imbalance between women farmers and input suppliers, tractor owners and harvesters because most of them are males. Therefore, this situation adversely influenced women farmers' bargaining intentions.

Research regarding power has demonstrated that powerful people show more bargaining behaviours (Galinsky et al. 2003), negotiate more (Magee et al. 2007) and take more risks when bargaining (Anderson & Galinsky 2006; Maner et al. 2007). The present study found that several women farmers experienced male hegemony in farm and non–farm related work. Existing power relations among male stakeholders and women farmers create unrealistic and unequal bargaining positions. Most farm stakeholders (e.g. landlords, farm labourers, tractor drivers, thresher operators, mill agents and traders) were men. and thus, as women, the farmers usually had a weaker bargaining position. For example, the existing power relations between a female farmer and a male landlord were so stressful that the farmers avoided bargaining with the landlords. In these situations, the landlord bargained for more profit. Therefore, adverse gender dynamics that create unequal power relations can negatively influence women farmers' bargaining intentions.

Women are dominated by men, which interferes with their bargaining intentions; conversely, women farmers' gendered roles interfered with their farmer role, which affected their bargaining intentions. This study identified that the women farmers reasoned their gender roles often made them hesitate to participate in the farm bargaining process because they required time for domestic chores. Others mentioned that they avoided participating in the market space because of their gender roles. A woman farmer noted that because of her gender role, she always aimed to save time

by selling her farm products quickly and thus compromised on her benefits. Likewise, various women farmers were found to sell at a lower price and in bulk to save time for household chores. These findings are similar to that of the Bardasi and Wodon (2006) which has claimed that rural women are significantly more 'time-poor' than men. Therefore, minimising the gender power imbalance and reducing the gender burden on women should be addressed to increase women farmers' bargaining intentions.

7.3.3.2 Myths

The present study found that myths remained deeply embedded in people's minds and negatively influenced farmers' bargaining intentions. The most unavoidable myth that exists in EGP farming is that women cannot use the plough, indicating that women are dependent on men for farming. In such situations, the myths create normative beliefs that form subjective norms for adverse bargaining intentions. This issue could be addressed by replacing traditional ploughing methods with modern machinery.

7.3.4 Institutional Factors

Institutional factors comprise two themes: collective farming and institutional farming structures. The results found that farming institutions significantly affect women farmers' bargaining intentions; for example, collective farming, water users' group, the formal contract of land tenancy and cooperatives supported women farmers' bargaining and receiving government subsidies. This finding was congruent with a study that reported that institutions facilitate negotiations between women farmers and their families (Farmar-Bowers 2010). Valdivia and Gilles (2001) argues that such institutional structure given women a legitimate and institutional context through which they can practice their bargaining. Further, the present study found that women's involvement in cooperatives and in farming self-help groups assisted in building women farmers' confidence.

The institutional mechanism to delivery such subsidies could empower women if it is designed with the needs and capabilities of women in mind. Conversely, it might hinder them, thus widening the gender gap if it ignores the gender needs of women farmers.

The institutionalisation of farm bodies provides a clear understanding of farmers' rights and duties, making farming processes manageable. Particularly, this awareness gave women farmers a sense of power over their choices and thus they developed positive control beliefs towards farm bargaining. Moreover, cooperatives unite farmers to create collective bargaining power for market negotiation (Fikar & Leithner 2020) and facilitate farmers in accessing markets (Batzios et al. 2021). Therefore, cooperatives were identified as crucial for women's market participation (Getnet et al. 2018).

The present study revealed that in the EGP region, women farmers' engagement in collective farming had more positive effects on farm bargaining intentions than their engagement in family-owned, individual smallholder farms. Farmers' involvement in collective farming increased productivity and profitability—they bargained for a bulk quantity of seeds and fertilisers, did not need to hire labour and exerted cumulative bargaining power to negotiate with the landowner.

Similar studies have presented the advantages of collective farming that benefit women farmers: dependable labour force, more skills and funds and better bargaining power with markets and governments (Sugden & Nepal 2016; Agarwal 2018; Leder, Sugden, et al. 2019). It is concluded that involvement in collectives increased women farmers' bargaining intentions; however, not every member in the collective had the same bargaining intention. This dissimilarity resulted from unequal power relations among collective group members, which created a power hierarchy. The person at the highest hierarchy level asserts power on other members, resulting in low control beliefs in farmers of lower positions. Such power relations can be embedded in gender, class and ethnicity. Apart from the conflicts in collective farming, there were conflicts among water users because of the lack of formal institutions and the existence of power hierarchies. Women are the most vulnerable in such situations—they either give up using water for irrigation without bargaining or simply obey instructions from people with higher authority. Although within an institution, there is power hierarchies according to designation of the members, but the institutional format can be beneficial as it has a clear description on individuals roles and decision making authority of the members that can create a fair farming practice. Therefore, institutionalising farming could play a crucial role in farmers' bargaining and welfare.

7.4 Women Smallholder Farmers' Attitudes, Perceptions and Beliefs Influencing Their Bargaining Intentions

The literature has confirmed that the most proximal determinant of human behaviour is one's intention to engage in a specific behaviour (Fishbein & Ajzen 1975; Ajzen 2002b). Ajzen (1991) identified three antecedents of human behaviour in the TPB model that assist in predicting human behaviour—attitude, subjective norms and PBC. Following the TPB, the present study explored three antecedents of women farmers' bargaining behaviours with the following research question: How and why do women smallholder farmers' attitudes towards existing farm bargaining issues, perceptions of significant others in their lives (subjective norms) and self-belief in their bargaining ability, skills and PBC over bargaining influence their bargaining intentions? (RQ3). Three sub-questions of RQ3 were explored to understand how attitude, subjective norms and PBC affect bargaining intentions.

7.4.1 Influence of Women Smallholder Farmers' Attitudes on Their Bargaining Intentions

RQ3.1 was formulated to discuss how women farmers' attitudes towards farm bargaining issues influence their bargaining intentions. In this section, the research question to be answered is as follows: How and why do women smallholder farmers' attitudes towards existing farm bargaining issues influence their intention to bargain? (RQ3.1). Attitude is the first antecedent of the TPB framework—defined as individuals' beliefs about the outcome of their behaviours (Fishbein & Ajzen 2011). An attitude usually regards an idea, concept or behaviour and can be measured directly as favourable or unfavourable (Fishbein & Ajzen 1975; Ajzen 1988; Willock, Deary, McGregor, et al. 1999; Ajzen 2001; Ajzen & Schmidt 2020).

The present study explored in depth the attitude of women smallholder farmers in the EGP towards bargaining. Through a qualitative exploration, the current study revealed that attitude towards a behaviour is not a singular attitudinal entity; rather, it comprises multiple attitudes towards bargaining. Further, the present study identified six attitudinal themes of farm bargaining behaviour: (1) 'women are better at bargaining', (2) 'bargaining importance', (3) 'attitude towards gaining benefits', (4) 'traders (middle people) gain the most profit' (5) 'bargaining necessity' and (6) 'bargaining

difficulty'. Similarly, Taylor and Todd (1995) proposed an extension of the TPB by decomposing its antecedents to capture the TPB's multidimensional nature. In doing so, this study decomposed the attitudes and identified the abovementioned six themes.

7.4.1.1 Women Are Better at Bargaining

In exploring women farmers' attitudes towards farm bargaining, the present study found that the most reported theme was that women are better at bargaining. This finding is supported by research regarding women's market participation conducted in Nigeria, Madagascar and China, which revealed that women were better than men at bargaining in open-air markets—women negotiated more patiently and better than men (Balogun 1991; Okoye et al. 2016; Hansen & Møller 2017). There could be various reasons that some women in the present study perceived that they are better than men at bargaining. First, women farmers in the EGP are exposed to various bargaining situations when performing their gender roles and maintaining various household and market activities, which gives them experience and helps produce positive outcomes. This argument is supported by Castillo et al. (2021), who found that knowledge and previous experience can shape attitudes. In addition, this argument is well-supported by the finding that women in the EGP engage in market activities as their primary means of obtaining a cash income for their household. Danso et al. (2004) noted that women participate in bargaining because they believe they are better at it. Moreover, the importance of attitude can prompt the knowledge accumulation process and influence intentions and actions (Holbrook et al. 2005). Therefore, women farmers' attitude of being better at bargaining has positively influenced their bargaining intentions.

Conversely, input suppliers—the bargaining opponents of women farmers—reported that women farmers were not as good at bargaining as men. Similarly, other research has revealed that women tend to be less competitive (Säve-Söderbergh 2007; Small et al. 2007; Babcock & Laschever 2009) and less skilled than men during bargaining and do not perform as well as men when negotiating (Kolb et al. 2004). This finding is more alarming because their perceived and actual situation varies. For example, vulnerable women smallholders were targeted by intermediates who offered prices much lower than the actual price—women farmers agreed to this low price because they believed they were better at bargaining but, in reality, they were not competent.

Similarly, a US study regarding garage sales found that salespeople expected women to be less capable of informed bargaining than men, as the study showed that women felt far less confident than men when negotiating to buy a car and thus found it easier to negotiate with women (Herrmann 2004).

It was observed that women bargained better when they engaged in bargaining on behalf of others but not when bargaining for themselves; men performed the same in both situations (Bowles et al. 2005). The varied results for women could be because they are more caring with others than with themselves or because they were afraid of potential adverse reactions if they represented themselves too strongly (Bowles et al. 2007). The findings indicated a gap between women farmers' perceived and actual bargaining behaviours. Women farmers' lack of knowledge regarding farm products and market information could be a reason that they are weaker at farm bargaining. Such information can be easily obtained using mobile technology; however, women smallholders do not use mobile technology as much as men do (Owusu et al. 2018). Consequently, their bargaining ability is affected. There is a literature gap regarding women farmers' perceived and actual bargaining behaviour, and thus, further quantification and qualitative exploration are necessary.

7.4.1.2 Bargaining Importance

Almost a third of participants spoke of the importance of bargaining for farmers. Some expressed that bargaining was unnecessary, but most believed that bargaining was essential in farming to engage in buying and selling activities. Attitude importance indicates the degree to which an individual assigns emotional significance to an attitude (Boninger, Krosnick & Berent 1995). People consider activities important when their attitude favours them, and thus, they value performing the activity in their everyday life. If an individual has an attitude which s/he finds personally important it will affect how they process information, make decisions and behave (Boninger, Krosnick, Berent, et al. 1995). Therefore, women farmers who considered bargaining was important had positive bargaining intentions. This finding aligns with the TPB (Ajzen 1991), which assumes that behavioural beliefs produce favourable or unfavourable attitudes towards the behaviour and subsequently affect behavioural intentions.

Moreover, the belief that an attitude is important can prompt the knowledge accumulation process and influence intentions and actions (Holbrook et al. 2005). Female farmers' personal beliefs guided bargaining intentions regarding the importance of bargaining in farming. This finding revealed that bargaining is important for smallholder farmers and positive attitudes will assist farmers in producing bargaining behaviours. This feeling significantly affects women farmers' bargaining behaviours because attitudes that are considered important are more stable over relatively long periods than attitudes considered unimportant (Krosnick 1988).

7.4.1.3 Attitude towards Gaining Benefits

The present study revealed the attitude towards gaining benefits as another important attitudinal theme, which Fishbein and Ajzen (1977) also considered instrumental. The concept of perceived benefit was empirically found to significantly affect intentions to adopt a particular behaviour (Beatty et al. 2001; Mehrtens et al. 2001; Zheng et al. 2006; Lee et al. 2011; Wu & Chen 2014). However, women farmers' perceptions regarding the most important benefits from farm bargaining differed—some perceived monetary benefit, whereas others perceived non-monetary benefits (e.g. time), as the most important. The latter benefit is an interesting finding in the present study.

Women farmers' gender roles play a crucial role regarding time benefits because women are motivated to quickly return home to perform their other roles (e.g. household chores, childcare and livestock care). However, this gender role affects monetary gain because women farmers agree on a lower price to sell quickly. This finding clearly demonstrates how the unique motivations and attitudes of women smallholder farmers in the EGP affect their bargaining intentions.

7.4.1.4 Traders (Intermediates) Gain the Most Profit

The present study noted farmers' widespread belief that traders (intermediates) gain the most profit from overall farming production. In addition, the current study revealed that EGP farmers did not like to sell to traders, which reflects that the farmers lacked bargaining intentions. The belief that traders gain the most profit generates negative attitudes towards farm bargaining with intermediates. Because intermediates are important stakeholders in rural agribusiness—they link farmers to the niche markets (Diwakar et al. 2020) —such negative attitudes are counterproductive for farmers. A review of the real circumstances may reveal that farmers could have claimed incorrectly. Thus, everyone's cost and profit in farming activities must be investigated in detail to determine the authenticity of these claims. Standardised bookkeeping and accounting practices must be implemented to enable this investigation. However, evidence suggests that traders do gain most of the profit, which supports farmers' claims. Namely, Indian studies have reported that traders received a 75% cut of the agricultural price (Bhardwaj & Singh 2014; Ranjan 2017). Similarly, Karki (2000) studied the commercialisation of natural resources (herbs) for sustainable livelihoods and found that traders received more profit than the local producers. Traders' unusual profit-making behaviours make farmers vulnerable—particularly women farmers who are time-poor and have no other choice but to sell to traders.

It is crucial to understand the reasons for traders' large profits. One possible reason is their stronger bargaining capabilities resulting from their market knowledge, which farmers lack (CECI 1999). Another reason is that traders purchase in bulk, which generates bargaining power and enables them to bargain for a lower price. Further, they have the necessary information and access to high-value niche markets, at which they sell the farm products they purchase. Therefore, smallholder farmers must have proper knowledge of the market channel to avoid incurring losses. Moreover, Ranjan (2017) noted that eliminating intermediary involvement from the agricultural supply chain between farm producers and consumers would enhance farmers welfare. In addition, further studies must explore the problems and opportunities regarding farmers' commercial sale abilities, which, when strengthened, would provide them optimum benefit.

7.4.1.5 Bargaining Necessity

This study identified bargaining necessity as an attitude of farmers that influenced bargaining intentions. The literature on attitudes has identified necessity as an attitude that influenced human behaviour. A study on farmers' commercial machinery bargaining primarily discussed farmers' attitudes regarding the necessity of purchasing the machinery (Tiessen & Funk 1993). Studies concerning consumers' willingness to consume functional foods have reported that consumers believed it was necessary (Urala & Lähteenmäki 2004, 2007; Chen 2011). Similarly, a health-based study also

found that when individuals deem a behaviour unnecessary, they will be reluctant to perform the behaviour (Landström et al. 2009).

The findings from the abovementioned studies demonstrate that attitudes towards the necessity of an activity play a crucial role in performing the relevant behaviour. Similar results occurred regarding the farm bargaining behaviour of women farmers. Notably, farmers' attitude towards a perceived need for bargaining results from the perceived benefit outcomes of farm bargaining. That is, if their analysis reveals the positive aspects and benefits of bargaining, farmers will prefer to engage in bargaining.

The results section has alluded to how a widowed woman farmer experiencing hardship in the masculine structures of farming, almost reached the point of quitting farming. In contrast, such a situation made women "de jure" heads of their household, which means taking over the primary farm decision-making role. Women's capability in terms of agency to change was found to be helpful in such situations where women brought about changes by involving themselves in farm bargaining which could result in a better price of their products. When women farmers reflected on their past experiences to understand that bargaining is required to achieve financial benefit, they developed positive attitudes towards bargaining and ultimately intended to bargain. Therefore, bargaining necessity attitudes positively influence farmers' bargaining behaviours.

7.4.2 Influence of Women Smallholder Farmers' Perceptions and Subjective Norms on Their Bargaining Intentions

The present study performed a qualitative investigation to answer the following research question: How and why do significant others' perceptions in women smallholder farmers' lives (subjective norms) influence their intention to bargain? (RQ3.2). This study aimed to deepen understanding regarding the subjective norms affecting women farmers' bargaining behaviour—it is one of the few studies that have qualitatively explored subjective norms and thus has a unique strength to understand socially embedded issues. Qualitative investigations can develop cultural understanding, because exploring the effects of subjective norms on behavioural intentions is useful in designing targeted interventions (Ajzen 1991; Harris et al. 2009; Zoellner et al. 2012). In addition, the present study revealed subjective norms that

potentially influence women farmers' bargaining intentions, supporting studies on subjective norms correlating with behavioural intentions (Bond et al. 2009; Manning 2011; Balayar 2018; Devkota et al. 2020). Conversely, the present study did not support claims that subjective norms are inconsistent with behavioural intentions (Ajzen 1991; Armitage & Conner 2001; Manning 2009).

The results identified six themes of subjective norms that linked with women farmers' bargaining intentions: (1) gender norms, (2) power relations, (3) shyness, (4) cultural practice, (5) gendered farm practice and (6) encouragement. Particularly, the emerging themes assisted in deeply understanding how women smallholder farmers' normative beliefs (associated with significant people [family members, relatives and neighbours] in their personal lives) were instrumental in shaping their behavioural intentions. The subjective norms were further placed into two sub-categories: (1) injunctive normsbehaviours informed by what others wanted to do; and (2) descriptive normsbehaviour informed by social pressures and the observed behaviour of others (Cialdini et al. 1990). Gender norms, power relations and encouragement were identified as injunctive norms; that is, women farmers' behaviours were influenced by social pressures and followed the perception of what other people wanted them to do. Further, shyness, cultural practice and gendered farm practice were identified as descriptive norms; that is, women farmers' behaviours were influenced by social pressures resulting from the observed or inferred behaviour of others (Cialdini et al. 1990; Ajzen 1991; Rimal & Real 2005; Manning 2009).

7.4.2.1 Gender Norms

The present study's respondents appeared to be sensitive regarding the normative influence of close relatives and neighbours as a consequence of existing gender norms. Gender norms are the attitudes and informal rules that govern individuals' behaviours viewed as appropriate, ideal or acceptable for women and men in a given society (Boudet et al. 2013). There is robust evidence that gender norms interplay in agriculture, particularly for women farmers (Sugden, Silva, et al. 2014; Arora 2015; Mudege et al. 2017; Sachs 2018; Arora & Rada 2020). However, women farmers' bargaining with the patriarchy in agriculture has been overlooked (Kawarazuka & Prain 2019). The present study identified underlying gender norms such as being good women, accepting the status-quo to carry domestic and care work burden, following

restricted mobility access that influenced women farmers' bargaining intentions and formulation of normative beliefs for bargaining intentions. Similarly, the findings of several studies have also revealed that gender norms can direct behavioural intentions (Ashourizadeh et al. 2014; Heise et al. 2019).

According to the present study, a gender-norm related mindset interferes with women farmers' bargaining intention. Particularly, norms that maintain the image of a 'good woman' hinder bargaining behaviour. These include norms such as 'good women should be shy', 'good women cannot speak with male strangers' and 'good women should be polite and respectful to elders'. Women farmers tend to follow the status quo by remaining polite and questioning less, which was similarly discussed by Babcock and Laschever (2009). Further, women farmers who followed gender norms carried an unequal share of work burdens, both household and on-farm burdens, which made them time-poor and consequently affected their bargaining.

The present study found that women believed that they should not ride bicycles, which restricted their mobility. These prescribed gender roles and associated restrictions limited mobility opportunities for women farmers and meant that they lacked sufficient information regarding the market and products, which is necessary for bargaining. Consequently, this limited their bargaining intentions and bargaining engagement. Similar findings regarding the abovementioned restrictions were revealed by Magesa et al. (2014) and Courtois and Subervie (2015). Further, EGP women farmers from Bihar avoided riding bicycles—they rode bicycles before marriage but quit riding once married because of gender norms. Similarly, a gender and assets ownership study found that women farmers lacked permission from their spouse or guardian to ride bicycles, which limited their mobility (Jost et al. 2016) or made women dependent on males for mobility. These strict limitations are especially challenging when considering the male outmigration situation prevalent in the EGP. The implications restricted women from participating in markets to sell farming products, giving them fewer opportunities to bargain. Consequently, women farmers had little transportation choices for transferring farm products to the *hatiya* or transferring harvested products from the farm to home. Instead, they carried their farm products on their head, which limited the quantity of transported products.

As noted by Doss et al. (2018), it can be concluded that such complex gender norms force women farmers to receive lower prices than their male counterparts by restricting their access to competitive price bargains. Similarly, the findings also align with a study by (Boudet et al. 2013), which examined livelihoods across 20 primarily developing countries and found that women's actions are more closely bound by traditional gender norms and relations than men's actions.

7.4.2.2 Power Relations

The present study found persistent social inequalities in the EGP community, which resulted from hierarchical structures determined by class, caste, gender and landlord–tenant relationships (Lahiri-Dutt & Adhikari 2015; Sugden 2016a). Such hierarchies explicitly and implicitly positioned people at unequal positions based on the power they exhibited, forming injunctive norms. In the present study, a norm perceived by women farmers was that individuals in low hierarchical positions must be respectful to those in higher positions. Such norms in the EGP region are complicated because women farmers have an intricate power relationship with their landlord. A woman must respect the landlord and her in-laws, husband and elders because they are of higher caste over a lower caste, men over women and landlords over tenants demonstrates the higher power of the former in a relationship with the latter. Therefore, a farmer had to respect the landlord. If the landlord was also an elder relative, woman farmers were downgraded to an even lower position when bargaining on land tenancy.

Further, power relations varied according to the intersectionality formed by an individual's multiple identities; for example, a lower-caste woman tenant would perform less bargaining with upper-caste male landlords than a higher-caste woman tenant. Similarly to the present study's findings, other studies have also discussed the power relations in agriculture (Liepins 1998; Deji 2020). Power relations have emerged as a strong subjective norm that influences women farmers' bargaining intentions. Further, unequal power relations restrict women smallholder farmers from farm bargaining—they often remain submissive at the lower end of the power hierarchy. Norms on power relations remain a barrier and adversely affect women farmers' PBC, restricting them from forming positive bargaining intention; in addition, these norms affect their mindset and push them towards a vicious circle of dependency

(Sachs & Alston 2010). Women smallholder farmers may fall behind because of the multiple burdens of complex power relation, which are necessary to understand in detail. Moreover, even if women farmers overcome intra-household gender power relations, challenges among landlord-tenant or class-linked power relations could remain. Such unequal power relations could be problematic by interfering with women farmers' bargaining, and thus, targeted support should be planned.

7.4.2.3 Encouragement

This study found that encouragement-related subjective norms influenced women farmers' bargaining intentions—encouragement or discouragement lead to behavioural intentions (Huda et al. 2012; Stok et al. 2015). Women farmers encouraged by close relatives (e.g. husband and in-laws) to participate in farm bargaining perceived that their close relatives would approve of their bargaining behaviour. This finding is supported by Rimal and Real (2005), who noted that others' expectations or desires influence individuals' behaviours, and because failing to act on such expectations affects social approval. Further, the present study revealed that women who were encouraged by their relatives were confident and had positive bargaining intentions. In addition, encouragement affected women farmers' PBC.

Interestingly, the close relatives who encouraged women smallholder farmers to participate in farm bargaining and allowed them to perform were from families with male outmigration. Such encouragement may be from male family members who are absent to perform farm bargaining because they want to prepare women farmers for bargaining roles. The present study found that various women farmers were encouraged; however, it also found that women farmers were discouraged by their families from participating in public farming activities, such as meetings and training. To discourage women farmers, families would portray negative images of women role models who actively participated in public activities. Specifically, households headed by a widowed mother-in-law discouraged their daughter-in-law by negatively describing role models. Such discouragement is detrimental to producing bargaining and preferring harmony. Negatively describing role models is alarming because several studies have explained the potential influence of role models on certain

behaviours (Liñán et al. 2011; Cheng 2020). Females are influenced by role models of the same gender, rather than by male role models (Biswas & Kundu 2019).

It can be concluded based on the abovementioned discussion that portraying role models in a negative light influences the formation of negative bargaining intentions subtly. Therefore, women smallholder farmers need to be encouraged by their families and close individuals to participate in bargaining. Targeted interventions aiming to bring desirable outcomes in women's farm bargaining must crucially understand subjective norms.

7.4.2.4 Cultural Practice

'Habitus' refers to how individuals of the same group or class accept things in their surroundings and their social life (Bourdieu 1984, 1988). Habitus governs human behaviour, which is also true for the farming system (Raedeke et al. 2003). Various cultural practices are habitus to the farmers in the EGP region, which affects their bargaining behaviour. For example, the rental payment system is very important to smallholder farmers because they are land-poor and need to hire land for farming. There are two types of rental systems in local practice in the EGP—adhiya (shared cropping) and *mankhab* (fixed rate). Agreeing to one of these rental systems is the norm that farmers must follow; otherwise, they will not obtain tenancy from landlords. The rental payment system has been in practice for several generations, and minimal bargaining between farmers and landlords has occurred in regard to changing or upgrading the system. In addition, no formal contract or scientific method exists regarding such a system. The lack of a contract is not favourable for farmers because they have less power—they are bound to the norms and do not bargain—and landlords have more power, with which they can break norms and bargain to receive most of the gain.

The study revealed a unique local practice in the EGP region—that of the selling of vegetables by *Kujras*. The *Kujras*, a socially defined group of people, sell vegetables either in the *hatiya* (local market) or by roaming in the village. The *Kujras* were positioned as a lower class than the farming class; therefore, women farmers perceived that they will be socially devalued if they sell vegetables in the market. These perceptions prevent women from exploiting the available trading opportunities, and

hence, they are forced to do business with traders who visit their homes. This finding is supported by the effect of local norms on intention, which varies according to spatial proximity (Passafaro et al. 2019). Therefore, it is crucial to understand existing local norms that potentially interfere with the bargaining intentions of women farmers.

However, the present study revealed that a few male farmers gradually started to sell farm products in the nearby village using a rickshaw; however, no women farmers did so. In the past, a teenage girl had once sold farm vegetables by herself, but her friends and neighbours teased her by calling '*Kujarni*', referencing a *Kujras* woman. Consequently, she quit and decided not to sell again. Therefore, the subjective norm formed strongly suggests that women should not participate in the market, which the women farmers find impossible to change. This finding is very important to policymakers who are interested in the welfare of EGP farmers—if such a practice is overlooked, they will fail to break the culturally embedded subjective norms and thus will fail to empower women in farming.

7.4.2.5 Shyness

Shyness can be explained as a feeling of apprehension, discomfort or awkwardness when a person is around other people (Carducci & Conkright 2020). In the present study, various study participants mentioned that their shyness played a role in their developing negative intentions towards farm bargaining. Women farmers in the EGP could exhibit shyness because of the region's collective type of society. Collectivistic cultures consider social shyness a positive behaviour (Frijda & Mesquita 1994). Moreover, most families in the EGP lived in a joint family and have known most villagers (who are family relatives or neighbours) for a long time.

Prior studies have demonstrated that collective societies value shyness more than individualistic societies because of power hierarchies (Aizawa & Whatley 2006). In the EGP region, women farmers valued exhibiting shyness to be culturally accepted and display a 'good' woman's characteristics by avoiding communicating with male strangers. Unfortunately, these behaviours ultimately result in the women farmers developing the habit of avoiding talking with male strangers, which is essential for farm bargaining. Further, women farmers often tended to delegate bargaining roles to men; similarly, a US-based garage sales study revealed common situations in which women delegated bargaining to men (Herrmann 2004). Moreover, in the sociocultural context of the EGP region, women are considered a symbol of family prestige and thus must display virtuous behaviour. Therefore, women smallholder farmers perceived shyness as a subjective norm that prevented them from bargaining, which is justifiable because subjective norms pertain to meeting others' expectations (Bagheri et al. 2019).

The primary characteristic of shyness is that it is largely an ego-driven fear of what other people will think of one's behaviour. Consequently, a shy person becomes scared of doing or saying what they want in fear of negative reactions or being laughed at, humiliated, patronised, criticised or rejected. Instead, they may simply opt to avoid social situations (Crozier & Crozier 1990; Crozier & Alden 2009). This finding also holds for women farmers in an unfamiliar market environment: 'There are thousands of people roaming in the market [*Bajar me hajar log ghumai chai*]. I feel shy to deal with other people [traders] in the market' (CWF3). Similarly, Cain (2013) explained that people's behaviour is affected by unfamiliar environments. However, shyness affects women in both the developing and developed worlds. This is particularly evident from a US-based study regarding car sales, which found that women buyers were extremely shy about bargaining, whereas men buyers showed aggression in their bargaining: "I often do not bargain, but rather I tend not to buy anything. I'm often too embarrassed (shy, quiet) to ask someone to come down in price, especially if it is early in their sale" (Herrmann 2004, p. 61).

7.4.2.6 Gendered Farm Practices

The literature has established the presence of gendered agricultural practices (Riley 2009; Rao 2012; Sachs 2018). Similarly, the present study's results demonstrated the practice of gender-based farming in the EGP region. Specifically, gendered farm practices were represented as subjective norms to women smallholder farmers— behaviours were learned by observing others. Farmers tend to perform stereotypical gender roles learned from the socialisation process and aligned with group conformity pressures. For example, male farmers prepared the land and irrigated it, bought and sprayed insecticides and used farm machinery whereas women farmers performed seeding, transplanting, weeding, harvesting and storing. Men tends to do difficult tasks which need more energy, but women's tasks were time-consuming and tiring (Rao

2012). Therefore, in regard to transformative change, gendered farm norms potentially created women smallholder farmers' negative intentions about new bargaining roles.

7.4.3 Influence of Women Smallholder Farmers' Beliefs Regarding Their Bargaining Ability, Skills and Control Over (Perceived Behavioural Control) Their Bargaining Intentions

The third sub-research question of the present study was as follows: How and why does the self-belief of women farmers in their bargaining ability, skills and control over bargaining (PBC) influence their intention to bargain? (RQ3.3). The answer to this question is very important because it reflects the perceived level of ease or difficulty to execute a behaviour and is believed to reflect past difficulties, hindrances and experiences of women farmers (Doll & Ajzen 1992). Moreover, PBC regards the product of beliefs about resources and obstacles that can facilitate or hinder performing a given behaviour; for example, internal controls, such as skills and abilities, or external controls, such as time, money and cooperation from others (Ajzen 2015b). To the researcher's best knowledge, the present study is the first to explore women farmers' PBC regarding farm bargaining behaviours. Therefore, an in-depth exploration of this issue is an essential addition to the literature on women farmers' bargaining behaviours and on PBC.

The present study used a qualitative approach to address the research question and examine how women farmers perceived their control. Six themes were found: confidence, flexible and fixed rates, skills and comfort. These themes were grouped into two categories: internal and external controls. Specifically, confidence, skills and knowledge are internal controls, and control over price is an external control. Women's perception of these controls influences their farm bargaining intentions. Similarly, Bandura (1982) noted that people's judgement on their capabilities, based on their perception of efficacy, affects their motivation and behaviour.

7.4.3.1 Confidence

The present study found that farmers' confidence in bargaining appears to be a significant predictor of their farm bargaining intentions. Their degree of confidence in executing a behaviour reflects their self-efficacy (Bandura 1997). As discussed in the

TPB and in Bandura's model, self-efficacy is the perceived confidence to perform a behaviour, predicting behavioural intentions (Bandura 1997; Ajzen 2012). Knowledge regarding confidence or self-efficacy is important because it signifies a person's beliefs about their ability to perform a behaviour (Bandura 1997).

To aid this knowledge, the present study identified that farmers' confidence was important for them to develop bargaining intentions. Several women farmers identified that their bargaining intentions resulted from confidence in their ability to bargain and the belief they could influence the outcome by bargaining. Farmers were confident because they had experience in farm bargaining; specifically, women farmers were confident because of their cooperative involvement in farm decision-making and self-help groups. For example, an Indian study found that women who were members of a self-help seed group were more confident and performed better bargaining for intrahousehold decision-making (Padmaja & Kondapi 2018).

Conversely, various women farmers shared that they were not confident in bargaining and thus did not bargain; instead, they asked their husband, in-laws or neighbours to bargain for them. Similarly, a Chinese study found that women were less confident than men in deploying deceptive tactics (Chan & Ng 2016). In the context of South Asia, women farmers' low confidence can be reasoned to result from their lower status in their family and community (Smith et al. 2003; Keleher & Franklin 2008). Further, Agarwal (1997) noted that a lack of land entitlement, resulting from low economic security, leads to women farmers' low self-confidence in their negotiating ability. Therefore, a lack of land entitlement as the reason behind low confidence should be explored. An in-depth understanding of low confidence is crucial because women farmers who remain less confident than men farmers may eventually receive a lower income from farming. In addition, women are more risk averse because they lack confidence, which could restrict them from exploring entrepreneurship in farming.

7.4.3.2 Flexible and Fixed Rates

Ajzen (1991) argued that the PBC of behaviour is related to both internal and external controls. The present study identified that farmers could lack control over bargaining depending on the type of farming items or services and whether they considered them bargainable or non-bargainable. It was reported that farmers could consider items

bargainable in one location but not another; for example, in Bhagwatipur: 'Usually, the seeds price is flexible, so, I bargain while purchasing' (CWF3). Conversely, in Mauahi: 'The price of the input items is fixed. There is no bargaining for input items' (DWF7). The flexible and fixed rates of farming items or services formed participants' PBC. Participants reported that they have no bargaining control with fixed price items or services; conversely, farmers can bargain or take control if the pricing of items or services is flexible. Similarly, a study regarding consumers' purchasing behaviours in the bazaar culture noted that bargaining for the best price was ubiquitous when pricing was flexible (O'Reilly & Kumar 2016).

The perception of pricing being flexible or fixed affects farmers' bargaining intention. Price flexibility was found to be subjective—for the same item, farmers had differing perceptions on whether the rates were fixed or flexible. The primary reason for such different perceptions of rates was the lack of proper information. Consequently, farmers depended on other farmers' past experiences and the information was distributed as common knowledge. This finding is unique because it demonstrates how farmers used past experiences and locally shared knowledge to establish their perceived control over farm bargaining; at times, farmers would not try farm bargaining based on earlier information. It can also be concluded that having price flexibility would help the farmers to practice bargaining as needed, however policies to govern such pricing must be ensured to safeguard farmers welfare.

7.4.3.3 Comfort

The present study found that some women farmers needed to feel comfortable to engage in bargaining. Feeling comfortable refers to a person's mental state derived from their experience with a behaviour, the perception of ease to perform an action and the belief of having control over their environment (White 2009). Further, a person's 'comfort zone' refers to their belief of minimum uncertainty, scarcity, vulnerability and feeling in control (Tugend 2011). Therefore, feeling comfortable is an expression of women farmers' PBC and is linked with their bargaining intentions. It was found that farmers' comfortableness with farm bargaining was guided by their familiarity and experiences with bargaining activities. Feeling comfortable while bargaining was subjective—experienced women farmers said they could bargain well, whereas inexperienced farmers expressed discomfort.

Moreover, participants mentioned that their comfort when bargaining enabled their farm bargaining intentions; that is, women farmers who were comfortable about bargaining with stakeholders had positive bargaining intentions. A similar result was found in an entrepreneurial study, which identified that perceived comfort or difficulty could influence women entrepreneurs' intentions (Khurshid & Khan 2017). In addition, a study regarding internet use demonstrated that comfort in using computers and internet skills enabled individuals to use the internet (Lassar et al. 2005). Therefore, women farmers must perceive a level of comfort to develop bargaining intentions. Moreover, it was found that bargaining behaviours flourished in comfort zones that were created from experience. Therefore, exposing women farmers to the bargaining environment and training them would increase their level of comfortableness to engage in bargaining.

7.4.3.4 Skills

The study found that women farmers' perceptions of their skills are important in shaping their bargaining intentions. Participants mentioned that skills such as persuasion, numeracy and literacy were required to perform farm bargaining. In the EGP region, several women farmers were illiterate and lacked numeracy skills, which made them less willing to participate in farm bargaining: '*Bargaining is my husband's job because I am not good at numeracy*' (AWF8). Women who lacked skills perceived difficulties regarding bargaining and formed a negative control belief about it. Moreover, women perceived that males were more skilful at bargaining. This perception aligns with various studies that document how males have greater persuasion and negotiation skills than women, including dominance, assertiveness and rationality (Kray et al. 2001; Herrmann 2004; Kray & Thompson 2004; Guo et al. 2020). Therefore, men were found to negotiate efficiently and outperform women (Kray et al. 2001; Kray & Thompson 2004). In these situations, women's agri-business participation is potentially discouraged.

Further, it was found that women farmers' confidence to bargain linked with the transaction's monetary limit. For example, women felt confident to bargain when it involved a small monetary amount but hesitated to bargain for high-value deals. In such situations, women farmers sought support from male family members, such as their father-in-law or husband. Similarly, a qualitative study conducted among women

farmers in Southwestern Uganda found that women who lacked numeracy skills left the bargaining to be primarily performed by men—women farmers' participation in bargaining in bean-related businesses was low (Eriya 2018). Therefore, it is vital to focus on women's literacy to increase their skills, which, in turn, would strengthen their farm bargaining participation.

In view of the discussions thus far, the implications for theory and practice are presented in the next section.

7.5 Theoretical Implications

This study on women farmers' bargaining intention is a novel contribution to the literature on farm bargaining research because this topic, and in particular, women smallholders' bargaining intention, has received limited research attention. Available closely related studies researching women smallholders were found to use the lens of feminist political ecology (Agarwal 2010b; Meinzen-Dick et al. 2012; Sharma 2013; Sugden, Maskey, et al. 2014; Leder, Sugden, et al. 2019), Marxist theory (Sugden 2010) and vulnerability analysis (Füssel 2007). However, the current study used the TPB framework, which is its contribution to this research area. Although the TPB model has been used to explain bargaining initiation in different contexts (Volkema & Fleck 2012b), the current study is the first to use this model to explore women farmers' bargaining intention.

Moreover, the application of the TPB model shows the strength of this study to address the research question. The theoretical basis of the TPB is considered as a cognitive theory. In contrast, in this study, the TPB model was applied to explore farm bargaining through an interdisciplinary approach. The aspects explored using this approach included sociocultural aspects, since this study examined existing practices and norms; feminist perspectives, considering that it viewed women's farm bargaining using the lens of gender; and economic perspectives, because it assessed the financial interactions of the farmers. Last, adopting a cognitive approach helped to further explain the interactions of sociocultural, feminist and economic aspects, which lead to psychological processes to develop farm bargaining intentions.

The TPB assumes that attitude, subjective norms and perceived behavioural control are the antecedents of behavioural intention, which is the direct predictor of behaviour.

Moreover, the theory assumes that behavioural, normative and control beliefs guide these antecedents. However, the literature has not examined the formation of these three primary constructs of the TPB (i.e. attitude, subjective norms and perceived behavioural control) or identified the factors that affect farm bargaining intention. Thus, this study contributes to filling this literature gap by explaining the formation of the three constructs in this context. Moreover, the detailed qualitative inquiry of this study revealed several themes related to those constructs, which future studies could use to develop research tools.

Another major contribution of this study is that it identified a wide range of background factors that enable or obstruct women farmers' bargaining intention. These factors interact with the three TPB constructs to influence bargaining intention. The study grouped these 18 background factors into four broad categories: personal, product-related factors, sociocultural and institutional. These factors differ from those identified in the related literature. Some of the factors are context-specific, considering that these are typically prevalent in the EGP area.

Moreover, the themes that emerged during the data analysis presented in the results Chapters 4, 5 and 6 and in this discussions Chapter 7 based on the reviewed literature converged into one significant conclusion that 'power' was central to the women farmers' intention to bargain. Their bargaining intention was embedded in the power dynamics based on the four aforementioned factor categories. The power dynamics revealed the unequal power relations of these farmers with their bargaining opponents, which affect all the TPB constructs. It was essential to determine the power dynamics that create power in farm bargaining. The empowerment theory of Kabeer (2001), which considers that bargaining power empowers women, can be used to understand such power dynamics. In addition, power is potentially the fourth predictor of intention in TPB, in addition to attitude, subjective norms and perceived behavioural control. This potentiality should be explored in future research.

Another remarkable contribution is that this study is the first to identify farm bargaining issues and to group these into the intra-household, on-farm, market and intermediate spheres. The identified spheres and farm bargaining issues can be useful to researchers in ascertaining bargaining-related topics. Moreover, they can conduct further research on intra- and inter-sphere farm bargaining. A theoretical framework based on the findings is presented in Figure 7.2. The framework integrates the four bargaining spheres in which farm-related bargaining by women farmers occurs, which are hence placed on the boundary. The four arrow lines show that the four spheres are interrelated. The main model is placed in the rectangle formed by the arrows to clarify that this model occurs within the context of the four spheres. In the main model, 18 factors are grouped into personal, product-related, sociocultural and institutional factors, which are background factors. These factors lead to the formation of attitude, subjective norms and perceived behavioural control, as the arrows indicate. The identified themes related to attitude, subjective norms and perceived behavioural control are listed in the respective constructs. Further, arrows show how the constructs are related to the answers to the RQs, and thus lead to bargaining intention, and the dotted line shows that intention leads to farm bargaining behaviour. However, weights are not assigned to the relationship of each construct, because the study used a qualitative approach. However, a qualitative foundation to understanding the intensity exerted by the participants was noted and used during the analysis and discussion of each theme.

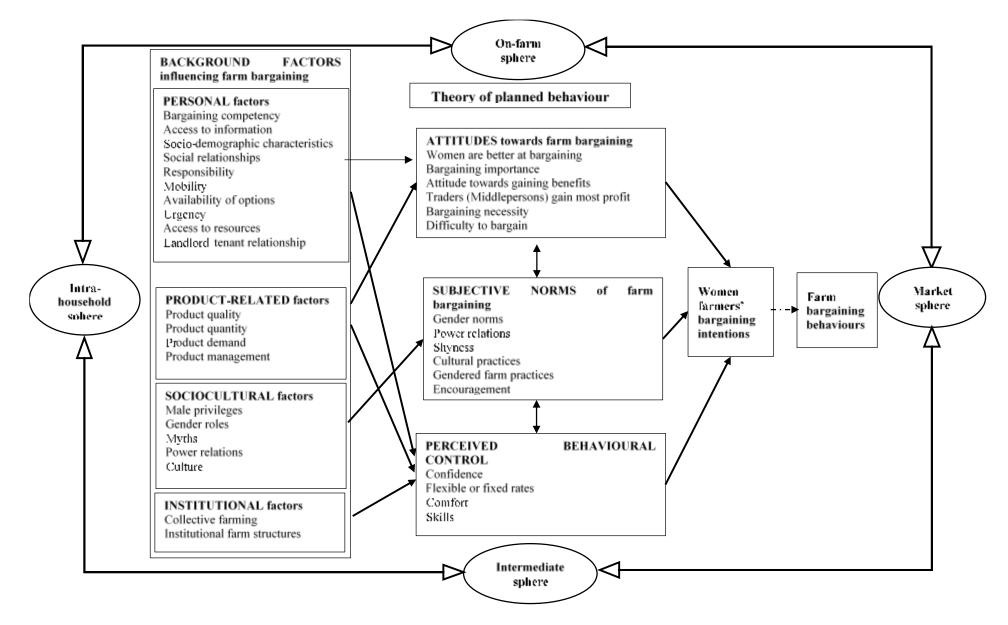


Figure 7.2: Conceptual Framework of Women Smallholders' Bargaining Intention

7.6 Implications for Policy and Practice

The motivation for any research based on interpretive ontology is to gather detailed knowledge that can have wide implications. For this study, an expected outcome was to provide implications for policy and practice that would strengthen women farmers' farm participation and their economic wellbeing.

For smallholder women farmers, this research suggests that increasing their confidence, numeracy skills and mobility, along with their ability to negotiate more at-home and on-farm support from family members, to seek market information, to control resources and to produce farm products early each season, may be a successful formula to increase their farm bargaining intention. For this purpose, the policy makers can focus on the ways to build bargaining confidence of the women farmers which can be enhanced by increasing their market experiences and participation in training related to such topics. This can be designed by involving local bodies and interdepartmental support. And another important aspect is to involve more women participants in various spheres of agri-supply chain such as traders, intermediaries, input suppliers, transport, extension officers and government bodies. Such inclusion of women participants would demand for a favourable support by addressing their gender needs. This can result in equal gender in overall agri-supply chain by further benefiting smallholder women farmers bargaining intentions. Further, this research suggests the farmers can perform collective farming to increase their bargaining power, which would increase their bargaining intention and, consequently, the benefits from bargaining.

Moreover, agencies working for agricultural development and women farmers' welfare may also benefit from this research. They can use its findings to design agricultural training programs to address factors that lead to the development of these farmers' bargaining intention. Given that encouragement from their family helps these women to develop bargaining intention, the agencies could include family members in the training programs. In addition, this research identified that having bargaining-related skills, such as numeracy, helps develop bargaining intentions. Hence, training programs can address women farmers' numeracy skills as well as cost-estimation skills

to increase their bargaining intention. Further, these agencies can develop training modules based on the four bargaining spheres identified in this study.

In addition, this study found that women are time-poor because of their three burdens of household care (reproductive), social tasks (non-productive) and farm work (productive). Of these, they are typically allocated household chores and childcare as part of their gender role, which limits their farm and market participation. Therefore, they would benefit from an intervention program designed to provide creches since this facility would help them meet this gender-based demand. However, a low-cost creche should be provided since the target group will be low-resource women farmers. To this end, the help of local bodies, such as a self-help group or farmers' collective, should be sought.

Further, the study explained the formation of attitude, subjective norms and perceived behavioural control and their effects on farm bargaining intention. These findings would assist agencies to develop interventions targeting farm bargaining behavioural change and can also be used in other domains to develop behavioural interventions. Agencies can also develop interventions according to the bargaining spheres and issues. In addition, this study revealed diverse gender and social norms that impede women farmers' participation in bargaining, which must be changed to increase their participation. Hence, these findings can be used to design norm-based interventions to increase their farm bargaining behaviour. For example, tailor made community sensitisation training that focus on highlighting gender restrictive practices in farm bargaining; the inclusion of bargaining role-play activities to transform specific norms; and gender transformative training.

The study also showed that smallholder women farmers found challenges to access information on niche markets and product prices, which affected their bargaining intention. Therefore, provision to easily access farm related information must be ensured for the women farmer for instance mobile apps, radio or television programs for price of vegetables from different markets can be introduced. In addition, it recommends developing a policy to increase their access to information. Likewise, access to markets affects their bargaining intention, and hence, a policy can be developed to increase their access. Moreover, farm product quality affects their bargaining control, and hence, to increase quality, a policy to ensure easy access to quality seeds, fertilisers and technical support. It can be done by establishing the government or cooperatives to provide farm inputs where women can easily access. Further, local government supervised supplier can turn to be a secure institution that can be responsible if something goes wrong. This provision can enhance accountability and credibility from government towards smallholder farmers.

Further, the control over productive resources influences bargaining intention, and likely power relations as well, which can affect bargaining behaviour. Hence, policymakers should aim to increase women farmers' control over productive resources and to minimise the power gap in power relations. The findings also showed that the mobility of women farmers is embedded in social norms and is gendered. Their restricted mobility makes it difficult for them to access farm-, market- and price-related information and to transport farm products to markets. Therefore, policymakers need to address unmet gender needs related to mobility by ensuring the availability of public transport facilities as well as by increasing the frequency of the facilities currently available.

Besides, there are some barriers concerning the limited bargaining power of women, mainly due to a combination of personal, technical, social and cultural factors. Some measures to increase women's bargaining power include: (1) provide adequate awareness and training to women for farm bargaining; (2) organize gender training for men members, as in many areas, men are the gatekeepers who do not allow women to participate in training. Such training materials should be simple and understandable language. In addition, promoting women alternative livelihood program and income generation activities can be useful. However, ensuring that the women have equal access to resources and decision making and seek long-term financial supports from donors targeting women empowerment activities can be useful.

7.7 Limitations

Every research has limitations, regardless of how well it is designed and executed (Simon & Goes 2013). Some of the limitations related to the qualitative design used in this study—which are revealed in Section 3.8 limitations and delimitations—are mentioned again in this section. One limitation is that this research was designed to study the farm bargaining intention of women smallholder farmers. It primarily

focused on women farmers' experiences and perceptions. However, during bargaining, women must deal with various agri-supply chain actors. This study included the views of some actors (e.g. input supplier, landlord and mother-in-law) as bargaining opponents, but not all (e.g. extension officers, machinery suppliers, traders, buyers and wholesalers).

The qualitative nature of the study gave rise to three further limitations. Although the study identified several factors that can affect the TPB constructs and farm bargaining intention and revealed the relationship between the factors and the TPB constructs in relation to farm bargaining intention, it could not determine the intensity (weight) of each relationship owing to its qualitative design. The relationship between demographic and other moderating variables could potentially be analysed by employing cross tabulations. In addition moderating factors such as confounding factors that strengthened or weakened the impact on bargaining intention as the end factor could be analysed by using quantitative approaches such as structural modelling or econometric analysis. In addition, the data analysis showed that power may be an independent predictor of bargaining intention and may act as the fourth antecedent in the TPB framework; however, this study did not test that possibility owing to its qualitative nature.

Further, the cross-sectional study design limited the investigation of the relationship between bargaining intention and bargaining behaviour. Moreover, although policies may affect farm bargaining behaviour, conducting a policy review is excluded from the study scope, which can be considered a limitation. Yet another limitation is that this study used an empirical approach to generate data from women farmers in the EGP region. Hence, its findings can be generalised in similar contexts only.

7.8 Recommendations for Future Research

This study applied an interpretive paradigm using a qualitative approach and collected information on women farmers' rich lived experiences related to their farm bargaining. The findings need to be tested further using a broader sample and a larger context to enhance their generalisability. It would be interesting to investigate smallholders' bargaining intention in another setting with a similar model that can also be replicated in a different context. Further, the qualitative interpretation of the findings could have

added value if also measured using quantitative techniques. Such measurement would verify the results and help to generalise these in a similar context.

This study applied the TPB model qualitatively to study bargaining intention and found a relationship between the factors that influence belief formation related to attitude (behavioural belief), subjective norms (normative belief), perceived behavioural control (control belief) and farm bargaining intention. However, given its qualitative nature, it could not investigate the strength of this relationship. Hence, future research may reveal interesting findings on this topic. Further, this study revealed different components of attitude, subjective norms and perceived behavioural control regarding farm bargaining behaviour. A measurement construct could be developed based on these components and validated quantitatively.

One crucial finding was that power was essential to women farmers for farm bargaining, and it may be the fourth predictor in the TPB model. It would be interesting to explore this possibility after controlling for the effects of the other three predictors in this model using quantitative techniques. Further, this study found that women are time-poor, whereas time availability is crucial in farming. Hence, future research can identify ways to address this problem of women farmers. For instance, an intervention study can be conducted to determine whether providing creches can increase their participation and benefits in farming.

The institutionalisation of farm structures was found to significantly influence farmers' bargaining intention; for examples Mothers groups of Nepal (Chhetri et al. 2012), co-operative groups for Mango production in Pakistan (Mehdi 2012). While this could have strong merits, there are also drawbacks to such interventions. For example, there are many failed cooperatives and farmer groups owing to a multitude of factors including governance problematics, lack of leadership, trust issues, etc. Simply recommending institutionalisation of farm infrastructure will not be sufficient. Of equal importance is the question of how to ensure that institutions do not exacerbate the situation women farmers find themselves in and perpetuate social and gender disparities that favour well-off farmers or male farmers, over the poor or women farmers. In addition, since the scope of this research does not extend to policy analysis, policy analysis research can also be helpful to identify the existing gap between policy and institutionalisation.

Another finding was that collective farming can increase the bargaining power that leads to farmers' bargaining intention. Hence, future studies could seek to identify the best collective models to increase their bargaining power in low-resource settings.

There is a scope for greater use of triangulation. Using more than one data triangulation (e.g., family members as informants) and method triangulation (e.g., observation of bargaining episodes), are recommended for future research and can potentially add strength to such studies.

To develop a deeper understanding of the bargaining of women farmers, it would be worthwhile studying why women are likely to bargain more when they have a substantial role in a specific area. Similarly, exploring whether there is a relationship between the bargaining sphere in which women farmers bargain and their level of participation in the activities in that sphere would be an interesting research direction. For example, women are likely to bargain more in an area that they consider their domain, such as reproductive roles, and the health and food security of the household. However, if it is seen as a male domain, it is unlikely that they will participate significantly in that sphere.

This study identified four farm bargaining spheres and related issues. Women farmers' bargaining position in one sphere is linked to that in another sphere, but this study leaves it to future research to investigate these links and their bargaining intention in and between these spheres.

7.9 Farm Bargaining, Women Smallholders and COVID-19: A 'New Normal'

This doctoral research started before the ongoing coronavirus disease 2019 (COVID-19) pandemic. When the pandemic commenced in 2019, data analysis for the research was ongoing. Therefore, this section on COVID-19 was not part of the initial thesis structure. This section incorporates a brief reflection on the newly imagined future of living in the pandemic-affected reality and its implications for the bargaining of smallholder farmers, in particular.

The COVID-19 pandemic is the most devastating public health crisis in over a century (Rose-Redwood et al. 2020). The pandemic also revealed how a crisis could lead to

food insecurity, malnutrition, poverty and livelihood vulnerability for the most marginalised groups—including smallholder farmers, and specifically women farmers (Fore et al. 2020). The world came to a halt because of compulsory safety protocols, such as implementing lockdowns, ensuring social distancing and wearing masks, leading to a 'new normal'. The pandemic affected every sector, including the agricultural sector and, in particular, smallholder farmers. In the EGP region, the migrant workers (i.e. women smallholders' family members) returned home (Barker et al. 2020).

This section draws attention to the situation in the study sites during the COVID-19 crisis. Social disconnection caused a prolonged state of isolation. In such situations, women smallholders may be more vulnerable because of their lower bargaining power. Further, all such pandemic-induced challenges had adverse effects, thus shattering the livelihoods of smallholder farmers. However, the effects of such crisis on women smallholders' livelihoods and their bargaining related to their farm products are unknown. Regardless, it can be assumed that remittances were not received, markets were closed, sowing was disrupted, the demand for fertilisers and pesticides was affected, labour was unavailable and traders were unable to visit farms to buy products, thus affecting the entire agri-supply chain.

The effects of the pandemic may linger for months and years, and India is undergoing the second wave of this pandemic (Ranjan et al. 2021) while Nepal is facing even serious impact of it (Baniya et al. 2020). The support of the public sector can boost the resilience of the women smallholder farmers in facing such events. Two ways in which the public sector can support these farmers is as follows. First, since a lack of institutional operations for farm supplies impeded the farmers from purchasing farm inputs on time, the public sector can fill this gap, such as by establishing robust supply chains to provide these farmers with the required inputs. Second, public sector institutions can collect farm products and thus address smallholders' need for money or other resources during the crisis. In addition, this study found that women smallholders make limited use of technology to access information, which can be addressed by ensuring adequate support from government sector. The smallholders are more vulnerable than others, therefore, support programs should target smallholders to maintain the country's food security and economy. Therefore, sustainable practices must be adopted to remain resilient in the 'new normal' (Oswick et al. 2020).

7.10 Conclusion

This is the first study to explore the farm bargaining issues in the EGP region and to identify that the smallholder women farmers espoused several motives to engage in farm bargaining. Further, this study also uniquely classified the spheres in which farm bargaining took place, namely, the intra-household, farm, market and intermediate spheres. It was found that bargaining issues were context specific. All four farm bargaining spheres were affected by sociocultural practices, power dynamics, gender roles and various beliefs (i.e. behavioural, normative and control beliefs). Moreover, this study clarified that the roles of women farmers (i.e. their household, market and social roles) often overlapped and affected their farm bargaining. This study also found that their positions in the four spheres were interlinked. Even though the bargaining spheres were segregated by location, women farmers' bargaining intentions related to bargaining issues were not entirely isolated; that is, the bargaining intention in the spheres were linked and potentially influenced one another. Hence, this research successfully provided a contextual snapshot of the bargaining problems and needs of women farmers in the EGP. By doing so, it filled a literature gap and provided a valuable knowledge base that can assist policymakers in devising interventions to improve women's bargaining power in the EGP region.

It can be concluded that 18 background factors pertaining to women farmers, grouped into four categories—personal; product-related; sociocultural; and institutional affected their behavioural, normative and control beliefs in various ways. In turn, these factors influenced the farm bargaining intentions of these women. Further, it can be concluded that personal factors, such as their bargaining competencies, access to information, social relationships, socio-demographic characteristics, mobility, responsibility, availability of options, urgency and access to resources, had a critical role in forming their farm bargaining intentions. The existence of bargaining competencies in the form of knowledge, skills and abilities was essential in positively developing their intentions to bargain. Participants with low or zero literacy could not read price labels or other relevant information when they engaged in purchasing farming products. Hence, numeracy and literacy skills are crucial for these women to effectively engage in bargaining. Women farmers who lacked these skills were reluctant to bargain and relied on other members, which threatened their farming autonomy.

It was clear that women farmers faced a significant challenge in accessing market information owing to the limitations placed on them by social norms and gendered patterns of mobility in the region. Access to product- or service-related market information, such as the current rates, rate patterns and break-even prices, influenced their bargaining intentions. Having access to market information assisted women farmers to bargain for a better price or to select another trader if the price offered was too low. However, the difficulties they experienced in accessing information restricted women farmers from engaging in economic activities. This restriction placed them in a weak position and made them vulnerable, and consequently, it negatively affected their intentions to bargain. Further, socio-demographic characteristics affected women farmers perceived behavioural control, which, in turn, influenced their bargaining intentions.

In the context of feminised agriculture, women farmers' sense of responsibility towards their farm influenced their attitudes towards bargaining and perceived behavioural control and consequently their farm bargaining intentions. The availability of options also influenced their farm bargaining intentions, which could be increased by institutionalising the farming system and connecting the farmers with the market. However, as pointed out earlier, the limitation of mobility restrictions presented challenges in accessing available options because they were time-poor and unable to visit a variety of shops to check pricing and quality. In the context of farmer–landlord bargaining, it was clear that landlords had more options available than did the tenant farmers. Hence, women farmers' bargaining intentions weakened because they were afraid of losing the tenancy. Moreover, they were more vulnerable because of the absence of proper regulations and policies to support farmers' tenancies. Hence, in these situations, in which women farmers' bargaining positions are weak and support from the state is unavailable, they are likely to lose interest in farming.

Restrictive norms about mobility also affected women farmers' subjective norms. Mobility has multiple implications for women in farm bargaining, by affecting their knowledge of bargaining issues, item prices, ideal purchasing locations and experience in bargaining practice. Therefore, building their bargaining confidence is of critical importance.

It is clear that when several unfavourable conditions affect a woman, her bargaining intentions could dramatically decrease. If a woman is widowed, aged and illiterate, she espouses lower bargaining intentions and is likely to feel more vulnerable in the bargaining process. In particular, single women and widows in the EGP were shown to face more bargaining difficulties than their peers. These difficulties are the consequences of the patriarchal nature of society, which reinforces the idea that women farmers are less valued than male farmers. When a woman's husband dies, it becomes difficult for her to continue farming. These circumstances present unique obstacles for women engaged in bargaining, and their interest in farming may have wane over time. Therefore, it is essential that the government support women farmers, primarily, single and widowed women who pursue farming.

Product quality influenced women farmers' willingness to bargain; hence, providing temperature-maintained storage facilities would go a long way to positively affect their intentions to engage in bargaining. However, in reality, this goal may be unachievable because even if this type of facility existed, women farmers in low-resource settings would not be able to afford it. A more feasible step that will help them and lead to their developing positive bargaining intentions is the regular sharing of information regarding product cultivation time and market demand, which would support them in the timely production of farm products.

It is clear that gender dynamics, such as male privilege, assigned gender roles and existing power relations, was an important factor guiding whether women farmers would be willing to bargain. Since men are valued more highly in the EGP society, women usually hold a weaker bargaining position. Uneven power dynamics were likely to play a role in women farmers finding themselves in unrealistic and unequal bargaining positions.

The conclusion can be drawn that adverse gender dynamics that create unequal power relations negatively influenced women farmers' bargaining intentions. Therefore, efforts must be made to minimise the gender power imbalance and reduce the gender burden on women. Further interventions, such as encouraging women's participation in every bargaining sphere (farm, market and intermediate spheres, other than the household sphere), would assist women farmers to strengthen their bargaining intentions.

When women farmers participate in collective farming in the EGP, they tend to have a greater willingness to engage in farm bargaining. Farming institutions, such as collective farming, water user groups, formal contracts of land tenancy and cooperatives, could significantly influence women farmers' bargaining intentions positively. This could also facilitate negotiations between women farmers and their families. Women's involvement in cooperatives and farming self-help groups could also assist with building their confidence. Therefore, institutionalising the farming system can make the women farmers autonomous and support their bargaining and welfare.

The conclusion can be drawn that when women farmers espoused a positive attitude regarding a range of bargaining issues, they were more likely to have the intention to engage in bargaining. When women view their bargaining ability as superior to that of men, possess adequate knowledge about how to bargain effectively, believe that bargaining is beneficial and view bargaining as necessary, they are more likely to engage in bargaining. However, when these elements are absent or they feel that traders (intermediates) have the most to gain and that bargaining does not bring any positive change, they are reluctant to bargain.

Another conclusion that can be drawn is that subjective norms, such as gender norms, power relations, cultural practice, gendered farm practice and encouragement, play a crucial role in influencing women smallholders' farm bargaining intentions. The influence of close relatives and neighbours are of particular significance to women farmers. Likewise, norms prescribing that women need to maintain the image of a 'good woman', who is shy, does not speak to male strangers and is polite and respectful about elders' viewpoints, hinder women's bargaining behaviour.

In addition, the power exerted by the rich over the poor, a higher caste over a lower caste, men over women and landlords over tenants affects the mindset of women smallholders. Further, existing local norms prescribing that only *Kujra* people must sell in the market hinder the engagement of women farmers in bargaining. Such local

norms create bargaining barriers for all the farmers but more specifically for women farmers who cannot overcome such barriers owing to the complex gender norms and patriarchy. These power dynamics push them towards the vicious circle of dependency. Even when women farmers overcome intra-household gender power relations, challenges among landlord-tenant or class-linked power relations could remain. Such unequal power relations are problematic because these negatively interfere with women farmers' bargaining. Hence, a planned approach is needed that targets and overcomes problems in bargaining. This would be a rich research area for future research to explore.

It can be concluded that increased levels of confidence, comfort, skills and knowledge (self-efficacy) influence their intentions to bargain in a positive way. In contrast, women farmers' lack of confidence could further restrict them from bargaining and acting in an entrepreneurial way. Hence, it is once more emphasised that literacy has an important role and it influences the acquisition of skills and knowledge, which must be considered in designing interventions to develop women's ability to bargain effectively. Last, having outlined the crucial role that existing gender and power dynamics play in women's intentions to bargain, it was nevertheless evident that they acquired their skills through experience and practice. Hence, giving women farmers exposure to experiential capacity building programs aimed at enhancing their bargaining skills and experience would be of significant benefit to them. Through continuous practice and engagement in farm bargaining activities, they can enhance their perceived behavioural control and consequently their intention to engage in bargaining. Thus, creating a conducive environment for women farmers through valuable platforms, such as self-help seed groups, fertiliser cooperatives and collectives, will help facilitate their bargaining confidence, skills and levels of comfort.

7.11 Summary

This thesis focused on the bargaining intention of women smallholder farmers in the EGP region. Studies have confirmed that women smallholders have low bargaining power in agricultural production and that bargaining intention is the immediate predictor of bargaining behaviour but have not clarified the phenomenon of their farm bargaining behaviour. Hence, this research examined this phenomenon in detail and explored the factors influencing their bargaining intention. To fulfil the research

objective, three main questions were explored. Moreover, an interpretive paradigm was applied using a qualitative methodological approach for in-depth interviews with the selected study participants: 35 women smallholders and their 17 bargaining opponents in the EGP region. Adopting this approach helped this study to answer the research questions.

This study addressed three main research questions. RQ1 was 'What are the existing bargaining spheres and associated issues regarding how women farmers in the EGP region bargain?'. In response, the study described four major bargaining spheres: intrahousehold, on-farm, market and intermediate. It analysed these spheres in detail and listed women farmers' bargaining issues in each sphere. The spider diagram in Figure 4.5 summarises these spheres and issues.

The study demonstrated that each farm bargaining sphere has several bargaining issues. Its detailed investigation of the bargaining spheres and the list of bargaining issues can facilitate recognition of the bargaining needs of women farmers. However, their bargaining intention may vary despite their current farm bargaining needs and several factors may influence it, which RQ2 examined.

In answering RQ2, this study identified 18 factors that influenced the bargaining intentions of women smallholders and grouped these into four broad areas. The first area includes 10 personal factors related to individual farmers: bargaining competency, access to information, socio-demographic characteristics, social relationship, responsibility, mobility, availability of options, urgency, access to resources and the landlord–tenant relationship. The second area, product-related factors, has four essential factors: product quality, quantity, demand and management. The third, sociocultural factors, consists of two main factors: gender dynamics (i.e. male privilege, gender roles and hegemonic masculinity) and myths. The last, institutional factors include collective farming and institutional farm structures. The study also revealed how the 18 factors were linked to the TPB constructs and shaped the relationship between these constructs and bargaining intention.

RQ3 addressed the TPB constructs related to women farmers' bargaining intention: RQ3.1 focused on attitudes, RQ3.2 on subjective norms and RQ3.3 on perceived behavioural control. The assessment of the TPB constructs on attitudes conducted to answer RQ3.1 identified six attitudinal themes that influenced bargaining intention. It revealed that attitudes—such as believing that women are better at bargaining; bargaining is important, beneficial and necessary; traders (middle people) gain the most profit; and bargaining is difficult—were linked to farm bargaining intentions. Further, farmers with the attitudes that women are better at bargaining and bargaining is important, beneficial and necessary developed a positive intention to bargain. Those with the attitudes that traders (middle people) gain the most profit and bargaining is difficult formed a negative intention to bargain.

Next, to answer RQ3.2, this study examined the influence of subjective norms on women farmers' bargaining intentions. It identified six themes concerning the subjective norms that influenced the formation of normative beliefs related to farm bargaining. The themes were gender norms, power relations, shyness, cultural practice, gendered farm practices and encouragement. Subjective norms were shown to be linked with bargaining intention. These subjective norms based on normative beliefs were found to be barriers to women farmers' willingness to bargain.

The last research question, RQ3.3, addressed the perceived behavioural control over the bargaining intention of women farmers. The findings revealed four themes confidence, flexible and fixed rates, comfort and skills—in relation to these constructs that were linked to their bargaining intention. Last, the ability to perform the bargaining behaviour was influenced by perceived behavioural control. The themes confidence, comfort and skills led to the formation of positive farm bargaining intention. When farmers found that the cost of the item or service for the farm was fixed, they had a negative intention to bargain.

The themes that emerged during data analysis in the results Chapter 5 revealed 18 factors that influenced the behavioural, normative and control beliefs of the farmers. These formed attitudes, subjective norms and perceived behavioural control, which influenced the farm bargaining intention of the women farmers. However, the strength (weight) of each factor's influence was not measured owing to the qualitative nature of the study.

The study findings have theoretical and practical implications. The factors it identified and the relational analysis in this research offer theoretical implications for developing a framework based on the TPB model to analyse women smallholders' farm-related bargaining intentions. Knowledge of the factors that reveal the social structure of the agricultural sector and of norms that influence bargaining intention is crucial in designing targeted policies and interventions for women smallholders. Women farmers can use the study's findings to enhance their bargaining power.

The analysis, and the discussions raised through the literature review, led to the conclusion that 'power' was crucial to the formation of women farmers' bargaining intention. The existing power dynamics showed unequal power relations between women farmers and their bargaining opponents, which strongly affected bargaining intention. Hence, it is possible that power may be an antecedent, apart from the three antecedents in the TPB framework.

In conclusion, the women farmers' farm bargaining was embedded in the power dynamics based on personal, product-related, sociocultural and institutional factors, which affected their attitude, subjective norms, perceived behavioural control and, ultimately, farm bargaining intention.

This chapter presented a thorough discussion of each RQ examined in this study based on a detailed literature review. It highlighted the study's contributions to theory and practice, detailed its implications as well as the limitations that emerged when answering the RQs, and then presented recommendations for future research. It also drew attention to women smallholders' farm bargaining during the COVID-19 pandemic. Then, it presented the conclusions drawn from this research, which provided answers to achieve the overarching research objective. This section concludes this thesis.

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APPENDICES

Appendix A: Interview Guidelines

A Qualitative Analysis of Farm Bargaining Intention of Women Smallholder Farmers in the Agricultural Context of the Eastern Gangetic Plains

University of Southern Queensland, Toowoomba, Australia

Tool 1: Interview Guidelines—Women Farmers

Identification No):			
District	Saptari	Saptari		
Village	Kanakpatti	Koiladi	Bhagwatipur	Mauahi
Ward No/Tole				

A: Demographic Information

Respondent's name:	Age :
Education:	Main occupation: 1.
Religion Caste/Ethnicity:	(Family) 2.
	3.
	Average working hr of respondent:
Household size:	Type of family:
Name of main agricultural decision maker in family: Relati	ionship to respondent:
Age of main decision maker: Sex of main decision maker:	DM Couple: Yes/NO
Respondent's Husband's name: Age : Educ	ation: Occupation:
Husband migration: Yes/ NO	Husband's migration period:
Total land area:	Agricultural land area:
Renting land for farming: Yes/NO	Rented land area:
Land titlement:	

i) RQ1 Bargaining spheres

6. What are the specific farm issues that you need to bargain over? Where does the bargaining occur?' Please say about a recent crop you harvested

Trobe using below encernise for burganning issues in unrefere spheres			
Intra-household	On-farm	Intermediate	Market
Workload	Landlord	Govt extension officer	Purchasing input (Seeds,
Division and			Fertilisers, Pesticides/
substitution			Chemicals
Mobility	Land preparation	Institution Bank /Micro	Purchasing or renting
		finance	farm services
Farm decision-	Labour hiring	Middleperson/Thekedar –	Selling farm products
making	_	bargain for farm product price	
Access and	Irrigation:	Transport – Rental cart/tractor	Dealing with
control	pump, canal	to transport products from	Wholesalers/ Retailers/
		farm to the destination	Customers
	Harvesting,	Cold storage	
	sorting, packaging		

Probe using below checklist for bargaining issues in different spheres

7. Fill the table below according to response of Bargaining space for women smallholder farmers

Bargaining issues	Space to bargain- is it Fixed/Flexible	Do women have space/power to bargain?	Who bargains better men or women? How?

ii) RQ2: Factors affecting bargaining power

- 1. In your view, what can affect women's intentions to bargain?
- 2. What personal qualities, product-related issues, sociocultural practices and institutional aspects affect women farmers' farm bargaining intentions? Probe Natural, Physical, Economic, Human Capital and Social Capital
- 3. Does having your own equipment influence your bargaining power, such as a pump set, or own weighing scale, or do you use the buyer's weighing scale?
- 4. What can affect the price of your products? Do you have access to information from the market or fellow farmers? Do you ask yourself?
- 5. How do you manage your income? Can you decide yourself what you want to do with your income?
- 6. How do you divide chores in your household (e.g. fetching water, buying foods, cooking, cleaning, child/elderly care and livestock care)?
- 7. Compare bargaining power changes over time, such as at the time of your marriage and at present?
- 8. What are the myths in farming related to bargaining in different spheres?
- 9. Mobility: Whenever you go to your field, do you need to ask for permission for mobility? If yes, whom do you ask? Have you ever left for farm-related task without asking permission? What happened later?
- 10. Does any sociocultural practice prevent women farmers from receiving full support or recognition for their contribution? Explain.
- 11. What are the most important assets for women farmers that can impact their farming?
- 12. How did you remain resilient during these obstacles?

iii) RQ3.1 Bargaining attitude: Willingness and Capabilities to bargain

- 1. What is your opinion on farm bargaining? How do you feel about farm bargaining and its significance to farmers?
- 2. Are you comfortable to bargain? Are all women farmers willing to bargain? If no, explore gender reasons willing to bargain like they do not prefer to bargain because there are only men suppliers/middle people or so on?
- 3. If you have to compare men and women farmer's bargaining, who would you consider has stronger bargaining power? And why?
- 4. Do you think you are capable to bargain? Can you recall bargaining incidents when you did excellent/satisfactory/unsatisfactory bargaining? Give examples.
- 5. In your opinion, who has the stronger bargaining power, the farmers or the middlemen, the input suppliers or the farmers who purchase the products from them? Why?
- 6. Among the chain actors, who do you think gets the most value? Please rank them in order with reasons, where 1 gets the most value. 1.Farmer 2. Middlemen 3. Wholesaler 4. Retailer.

iv) RQ3.2 Subjective Norms for farm bargaining

- 1. Are there any prescribed roles for men and women at home or at farm? Probe masculine structures like government bodies, public spheres, farm meetings etc.
- 2. Do such roles affect women's farm participation and bargaining? If so how?
- 3. Is your role as a farmer influenced by what your community will think of you, if you do anything other than the prescribed roles'?
- 4. Being women farmer have you ever faced any mobility restrictions?
- 5. As a women farmer do you have adequate access to facilities such as irrigation, credit, training and market?
- 6. Based on race, ethnicity, poor, region, who faces the most difficulties in farming?
- 7. Have you ever experienced discrimination for your product's price (probe based on your gender, age, ethnicity, poverty, region)?

v) RQ3.3 Perceived Behavioural Control for farm bargaining

- 1. Do you think you are capable to bargain? Can you recall bargaining incidents when you did excellent/satisfactory/unsatisfactory bargaining? Give examples.
- 2. Are you capable and confident to execute bargaining related to farm?
- 3. Are you capable of overcoming challenges or barriers?
- 4. Do you have the skills, or the means required to exhibit farm bargaining?

Thank you very much for your time. THE END

Tool 2: Interview Guideline— Key Informants

i) Interview Guidelines for Landlords & Male Farmers

A: Demographic Information

Name:	Age:
Sex:	Qualification:
District:	Village:
Land Area	House:
Profession:	Type of family:

B Guiding Questions

- 1. Do you have any kind of experience in agriculture? If yes, what is that and for how long?
- 2. Tell something about the agriculture in your village. In this village, are more people from farming households?
- 3. Taking you to your past, during your time in agriculture, did women also contribute to agriculture?
- 4. How would you explain women's participation in agriculture then and now? Give some examples about the farm-related tasks that they do now that differ from the tasks they did in the past.
- 5. Was the change necessary in your view? Why?
- 6. Give some examples that show changes over time in the agricultural roles of women.
- 7. Do you see any change in women's participation in agriculture in past compared with the present? Explain how it has changed giving some examples.
- 8. What is your feeling about such changes? What might have happened that brought changes in their roles in agriculture?
- 9. In your opinion, is it a positive or a negative change? Can you support your answer with evidence/examples?
- 10. Discussing about woman's farm work, can you say what are women's other responsibilities and how are woman in the village managing such things?
- 11. In your opinion, is farm work a difficult or an easy task for women? Why?
- 12. How is the farm work burden shared among men and women? Is the farm work among them equally shared? Who decides about dividing work among family members?
- 13. Have you heard about value addition to farm products? If yes, how have you done that?
- 14. Can you compare between bargaining power of men and women?
- 15. Is there any difference between the bargaining power of farmer men and women?
- 16. What makes the bargaining unequal?
- 17. What are the influencing factors in your opinion that can affect the bargaining power of farmers?
- 18. Do you think women farmers are doing their bargaining to purchase the inputs or sell their final products?

- 19. Do you think women have bargaining power for their farm products?
- 20. Does our culture and tradition have anything to do with the present bargaining skills of the women farmers? Please explain how.
- 21. Do you think there is need to strengthen women's bargaining power? How?
- 22. Do you think farmers' bargaining power can be strengthened if they work in a collective?
- 23. Is collective farming good for women?
- 24. Does everyone in the collective farming gain equal bargaining power?
- 25. How can the State help to support farmers to strengthen their bargaining power?

ii) Agri-Supply Chain Actors: Input suppliers

Name:	Age:
Sex:	Qualification:
District:	Village:
Land Area:	House:
Profession:	Type of family:

B Guiding Questions

- 1. What is your profession? Are you an input supplier in this region?
- 2. How long have you been in this occupation?
- 3. Do the farmers from the village nearby come to purchase from your shop?
- 4. Who often comes to shop? Male or female member of the family or group?
- 5. How do you find the bargaining power of farmers?
- 6. Who often bargains for price of the farm input? Can you explain?
- 7. Who do you think has more bargaining power?
- 8. What do you think can influence a farmer's bargaining? List and explain for each.
- 9. Do you think women's participation in agriculture 30 or 40 years ago differed from their participation now?
- 10. What are the women's new roles, if any?
- 11. How are women farmers bargaining in the agri-supply chain?
- 12. Do you think there are bargaining imbalances between women and men farmers?
- 13. Can you recommend any way to strengthen the bargaining power of women farmers in this region?

Thank you very much for participating in this research.

««END»»

Appendix B: Results Tables: Quotations from Respondent's Interviews

Table B1. Quotes identified for Factors Influencing the Women Smallholders'Farm Bargaining Intention from Interviews

Themes identified	Results from interviews
1. Bargaining	Knowledge
competency	'It is very important for me to earn by getting a good price' (AWF1).
	' to get a good price bargaining is important' (AWF2).
	'More profit can be made when we will bargain with a <i>khaiwal</i> [consumer buying for household consumption] buys our product' (AWF4).
	'As a farmer, mol-molai [bargaining] is very important' (CWF3).
	'I do not think bargaining is that important, as the village operates on the knowledge that one farmer shares with other or one farmer seek from another. In this way, everyone knows what the rate of the item is or services and that no one can cheat' (DWF1).
	'My husband is the main decision maker for the farm related issues. He knows about the type, quantity and duration to apply of an input supplies and buys them from the market. It is not necessary for me to give my opinion on this matter. I hesitate to bargain as I am illiterate, I am afraid I will do mistake' (BWF7).
	Skills- persuasive 'The Paikars [traders] ask for a cheaper rate then I say, "I have worked hard in sun, there will be no profit if I give you at the rate you have asked, it is very low, but if you agree to come a bit higher I can agree". He agreed, and I sold to him' (AWF6).
	'I ask the input supplier to reduce the cost like, "oh! the cost is really very high, please do not give in this price, can you reduce a bit" then the seller agrees' (AWF1).
	Skills- numeracy-literacy 'Bargaining is my husband's job because I am not good at <i>hisab</i> [numeracy]. I did mistakes in calculation while dealing earlier. So, better I leave it to my husband' (AWF8).
	'I hesitate to bargain as I am illiterate, I am afraid to do mistake' (BWF7).
	'If women have speaking power (bargaining) they can be successful but sometime despite they can speak they do not make significant difference because they make their argument without thinking. For example, they are loud, but they are weak in mathematics and cannot do correct calculation when they sell or purchase their goods' (AWF4).
	'Regarding the cost of the inputs, women customers have less knowledge and weak in mathematics' (AMVC1).
	Personal attentiveness 'My husband is the main person to buy vegetables for any event in our 50 household relatives. He goes to the Khutauna market. By this exposure he has gained skills, examples like he will go very early to the market to buy the vegetables in bulk for the event. He will not buy instantly rather observe the market for a while. If the produce, he is looking after is in abundant the price will be competitive and have chance to lower. But if the item he is looking for is less and there is no more item arriving there might be that the price will be double in few hours. So, a buyer must be very attentive' (CWF8).
	'Usually, farmers do not sell rice and wheat in hatiyaa to individual person, instead they sell their rice and wheat in Chatti. Measurement in the Chatti may not be accurate.

Themes identified	Results from interviews
	There is chance of getting cheated while weighing by the Chatti person hence farmers need to be attentive' (AMVC1)
	'Some trader come with kilo <i>taraju</i> (weighing scale) and target women sellers. There is an incident, a woman was selling rice to a trader from her storage. She knew that her storage unit's capacity is 5 quintals but the Trader started to weigh and he finally calculate and said total weight of rice is 2 quintals so there was a dispute and that news spread in village very fast and other people came there and told women not to sell to that Trader. There are some cunning traders too, so it should be very attentive while trading' (DWF1).
	'A trader who came to purchase rice from me started to weigh using a <i>Tin</i> (container) that is equivalent to 10 kilos. He filled the Tin with rice and then stood on the Tin full of rice and refilled the Tin with more rice. I said him to leave and I do not want to sell to him because he was doing dodgy practice to cheat more rice from us' (CWF7).
	Shyness ' women who do not go to <i>hatiyaa</i> [local market] to purchase do not have experience to bargain, are less aware on how to do bargaining. They do not go to <i>hatiyaa</i> due to shyness' (AWF5).
	'I recall when I attended my first meeting many years ago, I was very scared, so my hands and feet were shaking just to tell my name. But I have gained experience and confident now. It has come from my participation in several meetings' (AWF9).
	Training & Exposure 'There is important role of NGO's and community cooperative that organise trainings to women farmers that has led them to do signature, otherwise many women are still illiterate. Women farmers are now outspoken too' (AMVC1).
	' women who have attended trainings conducted by organisations like government agriculture office, NGOs, INGOs have knowledge about the seeds and they can mention which company's seeds or medicine they want to buy for their farm. They have knowledge about the seeds and input due to the trainings' (BMVC1).
	'There are several cooperatives that run in this village. The operation of the cooperative has given illiterate women a platform to learn how to read and write as well as to shy women to practice speaking skills with the trainers and the fellow participants. Being outspoken has numerous benefits to every aspect of life including farming also bargaining with othersI scaled up my speaking skills there because I was a shy person tooI feel it is important for a woman to be able to speak up' (AWF6).
	'Initially female farmers who were silent in the group meetings participation, have started to speak and keep their opinion in the farmer's group discussions now'. The farmers got exposure through trainings and visits outside the village. It has brought confidence among women farmers to speak. One of our project farmers mentioned, <i>"as everyone speaks in the meetings, so I don't feel shy anymore"</i> (BMKP4).
	'I have worked as a secretary for many cooperatives and organisations in this village. Like secretary at Mahuli community cooperative, Secretary at Forward Nepal [an NGO], Secretary at Nerude women's community bank, Secretary at Sodek cooperatives. So, while participating in the meeting as a secretary I had to introduce the members about the meeting and discuss on agenda that was supported by the organisers. This exposure taught me to become an effective speaker that helped me in my roles as a women farmer and seller. Now, people come to consult me in this village' (AWF9).
	' earlier I felt shy to speak with people in our village. But later as I started participating in trainings and exposure visits organised by project and other NGOs. I learned to be outspoken. Recently, I had participated in an exposure visit to Madhubani in India, there I met many women farmers from my community who were doing very good farming and earnings too. They were doing vegetable farming like Okra and Snake beans which had given them good profit. I asked them about their journey they said one need to deal with confidence and got really impressed. Now, I am at better position and happy that I have managed my farm myself. I have learned to improve farm yield and to gain profit. Now, I can also bargain well with traders, suppliers and customers' (AWF1).

Themes identified	Results from interviews		
	Experience 'It took me time but later I became non hesitant and fluent to put my opinion. This change helped me to profit in farming as well. But as I know, I will not be alive forever, I want my daughter and DIL to gain the confidence by learning and practicing. They must take part in such events like meetings, public activities and overcome their shyness, learn how to speak and activities that are logical. Thinking is very important' (AWF6).		
	'Earlier we lived in a joint family along with my husband's three brothers and SILs together. My husband was a migrant labour in foreign, but he died there, then my in- laws separated me and my two young sons. I did not had resources no land and no money. Despite having no farming skills, I decided to rent land for living. I learned by asking everyone to know how to do farming' (AWF7).		
	' Women must do everything related to household and farm. They are more experienced than ever and hence can do more bargaining' (AWF9).		
	' earlier when I bargained, I felt uncomfortable but now when I have to deal a lot with traders and buyers it has started to become comfortable. I must purchase by myself when my husband and FIL are not present. In my own opinion, I have improved a lot by practicing, I have raised my confidence. I feel to bargain more now' (BWF1).		
	'I am an illiterate farmer. I have gained experience by farming for a long time. Earlier, when my guardians were responsible for farming, I did not care about farm bargaining but now, I must take our farm responsibility. So, by doing it myself several times, I can tell from where I can by inputs, how much will it cost and how to reach there. I believe people do not know just after getting birth on this earth. They have to learn gradually, and many things are taught by practical doing and farming, farm bargaining for me is similar, I have learned it by doing not by schooling' (DWF3).		
2. Access to information	Market information / High value markets 'There are many women Trader from Rajbiraj who come to buy vegetables from our village. When one of them came to buy tomatoes at my farm I asked her where you sell the tomatoes then she told that she sells in Rajbiraj. Hence, last year, I decided to explore Rajbiraj market and took tomatoes by riding a bicycle. I was surprised by the price I got there, it was double than the price I used to get in the local markets like at Traffic and Khutauna' (AWF2).		
	'Women farmers most of the time bargain to reduce the cost. However, the price they offer is mostly based on assumption. We tell them if we cannot give in that rate' (BWVC1).		
	Product information- Price of product 'Traders bargain to get a lower price. They offer of a lower price than the local market. In the last season when a Trader came to buy tomatoes at my farm, he asked, <i>"give</i> <i>tomatoes at Rs. 8 per kilo"</i> then I said, <i>"it is Rs 15 in market then why should I give you</i> <i>at just Rs. 8"</i> . He replied with attitude, <i>"then go and sell in the market"</i> . As buying in bulk and direct from farm they have thinking that they can crack a cheaper rate and it is possible if a farmer is ignorant about the market price of their product. But know about the market rate and I stick with my price' (AWF5).		
	'I do not need to bargain with Paikar, as usually, I already have information on the price of the item I am selling. It is the same throughout the village. When I know it is the best price then only, I sell' (CWF6). 'I am thinking not to sell rice now as the price will raise later. The government price is Rs. 1800 per quintal now that will rise to INR. 2000-2200 per quintal' (DWF1).		
	'As now it is mobile's era, we call to friends in the Khutauna market and hence we get aware of the market price the Trader also has the price information from the market and so we can tell if he is telling the truth or not. If both the prices match, then we agree to make a deal' (CWF8).		
	'When I buy the input, I believe the expensive is good the cheaper one is less good' (DWF1).		
	'Farmers must have the information on existing rate of a produce in the market or in the village otherwise they may get cheated by the Traders' (AWF4).		

Themes identified	Results from interviews		
	'I know about farming and can make farm related decisions. I can make the final say for my produce, and I will not sell if I am not happy with the price' (BWF1). Product information- Knowledge on product 'I am less aware about the pesticides and fertiliser used. For inputs I ask my fellow farmers to buy for me' (AWF7).		
	'Women farmers do not know the brand name or the variety for the input. They ask to give a good one and ready to pay the cost price. If they lack the information, they migh get cheated but at my shop I explain about the available options and which one will be better according to their expectations' (DMVC1).		
	I ask my FIL to bring <i>ijoriya</i> [white fertiliser] potash, 1 bora wheat and 1 bora fertiliser For seeds the rate is based on the quality of the seed I want (CWF9).		
	'Men farmers knows more about the price. For women they come because their husband are not here with them and they're farming. Regarding the price on the packet many women can read the MRP. But they do not ask for the input by the name. For example, a farmer will ask, " <i>I am going to plant wheat, give me tarka and uparka inputs used</i> ". When they say <i>tarka</i> means input used underground i.e. DAP and <i>uparka</i> means on the ground i.e. Urea' (CMVC1).		
	'I tell that there is different brand and that is expensive and there are cheaper brands too. But their strength may not be same as the expensive one. Sometime women buy th cheaper one and then come back to tell that it did not work and give the good one. I say you should buy a stronger one' (BWVC1).		
	'I feel, it is easier to bargain with a woman seller. It might be due to women's awareness of weight of the item and its market value. For example, if a farmer proposes NRs. 3000-3500 to sell a livestock item, the final price can be different if the seller is woman or a man. When the seller is women can decrease the price up to 2500 but if I ask to buy from men seller, he will not decrease the price below NRs. 3000. It is easier to win trust among women. That why I look to buy from a woman seller to catch cheaper rate.' (AMVC2).		
3. Socio- Demographic Characteristics	Gender to bargain Males buy at the cost price, but women always kich-kich [haggle for price]. They request to reduce as, "please reduce the price, may you give at Rs. 5 or Rs. 10 less". Bu males think nagging as womanish' (AWF1).		
	'In my shop, both men and women come to buy seeds. Out of them, 80% of the farmer: know about the quality of seeds and which one to buy. So, when they come, I give then what they ask for. But among those 80%, number of men are more (around 80%) who have knowledge on seeds while women are about 20 % only who know about the seeds (BMVC1).		
	Gender of bargaining opponent ' I am comfortable to bargain with a woman seller because I feel connected with her and talk frankly so I can bargain well. It is not that I never buy from a men seller, but it is uncomfortable to bargain with a man' (BWF1).		
	'There are many women middle people come to buy vegetables from the villages I overall take care of my farm I feel fine to bargain with them' (AWF2).		
	'There are more women middlemen working as traders. Tomorrow is the <i>Kathauna hatiya</i> , there will be more women traders in comparison with men. It is similar in Inarwa' (AMF1).		
	<i>Paikaar</i> the Traders come to purchase the produce when it is ready. The traders are women or men who come to collect the vegetables from the village. Now a days there are more traders. They come from Rajbiraj get off at Traffic and then they come to the farmers home or farm on Rickshaw. They load it on rickshaw after the deal is finalised and take back to The Traffic and catch the bus to Rajbiraj. Almost 50:50 are men:women Traders' (AMF2).		
	Traders from Rajbiraj and other places come to this village. Now a days there are more women traders who come to this village (AMF3).		

Themes identified	Results from interviews Marital status 'In this village, the labours here do not listen. I must go to call them a number of times at their home before the labours came to work'. If I had more members in family who could contribute on farming, I am sure, I would have progressed a lot. Unfortunately, I am a widow farmerI only have two sons who are still young and now are not with me. Currently, I am working alone' (AWF7). 'My husband died three years ago and unfortunately this year my FIL also died. So, in our family my MIL, two young sons and I are here. There are disagreements in our farmers group that the powerful male members try to dominate our say in the group. We cannot argue when they are unfair because being widow women makes us (MIL and I) feel weak, and I cannot take stand for myself' (BWF2). Educational status
	'My husband is the main decision maker for the farm related issues. He knows about the type, quantity and duration to apply of an input supplies and buys them from the market. It is not necessary for me to give my opinion on this matter. I hesitate to bargain as I am illiterate, I am afraid to do mistake' (BWF7).
	'Illiterate or less educated women bargain more. The educated women look the MRP and hence do or do not bargain. I am a woman seller but yes that is fine with me because I also do bargain when I buy something' (BWVC1).
	'Both men and women ask equally about the input products, but I need to explain more to women because they do not understand, and I think it is due to lack of education' (DMVC1).
	'Men knows more about the price. For women they come because their husbands are not here with them and they're farming. Regarding the price on the packet many women can read the MRP' (CMVC1).
	Age 'I do not bargain for household work with my MIL as she is very old to help me' (CWF3).
4. Social relationship	Family supportive envt, Encouragement 'I am equally able to do farm bargaining like my husband. But I was not like this before. In last 7-8 years, I was not able to do things like now. My husband encouraged me for this so, I also kept doing' (CWF7).
	'My family support me in all ways so that I can take part in the agriculture that is why I am making pretty good profit from it' (AWF5).
	'Any women who do not get support from their husband, whose husband scold them their status is not uplifted. My husband is not only supportive but also motivating to go and experience the market job by myself. But I do not agree. So, he says I need to develop my confidence' (BWF1).
	'He also does not interfere my work in the farm. He never stops me to talk with anybody. I also participate in the trainings and he supports and encourages me to participate in the farm related works' (AWF4).
	Customer relationship 'Men usually feel shy to bargain if they say Rs. 50 they will pay Rs. 50. But if there is a female customer they will bargain based on the bond they created with the seller for example, " <i>I know you, I come to your shop all the time and you are not reducing the</i> <i>rate</i> ". So, then the seller will agree to reduce. Local seller farmers are also the relative of the customers who come to buy and for that reason they manage the relation by reducing or adding small quantity more to what customer purchase. Women sellers are more around the hatiya' (BWF8).
	'When we bargain to reduce the cost for the tractor ploughing, the owner considers and reduce Rs. 10-20 in lump sum at the end. The seller considers the reduction because we are their <i>Pakdal</i> party means regular customer who needs ploughing for 3 Bigga of land whole round the year' (CWF3).

Themes identified	Results from interviews
	'There is another way of threshing that is by using Rambha. It comes in tractor and has a bigger machine loaded on it. It costs 2 kg/mon. Nowadays there are more farmers preferring Rambha because the Rambha comes in a tractor to the village during the threshing season and ask if anyone wants it. They keep on roaming in the village when it is threshing season. I had prior commitment to the smaller thresher, so I used that otherwise by time and cost Rambha is effective, I did not know before' (AWF1).
	Interdependency The one who is elder in the village like the known person like FIL and BIL and they bargain we always accept their request; it is difficult to deny. Because, although they are indirectly related to us, we are inter-dependent on each other. I need their help for my farm related activities like while weighing to sell, finding a trader, borrowing equipment' (CWF3).
	Social networks 'My husband and me, both of us can sell our produce. To consult regarding the price, I call to my husband if he is not available, I quickly ask to my neighbours. I can take time to go and ask with neighbours. Sometime, if I have been to nearby <i>Khutauna</i> market then while returning I ask the price. The information from the networks help me to bargain for the price' (CWF8).
	'The use of social networks is very important here. When My husband is not here, I manage my tasks by taking help from my networks' (CWF7).
5. Responsibility	'It is my responsibility to manage everything. I need to work hard on our farm. I take overall care of my farm. As these radishes [she was bunching at the time of interview] that now I am bunching, I have worked myself to plant them, I took care while they grew, and today in the morning I pulled them and washed. I will sell them to the local market. So, when I do everything, I also bargain during the process by myself.' (AWF2).
	'I had idea of the farming before marriage. After, marriage we used to stay in a joint family, and we follow BIL's instruction while working because in that time he was overall in-charge. I never gave my point of view in that time but later when our family got separated from him, we had our share of land and must farm on our own so, I got the opportunity to manage overall, I prepared plans and executed. Now, I have to think how I can make profit and bargain well' (CWF2).
	'Now a days, selling is women's job because men's go to foreign for employment and they are not in the village' (AWF5).
	'I am responsible for our daily activities as well as farm activities' (AWF6).
	'But you also have responsibilities when you are selling your produce' (AWF7).
	'Women must do everything related to household and farm' (AWF9).
	'In my family, I am more responsible for the HH chores, farm as well as selling of the farm products. Compare to my work burden my husband has less than half work than me for any day. For example, when the production is less it is my responsibility, he is not much concerned with the amount of production he says let it be whatever is produced' (BWF8).
	'I must maintain the family the kids, kitchen and farm' (CWF7). Agency 'My husband is a migrant worker in Bombay. So, I must take care of all the works here. Earlier, when I was a newlywed, I was extremely shy person and could not speak with
	others. But now, I am a mother of three children and if I do not raise my head who else would, there is no other adult than myself in my family. Therefore, it became necessary for me to manage things here and speak up to bargain or else our family would face its consequences' (DWF3).
	'It is considered as a gender role that a DIL should not speak with FIL and BIL but as the circumstance needs that I have to participate in farming and my husband is not with me I have to talk. So, I started to talk with my in-laws but with respect that is a modification. I put <i>ghunghat</i> and then I talk with respect. So, they also do not feel

Themes identified	Results from interviews
	unrespected and hence they help me when with my farm job when I cannot perform due to my small kids' (BWF1).
	'There are many women in our village now who can ride bicycle who earlier were not able to ride it Last year, I decided to explore Rajbiraj market and took tomatoes by riding a bicycle. I was surprised by the price I got there, it was double than the price I used to get in the local markets like at Traffic and Khutauna' (AWF2).
6. Mobility	'When I go out, I must ask my MIL because she is the guardian of our family till the date. By doing so I also pay respect to her. This is the same if I were at my mother's home, I must tell guardian when I have to go to somewhere' (AWF2).
	'I have three DILs they ask me before going anywhere. For example: if they go to work on farm or to their maternal home, they first ask to me. I also tell them what needs to be done in the farm and they do. My DILs are very obedient they respect me a lot. They do what I tell. They also ask when they feel something must be done' (AWF9).
	'In our culture women are not free equally like men to travel or go anywhere. My husband takes a round of the market and search for the best product and price before he purchases. When he finds it then he bargains and purchase the product He goes to market in leisure, but women do not have leisure time, she has one task after another and that keeps continuous. But when I go to the <i>hatiyaa</i> [local market], I purchase in hurry because I have no choice, my responsibility towards my two kids at home who are waiting for me is always in the back of my mind' (BWF1).
	'Both male and female farmers come here to buy inputs but in overall there are more male farmers who come to my shop' (AMVC1).
	'Men are like birds. They keep on flying from one place to another but for women she must stay at home' (AWF4).
	'I sell rice at <i>Chatti</i> , in the weekly market, whenever I am in urgent need of money for groceries or medical the <i>Chatti</i> person gives me money instantly. Although, I know if I sell in <i>Chatti</i> , the price is Rs. 10 less than if I sell in the Hanumanagar market. I carry rice on my head to the <i>Chatti</i> as it is close from my home. I cannot ride bicycle. There are citi rickshaws now to Hanumannagar but I do not prefer because I must pay the rickshaw fare' (BWF4).
	'Bicycle is the most common means of transportation in this area. Many men come to market by riding their bicycle to buy fertilisers and seeds. But in comparison to men there are less women who ride bicycle to the market. However, as now the city-rickshaw is into operation, it has increased women's presence in the Hanumanagar market' (BWVC1).
	'Women in the village will not go to drink tea in the market but men will go even if he does not have the money his friends will buy him tea and <i>paan</i> [beatle leaves]' (AWF7)
	'I used to ride bicycle before my marriage but after marriage I do not ride anymore. I am concerned about What other people will say about it. People here will say, <i>"look someone's DIL is riding bicycle and will laugh"</i> . It is not good for a woman to divide legs to ride bicycle' (DWF4).
7. Availability of Options	'Yes, every customer would like to bargain for price. I consider their price at times depending upon the market price for that day. I often remain firm on my price. It is then customer's choice if they want to buy at my price or find another seller. I do not regret, as there will be more customer' (AWF10).
	'I do not keep the bargaining rate at my shop as this is a wholesale input shop. It means the price is almost fixed. Many shopkeepers keep high price of a product and when a buyer bargains then reduce the cost. But I do not prefer it as, it is a competition market now a days. A customer will buy from the seller where they find it cheapest. So, if I keep high price, the customers will ask the rate here and thinking it is expensive here will go to another shop. There are 3 licenced input sellers in this area and there are informal sellers who sells input at the <i>hatiya</i> local market too. So, I must consider all those things. Despite, I guarantee for the input sold here, and explain customers about the quality of products. However, some customer compulsorily bargain. Prior coming to this shop they do a price check in three four shops and then they come here. Although,

Themes identified	Results from interviews
	this is a wholesale shop they come here and still bargain. Especially, for such customer, I say, "I do not want to sell to you I will have many genuine customers" (DMVC1).
	'Every customer bargains. Customers sometime give reference of other shops as " <i>I</i> asked in another shop, the price of the item was Rs. 20 but in your shop, it is Rs. 25". Customers sometime try to influence the seller by many means. Then, I calculate even if I get Rs. 1 profit, I sell it, but I easily deny if I am in loss. I believe there will be plenty of customers' (AMVC1).
	If I compare the farm expenditures in last 20 years and now, the diesel to irrigate was Rs. 11/litre and now it is Rs. 75/litre, to hire machine for irrigation it was Rs. 20/hour and now it is Rs. 200/hour and the milling was Rs. 1/ Tina rice while it is Rs. 8/Tina now so everything has become expensive. But the rent to the landlord was <i>adhiya</i> shared cropping since then till now. There is no input support from the landlord since then till now. These things are remained the same. There is no profit to the farmers. That is the reason I have reduced the rental land area by half. I cannot completely leave tenancy from the landlord because earlier the landless people like Mushar, Chamar, Muslim people came to buy rice, wheat and pulses from us but now all of them are doing their own farming. They do the tenancy for landlords. So, the landlord can easily find someone to rent their land' (CWF3).
	'The rent we are charging is very low, so, farmers do not bargain. At present farmers are growing 80 kilo/katta, we have not asked to share the by-products <i>lar puwar</i> . The rent that they are paying to us is 22 kilo/katta. This time I have increased by 2 kilo/ <i>katta</i> . Next time we are planning 30-35 kilo per kata and lar puwar also must be sharedYes, the farmers say do not increase the rent. But I know if they leave the land where will they go? I would say, " <i>my field is in my backyard</i> . <i>If you think it is not a good deal you may leave my land</i> , <i>I will keep it fallow</i> . <i>By this my field will a take rest too</i> ". I just take 10 kilo/katta for the wheat because I know the input and the labour for wheat is a lot so we will not increase it but for paddy we will. Currently, there are many farmers renting our land. If one farmer leaves the land, the villagers will know it and another one will come to ask' (CMKP1).
8. Urgency	'I sell rice at the <i>Chatti</i> [informal buyers for rice at wheat at the local market], in the weekly market whenever I am in urgent need of money for groceries or medical. There I can sell any amount of rice and the <i>Chatti</i> person gives me money instantly. Although, I know when I sell in <i>Chatti</i> , the price is Rs 10 less, than that if I sell in Hanumanagar market' (BWF4).
	'It was sold to a Paikaar, he was a Brahmin Paikar to give <i>daan</i> [donation for religious purpose]. I said if the price is 8000, better I will not sale because it still giving milk. But in actual the place where I keep the cow was getting congested, so we should sell it. we had to choose which one to sell and which we want to keep, we decide it thinking which one is more profitable to us. I sold it because It was a good deal, he paid more because the buyer was in urgent need' (CWF4).
	'The Paikar offered the price and I accepted it. I did not bargain because I was afraid that he will not buy, and I will not get another buyer soon. So, what he offered I had to accept because I needed money for household expenses like children education, groceries, also I had to go to Delhi so needed money urgently' (CWF7).
	'At that time, the selling price of wheat was 1200 per quintal so, I sold half quintal only at Rs 600. I sold because my younger son was sick. He had fever so it was necessary to do an x-ray and urine test. The total cost came up to Rs. 3000 and rest we managed from my husband's income.' (CWF9).
9. Access to Resources	'He used tractor to plough the land overnight and planted all the cauli seedlings early next morning. The seedlings he planted belong to the group members and the members had taken care to water the seeds. The next day, when farmers wake up, they were surprised to see all that had happened. The women farmers in the group could not raise their voice due to their dependency upon him. The women farmer did not have access to productive resources- like plough and water. They could not prepare their field to transplant the seedlings without the help of the powerful man. He did conspiracy to the women farmers by not giving the oxen plough so that women farmers could not prepare their farm on time to transplant when the seedling were readyWe are also dependent on him to irrigate our land because he is only one who has boring and pump-set machine close to my land. If the project pump set is not available on time, then we need

Themes identified	Results from interviews
	to use his pump set. So, if we quarrel it may have its consequences which will be difficult for me because I am a single woman' (BWF2).
	'So, if I have money I can take farm decision by myself but at many times when there is no cash with me then I need to call my husband and ask about how to do it and if he has money he sends or if not then he suggest how to arrange it' (BWF1).
10. Landlord tenant relationship	'Our landlord often considered our request to reduce rent when we faced unprecedented events like flood or drought. They do it because we are a reliable tenant. We pay our rent <i>Kuut</i> on time. If we had not paid rent on time in the past, he might be reluctant to what we ask for. In my opinion, landlords having farming experience can understand the hardship of a farmer during disaster. But in contrast, the landlord who do not have farming experience by themselves might be unwilling to understand it' (AWF2).
	'The tenants come to bargain on rent when there is drought or flood. They share their problem and say they cannot pay the full amount of the rent. They assure to pay the due rent in the coming year. I consider their difficult situation. Even if they cannot pay the debt in the following year, I do not ask rather forget the old balance' (DMKP2).
11. Product Quality	Fresh and good 'Bargaining for farm products depends upon how well a farmer can produce' (CWF5).
	'When your harvest is good-it is well fruited, fully developed and look healthy then it will pay you back good. It will give you good price in return, same as when a girl is good everyone would like to marry her. The demand will depend on the quality of crop' (DWF5).
	"Yes, buyers bargain all the time. If I mention Rs. 50 per kilo for Cauliflower, based on the rate of it on the market, a customer will ask to reduce the price, but I remain firm on my price because my produce is of very good quality and freshly harvested from my farm. I tell, <i>"it is my price if you want take it, if not you can buy from others you can go"</i> (BWF8).
	'The most important thing for a farmer's bargaining power is the quality of their yield i.e. a good quality receives a better price, it can sustain in the competitive market' (AWF4).
	'As our produce is local and fresh it could sell at NRs. $5 - 10$ more than the produce that is sold by Traders in the local market' (AWF5).
	'If I have to sell cauliflower after harvesting. I take it to the market, find a spot to sit and display my product. Then, I will ask traders and farmers who are selling cauliflower, " <i>What price are you selling</i> ". I ask some of them to generalise the price on that day. For example, if I find others rate is NRs.40/kg, then I also keep NRs. 40/kg as price of my product. This is the same way I keep the price every week. Because for the same product if price is higher customers will not buy. However, if my product is fresh compared to other sellers, I can keep a higher rate too. So, the price of product depends upon the quality and freshness of the product not on the seller's characteristics' (AWF7).
	'The cost rate depends upon the quality of the produce like if it is fresh' (BWF1).
	Input suppliers ' the customers who know that if they buy from my shop, they will get a good and tested seeds those will pay the price without any bargaining' (BMVC1)
	'The seeds sold in this shop are of good quality and guaranteed. It means if the seeds do not germinate will be replaced. This gives seeds security to the farmers. Hence, they appreciate and most often purchase my seeds. Not only Kanakpatti, people from other village also now started to recognise me and they want to purchase from me' (AWVC1)
	'Customers ask for a good quality input and are willing to pay the price. They say, " <i>I want a good variety that can give me a good yield</i> " and we show them the available options and prices and guarantee on them and they buy accordingly' (DMVC1).
	Value added products 'Last time, I went to buy vegetable from the local market, some women farmers were selling green vegetables. A woman seller said, "I have produced this for my own

Themes identified	Results from interviews
	<i>consumption, and it have not used any pesticides</i> ". I could see some of the leaves had holes due to insects and she said it was the sign of not using any pesticides. Organic vegetables are of high value these days' (AMVC1)
	'The value addition to products needs extra effort and gives extra profit. Like, I prefer to wash radishes and bundle them before I sell them in the market. They are sold in better price if I do so. Now a days many sellers bring washed radishes in the local market. Similarly, I also grow rice and partly I parboil it. The parboiled rices can sell in an extra price' (AWF9).
	'The cost for non-parboiled rice is 900/ Quintal but if parboiled its selling price will be higher i.e. Rs. 1200/ Quintal. The price of rice also depends upon the variety of rice, for example thin variety of rice is expensive than the thick variety of rice' (CWF5).
	'Although the high-quality rice like <i>Kariya-kamal, Kala-nimak</i> (scented variety of basmati) yields less and its by-product is more but it gives me more benefit. It can be sold at high price compared to the high yielding regular <i>Mansuli</i> variety' (BWF1).
	Perishable 'Some items like green leaves, tomatoes, and green vegetables are perishable in nature. Perishable means it can get spoil quickly if temperature is not maintained. The perishable items get high price value when it is sold fresh. I try to sell all of them by the end of the same market day. Because if not sold I need to take them home back and need to come back to sell another day. However, for such items must be stored in cold temperature and in our village or nearby there is no cold storage facility in large or small scale and not any farmer has freezer to store the produce in the village. So, if the produce is not sold by the end of the day, a farmer bear loss. Hence, if some customer bargain, I sell them in cheaper price too to prevent loss due to dry out, losing its weight or getting rotten' (AWF7).
12. Product	'I will say, "See I will purchase your seeds in bulk can you reduce Rs5/10". This way
Quantity	they will reduce the overall cost' (AWF2).
	'When I will buy vegetables or seeds in small quantity I will not bargain. I think why to bargain just for Rs. 2 or 4, it should be done when we buy in a large quantity' (BWF1)
	' when a customer buys in a bulk quantity and bargain to reduce the price, I do it but not to a buyer who purchases half a kilo or 1 kilo. Sometimes, I also offer to reduce the price if I have to sell in a bulk quantity' (BWF8).
	'If I buy inputs in large amount, it is cheaper but if I buy less then cost is bit expensive. But I buy according to need for my land' (DWF3).
	'Women customers bargain on fertilisers. They bargain to reduce price when they are buying in large quantity. I reduce when they buy in large quantity- like if they buy whole sack' (BWVC1).
13. Product Demand	'The price of input can be slight flexible depending upon the season. Like in the peak season for farming price of inputs goes up and will be lower during the off season. For example, the price for 1 sack- Rs. 2500 during off season that may rise to Rs. 2800-3200 if the demand increases' (BWF1). 'It does not matter who is selling, if the demand is high farmer will get good price value but, when there is plenty of produce available in the market the price will decreases' (BWF3).
	" if I can sell cauli or any vegetables during the <i>aguta</i> season that means I am selling my produce before other farmers or traders can sell the item, festival time or marriage season I will sell in a very good price. As the demand will be high at that time the produce will sold out quickly. If so happens, I or my children could quickly go back home and freshly cut cauli again and bring it to market for selling. The good thing is that I live near the <i>Jiriya hatiya</i> market from where I can do back and forth to sell my produce' (BWF8).
	'The vegetable production is affected by timing of production. There are three important selling time slots that influence the price of the produce <i>early season</i> , <i>midseason</i> that is also the peak season and the <i>late season</i> for every crop specially for vegetables. For example, when the cauliflower production is ready to sell in early season that is in <i>Asin & Kartik</i> [September and October] month the price rate is 120-

Themes identified	Results from interviews
	130 but after <i>Mangsir</i> 15 to <i>Poush</i> [November -December] the rate starts to fall up to Rs. 30-50. In the month of <i>Magh</i> the price downs but again when the marriage season comes in <i>Mangsir</i> [November] the rate become Rs. 40-50' (BMF2).
	' If a farmer can sell during <i>aguta</i> , one can get a very good bargain, for example, last year I had planted brinjal in 1 Katta of land and was able to produce 9-10 Quintals of the vegetable We sold brinjal to the trader from Dumra from home. At the beginning, the price was high, so we sold at Rs. 40 per kilo. Gradually, when the <i>pachuta</i> season approached, the production increased and there was abundant of brinjal produced by many other farmers too. So, later the price decreased then I sold at Rs. 20 and again decreased to Rs. 15. This is same for other vegetables too that at first, the price will high, then later it will reduce, and again it will little bit raise' (CWF8).
14. Product Management	Cost price collected 'Accepting customer's bargaining also depends upon whether the cost price is already collected. If so, then a trader or a farmer will not hesitate to reduce the price' (BWF8).
	Market closure time ' accepting customer's bargaining also depends upon the situation and the item I am selling. I usually make RS 2-5 flexibility with the price but when the market starts to close, and I still have items to be sold then I will reduce the cost to clear up the stock' (BWF8).
	Storage facility 'The government price of milled rice is 1800 per quintal now and it will rise to INR. 2000-2200 per quintal. I am thinking to sell when the price goes higher. I have plastered floor and can store my harvest at my home. The rice is completely dried now. I can store either by threshing or without threshing. Traders come at home to buy rice when it cheaper and they store and sell when the price goes higher. But I will not sell now and will wait until the price goes higher' (DWF1).
15. Gender Dynamics	Male Privileges 'We give more value to men because even if a man is retarded, he can earn, he can go to another place to work but a woman cannot. No matter how smart she is, she must remain at home. Likewise, on farm, men do physical and technical tasks like hoeing to prepare land, arrangement for irrigation. A woman's task is comparatively easier for example sowing seeds, weeding crops. The domestic chores are also easy task that woman does. It would not suit a woman, if her husband cooks and she just eat, it is quite a shame for a woman. So, after farm work in the evening when I come home from farm, I do household chores and take care of the livestock. If it is late my husband can help with feeding the livestock by cutting the fodder for animals. I do not think any men in this village works in the kitchen' (BWF4).
	'when a trader comes to purchase our farm produce, he shouts if anyone is selling. Then when a woman says she must sell. He asks for the guardian. Usually, a woman is not considered as a guardian of a household. But, when my husband is not at home, then I say I am the guardian and sell our produce' (AWF7).
	'My husband has nine brothers and out of their children, there are 22 sons and only 2 daughters. I have the one daughter and one son. I am a poor farmer who do not have house yet. My husband is a migrant worker. I think I am unlucky to have a elder girl than a boy because if son would be elder he would help us in earning and our situation would be better soon But our bad luck that it did not happened. I also have to pay dowry at the time of my daughter's marriage' (DWF3).
	'My life as a farmer is terrible. My husband does not listen to me. I gave birth to a single girl child who is married now and lives with her husband in another village. People say me I am <i>niputtar</i> i.e. one who do not have any son. My heart breaks when I hear people saying it is result of my bad karma that my fate did not gave me any son. If I had a son, then he would have stayed with me and helped with our farm. I must work alone or either I must hire labor. And every time I am sick. There is no one to take care of me and my farm' (BWF7).
	Males would not cook in this village not a FIL, not a husband or not a son, but also females would cook a MIL, a wife or a daughter' (BWF4).
	'In our village, cooking is mostly a woman's job. Villagers will laugh if a man cooks a meal for his family at home. He will be called womanish. My husband is a very good

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Themes identified	Results from interviews cook. He volunteers to cook in the village marriage ceremonies, but when it comes to cooking at home, he feels shy he says he won't cook rather can guide me how to cook'
	(AWF2).
	'In-laws, husband and children are fed at first. If husband has not eaten, then wife waits for him and first feed him and then eats. So, sometimes when my husband is busy and do not return by mealtime then I remain starved. He says to eat but I like to wait and feed him first' (BWF3).
	'My husband works in Bombay. I believe women's household chores is fairly justified as woman stays at home, and man goes out to earn. In this way men gets very little time to spend with the family during holidays. So, when my husband comes in holidays, he does not help me in kitchen' (DWF4).
	"after my marriage my husband and FIL are my guardian and they make decision for meIf will say, "Do not work then I wouldn't" (BWF5).
	'There is no one else important than husband in this world' (BWF6).
	'No matter how much a woman does she will never be valued like a man. Our culture has given higher value to men in compared to women' (AWF6).
	'A wife will never be valued more than a husband even if the wife is smarter. A woman must value more to her husband or if not then it is not considered nice. The <i>Mithilanchal</i> region are rich in traditions, cultures and religion The Modi and Nitesh government have given 50% rights to both men and women still in <i>Mithilanchal</i> the value given to men is more' (DWF2).
	'In our culture, there are festivals especially celebrated for the long life and wellbeing of brothers like <i>Bhardutiya, rakshya bandhan</i> and <i>Sama</i> . There are not celebrations for sisters' (CWF4).
	Gender roles ' when I go to the market, I purchase in hurry my responsibility towards my two kids who are awaiting at home is always in the back of my mind So, my husband gets the best price and quality items in our family. He goes to market in leisure, but women do not have leisure time, she has one task after another' (BWF1).
	'Women do not have leisure time due to their chores and farm work. Therefore, I ask and give money and request to bring seeds for me with my neighbour who is going to agrovet or market' (BWF2).
	'My husband buys the grocery items but as he is busy with some work all the time, he always forgets items, so he does not prefer to go to shop. It is also a women's duty to buy <i>hing to hardi</i> (local phrase referring to all kinds of grocery items) for a household' (BWF3).
	'Women's workload includes domestic chores, farm work and care for child and elderly and livestock care therefore they are mostly busy. I find due to women's work burden; she asks school children from her family or neighbour to buy seeds while returning from school. Occasionally, when she come to buy input she bargains based on her assumption or a recommendation from other farmers' (BWVC1).
	'due to my household responsibilities, I cannot harvest quickly. It's late as I can't give all my time to farmYes, as traders come to our home, they give us less price. I find selling to the Paikar [Traders] is better because although they give me the less price than selling into the market. It saves my time that I can use at another work' (CWF2).
	' it provides better profit when a farmer sells produce in the market but as I must take care of my small kids and farm-work daily I do not get enough time to sell like that. So, my first preference is to sell the farm produce to the vegetable buyers who come to purchase at my home' (CWF8).
	'Often traders want to buy from farmers in the local market. They want to buy in bulk, so they offer a less price to us. But I prefer to sell to them as it saves my time. Once, I

Themes identified	Results from interviews sell all my produce, I am done for the day and I can return home to do my household chores or whatever I want to do' (AWF4).
	Hegemonic Masculinity
	'We feel that men oppress women in this village. One example is, one of our farmer's group male member shows a rough personality who once verbally abuse and hit a woman farmer whose cow entered his moong field. He hit her so hard in front of so many people that she was lying on the ground. He never hesitates to verbally abuse women that why we do not like to stay near him' (BWF2).
	'Women farmers in the group speaks but there is no value for what women are speaking. For example, a woman farmer gave some suggestion to the secretary of the group who is a male. Shamelessly, he said "when my wife cannot speak in front of me then why are you speaking". She then complained this to women staff of the project, and she brought this issue into the notice to the project members, they later come and supported the women in their favour. It helped the women farmer a bit, but such incidents are continuous. There is another incident when a male farmer lied and manipulated the women farmers in the group. I felt I was cheated. When we denied what he suggested, he was trying to scare us and out of fury he said, "from now, I would never step at you house" and then the situation degraded, finally I felt unworthy to remain in the group, so I left it' (BWF5).
	'This is the village of the lower-class peoples. When we hire labours, they want to grab as much money as they can. At present the rent we are charging is very low this time we will increase the rent the farmers will say do not increase the rent. But where will they go if they leave the land. I would say my field is in my backyard. If you think it is not a good deal to you leave my land, I will keep it fallow. My field will take rest' (CMKP1).
16. Myths	'If a woman ploughs there will be drought older woman says. I often wonder about it and realise that woman can use hoe to dig then why cannot use plough. I believe as women must do all the domestic tasks work at home, so she does not get enough time to use plough and this became trend. Men have leisure time they go around the village, but women have number of things to do' (AWF1).
	'Now a day's women do farming. There is only one thing that only men can do is ploughing with ox. That is a rule and if not followed then there is a <i>Don</i> means charge a fine. If a woman plough, she must pay <i>Don</i> to the community' (AWF2).
	'Women can do everything in farming but Ploughing was done by men and still by men women here never ploughs. Because, in <i>Treta yug</i> [a period in Hindu Mythology], King Janak had no kids. People suggested to call upon a wise <i>Rishi</i> [Guru] to the palace and find solution for the problem. At that time a <i>Rishi</i> came, and he said that if king Janak holds <i>laagain</i> [wooden stick of a plough] to plough the field then will bring all solution. Ravan collected tax from all the Rishi. Rishi who survived with collecting the Bhikshya how can they give anything to Ravan. Then Ravan asked for their blood then the Rishis collected blood in a vessel and when they were going to give it to Ravan one Rishi dig land and hide the veseel in the land that was the King Janak's land. And when Kind Janak dig the land as a solution for drought and childlessness, then came Sita the goddesses appeared as a baby. So, people linked ploughing as a male's job because of the story. So only male can plough. Likewise, in the village the Muslim (Kujra) also followed Hindu about ploughing' (AWF5).
	'Yes, ploughing is the one and only thing in agriculture that women cannot do' (AWF7).
	'The only task that a woman cannot do while farming is ploughing' (BWF3).
	'Old people say that if women plough there will be drought. The whole plough is made up of wood and it used rope to tie the oxen. The ploughs handle is called <i>bareri</i> . <i>Laagain</i> is the wooden part that touches the ground and has attached with a sharp plough made of up iron. <i>Laagain</i> holds the oxen. <i>Paalo</i> is the wooden block that has hole to ties the ox with rope. According to the traditional belief a woman should not touch the <i>Laagain</i> . As when the <i>Laagain</i> is tied with the oxen it is considered as god <i>Mahadev</i> . Although women can worship <i>Mahadev</i> they do not touch the <i>Laagain</i> . When a field is ploughed it is done vertically from one end to another of the farm. The

Themes identified	Results from interviews
	ploughing creates a line on the field by digging. A pregnant woman must not cross such lines drawn by the plough. If she must then she must throw some soil over those line that dismisses it before she cross. There is a strong belief until now that is a pregnant woman crosses such line the baby to be born might die due to hypoxia that is the baby's breathe is stopped as long as the time was required to dig that line from one end to another by the plough. Some also say that the baby to be born will be <i>Marchhiya</i> [retarded]. I know about these things from my mother and has clearly told to daughters strictly not to do so (CWF3).
17. Collective Farming	Advantage 'We the farmers divide the cost associated with the maintenance of the wear and tear of the sunflower pump. When we divide the cost, it is helpful that we do not need to pay a lot, we only have to pay one eighth' (AWF2).
	'The tenancy rent is decided among the landlord and tenant at the beginning for farming. But as landlord found tenants having a good production, he decided to increase the rent. He called all the farmers and then he said that as the production is good the rent will be increased. But it raised a huge dissatisfaction among the tenants. All the farmer then said that they will leave the land if he will raise the rent. That made the landlord to drop the idea' (CWF2).
	'In the first year, the landlord and tenants had jointly decided 12,000 per year per Bigga as a rent for farming. The group members received seeds support from the local NGO which was the project partners. The support was discontinued in the second year. Farmers faced difficulties to pay the rent as the situation was different in the 2nd year, so, we collectively bargained with the landlord and he reduced the cost to 10,000 per year. We were further able to bargain that if we only produce only one crop i.e. paddy then the rent will be less. So, if I do not do wheat then the rent will be 7000 only. As the wheat cultivation is expensive, we choose not to produce wheat. The landlord agreed our request' (DWF3).
	'The price of the items is fixed. There is no bargaining for input items. Still we ask but the shopkeeper do not reduce the cost. In this situation, if all the farmers will ask then may be the price will be reduced. But, if only one person asks then the price will not be reduced' (DWF7).
	Disadvantage 'A problem in collective is that when an equipment needs repair no one in the group wants to take initiation. And if someone take the lead, the other members show financial difficulties at that moment. If I repair on my own money and effort, then again everyone wants to use the service' (DMF1).
	'The group members had collectively purchased trays using farmer's fund. They prepared soil trays and planted seeds of cauliflower. The farmers were surprised to see that he planted all the cauli seedlings. The women farmers in the group could not raise their voice' (BWF2).
	'The women farmers in our group do not have access to farm resources- like plough and irrigation facility. They could not prepare their field to transplant the seedlings without his [the resourceful man] help. He did conspiracy to the women farmers by not giving the oxen plough so that women farmers could not prepare their farm on time to transplant when the seedling were readyWe are also dependent on him to irrigate our land because he is only one who has boring and pump-set machine close to my land. If the project pump set is not available on time, then we need to use his pump-set. So, if we quarrel it may have its consequences which will be difficult for me because I am a single woman' (BWF3).
	'Women farmers in the group could not raise their voice due to their dependency upon the rich male member for plough and irrigation of their field. Now there is project which is also supporting the farmers but if the project pump set do not work when we need, we do not have any other alternative. If quarrel with him, we may face its consequences' (BWF2).
	'The group members who did not have facility of irrigation had paid money for water pumped by project's pump-set. The group also sold water to other needy farmers who is not a member of the group. I also used the water and paid the money. Secretary also collected money from the non-project farmers. It was supposed to share the earning

Themes identified	Results from interviews
	from pump-set, but it never happened. As a right of a group member, I inquire the
	Secretary about earning, he never answered me and no one else answered. I felt, my
	position was weak because of being a woman member, so I left the collective' (BWF5).
 Institutional farm structures 	'To apply for the drought relief-fund a farmer must fill the <i>khata</i> (Account) number and <i>khesra</i> (Registration) number of the farm plot. Unfortunately, a tenant farmer does not have the official land lease paper hence, they do not have the details of land. In usual practice the landlord and tenant farmer they do agreement verbally. The need for only a verbal agreement is due to landlord's fear that if they provide land details to the tenants they may claim the land after farming for certain years. So, when the government subsidies are given to the climate affected farmers, instead of the actual farmer who beared the consequence of drought, the landlord's who has access to the details can claim and receives the fund as, "Who wouldn't want to take the free money" (CMKP2).
	'At present the rent we are charging is very low. I saw this year the crop yield is quiet well. I am thinking to increase the rent this year I know the farmers will say do not increase the rent. But where will they go if they leave the land. I would say my field is in my backyard. If you think it is not a good deal to you leave my land, I will keep it fallow. My field will take rest' (CMKP1).
	'There is a canal in our village from where nearby villagers irrigate our fields. However, the water use lacks any governance rule, whoever gets there first they got water at first. So, during <i>khariff</i> season, we were built furrow to bring water from the canal to the paddy fields. At that time, village farmers monitor the act to prevent water passage from ours to theirs. Since the morning we were digging the passage, everyone wanted to plant their paddy at first. It took so long that we stayed there monitoring till midnight. As the night got darker the villagers whose irrigation on their field was completed went back to home. My sister in law, one Muslim farmers, another women farmer, my husband and I, five people remained there just near the bridge until our irrigation was complete. Around 1-1:30 am, I got asleep. When I wake up, I noticed above on the road, a van had stopped from which few men came out. They were talking loudly and drink alcohol. We could not recognise them, but we just remained quiet as we thought they were people from another village who came to take water to their village. We were scared so, the two men in our group were saying to us to run away from that place, if the men's would get caught they would only get hit so that would no be a huge problem but if women are caught it will be big problem [physical and social] So, we quietly started to crawl down the bridge and tried to get away from that place. Men in our group were worried as well as we ladies were scared so much, we were in the river in 2 pm and hiding there for a while. We heard when the people threw the alcohol bottles in the ground. After 2 hours, they finished drinking and sat on the van and went away. Then my husband and that Muslim shouted out for us to come out from the river. That day was horrible experience for me, and I said to myself I would rather let the field dry but would not take such a step on future to water my fields. The field is

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Themes Identified Women better at bargaining	Results from Interviews/Discussions I think to purchase the same item and quantity from the local market, the amount of money my husband and I will spend will not be the same. The amount he will spend will be a lot more. For example, for the items I pay Rs.100, my husband will spend Rs. 200. The reasons are he not only avoids bargaining but also picks expensive items. But as a woman, I will bargain and try to convince the seller to reduce the cost' (BWF8).
	'Now a days, men are out-migrating to foreign to earn so, men are good at earning but not at bargaining. Women farmers who remain in the village have to do everything and they are advancing in their work, they are assertive, vocal and they are good at bargaining' (AWF9).
	'There is much bargaining on the cost of the farm inputs. Women does more bargaining. They make me tired of their bargaining. If male come, they say give me Rs. 5 discounts but women want reasons why this shop is expensive it is cheaper for the same product in another shop. The interrogation before their purchase is boring. Yes, I reduce the price for the customers' (CMVC1).
	"men and women both customers bargain. Women do more bargaining but the rate they ask for is based on guess <i>hachuwa</i> . Men does bargain and in comparison, to women they have some idea on price. Men also evaluate the price of the item in the market to identify the price rate of an item. Then they do bargain and buy it from where they find they can get the best price' (BWVC1).
	'First, I think bargaining is women's habit, they always want to bargain for any purchasing. Second, I think in a family man earns and women must manage family So, if she can save the money that is her saving. She can buy what she wants. No doubt it's my wife who is better at bargaining. If we decide to sell at Rs. 25 she can still sell at Rs. 30 and she says she sold at Rs. 25 and saves Rs. 5 for herself. She acts like a middle-person' (CMF2).
	'Women are better in bargaining. Men cannot bargain as efficiently as women' (AWF7).
	'Women's bargaining is stronger because they do arguments or nag on price and males do not do that' (AWVC1).
	' But males think nagging for price as womanish' (AWF1).
	'Women are better at bargaining' (AWF5).
	'Janani i.e. women are the one who reduces the price' (BWF4).
	'Women bargains more, and they can get a cheaper price. Women are willing to bargain' (BWF6).
	'Women does better bargaining. I always say that you buy things in expensive price, so my husband says me to buy even his things' (CWF8).
	'It is not that men or women are good it is not the same for everyone. Sometime men are better than women in doing something, but sometime women can do thing better but again not all the women have same ability' (DWF4). 'men can easily get cheated because they do not bargain' (CWF4). 'Women does better bargaining' (CWF5).
	'Yes, I am confident to bargain. Yes, I can do. I do more bargaining than my husband' (CWF6).
	'Women, I do better bargain than men' (DWF2).
	" in bargaining there are more women, bargaining is their habit. There are not many shops in this village so as a shopkeeper, I know if a woman customer is just bargaining or intended to buy the item. So, sometimes I intentionally tell different

Table B2: Attitudinal Themes and Farm Bargaining Intention Quotations Identified from Interviews

Themes Identified Results from Interviews/Discussions			
Themes Identified	Results from Interviews/Discussions		
	rates to men and the women as I know some of them are not serious buyers' (DMKP2).		
	'in our house my husband does good bargaining than me, but this might not be the case for all the women and men in this village. In many instances' women are very good at bargaining' (BWF1).		
Bargaining Importance	'Men shows better bargaining in comparison to women. I need to pay more when I buy from a male seller. So, when I shout to find sellers selling their livestock, I prefer it is a woman seller. The reason is as I am a middleperson, who collects goats at cheaper rate from villages and sell it to a dealer and get some profit. So, to make more profit I need to buy at a cheaper rate. I find easier to bargain with women than men. For example, if the cost price of a goat is NRs. 3000-3500, if the seller is woman, she might decrease the price up to 2500 but if it is a male seller, he will not decrease the price below NRs. 3000 I think women deal well for the items worth for small cost, say less than Rs. 50, 100 or 200, while if it comes to a bigger amount like in thousands, then men are better, and most women rely upon the male member of the family for higher cost items' (AMVC2).		
	Hence, I need to bargain for everything. It is very important for me to save by getting a good price' (AWF1).		
	'Farming is not possible without investment and labour. The one who do hard labour on their farm shows good yield. To get a good price bargaining is important' (AWF2).		
	'There will always be customers who will reduce the cost price like some men will ask to reduce the cost saying it is just from your home you can reduce the cost don't make it expensive, it is not a commercial farming. Therefore, bargaining is important for me' (AWF7).		
	'As a farmer, mol-molai [bargaining] is very important' (CWF3).		
	'Yes, they do bargain and why not they have taken care of the goat for many months' (AMVC2).		
	'Yes, I feel bargaining is most important for a farmer' (BWF1).		
	'Bargaining is important' (CWF2).		
	'Yes, bargaining is important for farmers' (CWF4).		
	'Yes, bargaining is very important for a farmer' (CWF5).		
	'I do not think bargaining is that important as the village operates on the knowledge that one farmer shares with other or one farmer seek from another. In this way everyone knows what the rate of the item is or services and that no one can cheat. So, we must follow the pattern' (DWF1).		
Benefit orientation	'for women if she can bargain, she can save some money' (AWF2).		
	'Yes, I like farming and when I sell, I will do bargain as well because I can gain better price' (AWF1).		
	'When we farm and bargain to sell it gives us profit' (AWF3).		
	'I think when we sell a buyer never pay less. A seller will sell at the price more than what was invested. Seller makes more money; they never reduce the cost' (BWF6).		
	'I get good price in market for my yield in compared to selling to a Trader' (CWF2).		
	'Yes, as they come to our home, they give us less price. I find selling to a Trader is better because although they give me the less price than selling into the market. It saves my time that I can use for another work' (CWF2).		

Themes Identified	Results from Interviews/Discussions
Themes furthined	'More profit can be made when we will bargain with a <i>khaiwal</i> [consumer buying for household consumption] buys our product but if a <i>bechaiwal</i> [traders] catch us they will buy all our produce but would give us a cheaper rate so we need to bargain more with them' (AWF4).
	'Certainly, if farmers sell their produce by oneself in the market gives them a better price. But is also demands huge time as farmer must transport to the market, must sit the whole time before all the selling is done, has to wait for the customers, must bargaining with each of them. But if they sell to the local middleperson (Paikaar) who purchase from the fields or home farmers can save a lot time. That is also saving money. I often sell my yield to Paikaar because it is easier, I get Rs. 5 less per Kilo but I can save my time that I can give it to another activity. Good thing is that they come to home. I sold tomato and brinjal to Paikaar this year' (AWF2).
	'as a farmer I prefer to sell in a single go so that I can complete selling for the day quicker' (BWF4).
Traders (Middle people) gains most profit	'Traders are rigid in price because they have paid money in cash and want to make more profit. and as they work as a full time Traders. They go to every nearby market for selling' (BWF4).
	'I do not sell to <i>Paikar</i> or <i>Feraha</i> (Traders) because they give less price of the produce. Feraha earns most out of the selling to others in the process' (AWF1).
	'If a farmer sells to the customer, a farmer benefits the most, but if sold to a Trader then the Trader makes the most of profit. For the one who do not have their weight machine Traders may do incorrect weighing as well' (AWF2). 'Traders have stronger bargaining who come to the farm to purchase bargain more' (AWF7).
	'I think buyers never pay less they must pay at least more than what was cost of the seller. Sellers make more money; they never reduce the cost' (BWF6).
	'Yes, I do a lot of bargaining to sell in more price, but Traders do not give because he is also a seller later, he sells to make profit. I get good price in market than what a Traders gives' (CWF2).
	'Traders aim for profit; it is their occupation, so they do not want to pay more rather wants to make more money' (CWF3).
Bargaining Necessity	' If our produce is enough for whole round the year then we sell our surplus. Being a small farmer, the quantity of my produce is also small, so I need to sell in a good price. Hence, it is necessary to bargain well for good selling value' (CWF5).
	'I must make my farm decisions and for every decision bargaining is necessary' (AWF5).
	'I was a shy person who could not speak with other people. For farming I needed to communicate with others and bargain. The change was not easy, but it was necessary. I felt if I do not speak that is going to cost me more in everything' (AWF6).
	" if a farmer goes to sell their farm produce, customers will definitely ask for a lower price and that's how it always happen. Therefore, for a farmer bargaining is always necessary" (CWF3).
	'Yes, it is not possible without bargaining. Just selling or buying at one rate is not likely in farming. We must bargain' (CMF2).
	'My husband is working in Bombay, he occasionally comes to our village. When he is not here, I take care of all the works here. Earlier, when I was a newlywed, I was extremely shy person and could not speak with others. But now, I am a mother of three children and if I do not raise my head who else would, there is no adult accept myself in my family. Therefore, it became necessary for me to manage things here and speak up to bargain or else our family would face its consequences. As well as, I believe my livelihood as a farmer is not stealing or a less dignified job that I should feel shy rather it is my livelihood and I am proud of it hence I decided

Themes Identified	Results from Interviews/Discussions		
	to overcome my shyness. Meanwhile it was necessary to talk with men it was fine.		
	Till my son will be able to help me I must manage so I am doing it' (DWF3).		
	'A farmer must bargain for everything like to purchase seeds of paddy, wheat, green leaves, vegetables, fertilisers, water for irrigation is also bargained' (DWF6).		
Difficulty Bargaining	'The cost told by input suppliers is fixed. I purchase input from Mohanpurwala at		
	the Kathuana market. He is a very rigid seller and never discount the price of the		
	inputs. I do bargain to reduce the cost, but he finally takes the full price' (AWF8).		
	'Most of the time, I need to hire labours to transplant paddy on time because timely transplantation is crucial during paddy season when the field is ready. My relatives help me for it but as I need to complete transplantation in very short period, I also need to hire labours. In this village many male labours have out-migrated so there		
	are limited who are here. I must request or beg them because they would not listen. After requesting for many times then only they will show up on the field. It is very difficult' (AWF7).		
	'Yes, I do a lot of bargaining to sell in more price, but it is difficult to convince the		
	Traders. They do not give the price I ask for. I tell I will give in a certain price, but		
	Trader ask to make it cheaper and we both bargain. The Trader cannot give the		
	price I ask because they are also a seller later, they must sell and make profit for		
	themselves' (CWF2).		

Table B3: Subjective Farn	n Bargaining Norms	. Identified Themes and	l Related Quotations from I	nterviews

Themes Identified	Results from Interviews
Gender norms	'I avoid talking with unknown Traders. As there is a saying that, a woman and suitcase, both are better when closed - " <i>aurat aur peti band hi behatar</i> ". It is not necessary for a woman to be open and frank with everyone. Shyness from the outside world is a treasure to a woman (CWF3).
	'I liked to ride bicycle and used to ride it before my marriage. But in our culture women after marriage do not ride bicycle. What will people comment, "look! <i>name</i> (referring to my FIL)'s DIL is riding a bicycle, she is not ashamed". It is not good for a woman to divide legs to ride bicycle I could have bicycled to the local market and it would be quite easier, but I avoid it My husband is a migrant worker. I live with my in-laws and my children. I believe, elders are our guardian. So, when my FIL and MIL both can go to market and help me in purchasing the groceries as well as farm inputs, why should I go? I do not speak in front of them unless necessary. Therefore, when they go to <i>hatiya</i> market, I ask either my FIL or my neighbours to shop for our family' (DWF4).
	'I feel when I participate in farmer meeting or trainings in the village, my family do not appreciate it. They often taunt me with an example of a lady recently elected as a woma representative for our village committee. Her such participation in the village committee is not appreciated by many people. Often people make fun of her name that how she being a woman is trying to become a man. She must take part in the meetings and deliver speeches that often occurs in a public space is criticised by many. Her farm work remains incomplete as she is gone for the whole day for the meetings with men. Villagers remark by doing such she has gained nothing, still poor as not earned a <i>katta</i> of land. Rather getting involved in such position if she focused on doing tenancy could uplift her situation better. No matter how higher degree a woman has she must ignite fire-wood for cooking. I cannot convince my own people, so better I avoid going to meetings and training and just focus on my farm tasks' (BWF2).
	'I need to think what others will say if I talk to Traders visiting our home. I hesitate, because in my community an adult woman is a soft spoken, shy, respects elders, not talkative, do not talk with stranger men. If a woman shows such virtues be a "good woman" whom people admire. It also boosts her desirability as a potential bride to a groom's family. An outspoken girl is not liked enough. (AWF6). 'I get limited choice to travel and take part in farmer's activities. I think woman's primary responsibility is to do household chores. I avoid purchasing and selling vegetables as I do not get enough time due to my domestic responsibilities' (BWF3).
	 'as an extension officers are male, even if a woman knows him would not talk due to social pressure to not talk to an unknown male' (AWF10). 'I consider my husband and FIL are my guardian after my marriage. They know what is good for me and hence can make decisions for me. Recently, after my marriage, when they asked me to leave the previous job as a <i>Community Based Facilitator</i> in the farmer project, I agreed. I must obey their decisions' (BWF5).
	'Awareness on market vegetables rate is useful to sell it from home. When a Trader comes to purchase our farm produce, he offers a rate claiming it is the market price on the day and we must sell accordingly. we might get cheated if we lack the information. Hence, to verify the price we call to sellers at the <i>bazar</i> (local market). We both my husband and I have mobile phones, but mainly my husband finds the price in the <i>bazar</i> . This helps us to decide our cost price and hence we sell to Trader. Mostly, I sell when my husband is at home. But if not, I call him to find the market price and he calls me back with the price and my relatives help me to sell. In our family, my in-laws also stay with us and most of the villagers knows each other, while some are our relatives too. I avoid talking to the Traders as it helps to display my good character and reputation of my family' (CWF8).
	'I do not prefer to talk to Traders as a woman is not appreciated talking with men. It is not a virtue of a good woman' (BWF1).
	'I do not prefer to sell my farm produce at home. I prefer to sell in the local market. I an a widow farmer, in our village, the villagers backbite is a woman farmer talk to a stranger (AWF7).
Power Relations	'Our landlord is related as elder BIL to us, so my husband and I we both respect him and obey what he says (CWF3).

'We do not say anything to our landlord. Because I know how he is, he will not listen to what we request even when we are in difficult situation. The landlord will say if you are facing difficulties to pay the rent of the land [*adhiya*] then you may leave the land' (CWF9).

'I live in a joint family following a hierarchal system of respect. My FIL is the household head of our family decides for our home and farm. My in-laws as my guardian, whom I pay respect as a daughter-in-law. I avoid going to market as my active in-laws does it for our family. I can tell them if needed something. My SIL and I we both do not speak in front of FIL to show respect. I have never talked with FIL, not face to face or on mobile. I usually tell my MIL to say or ask if I must tell my FIL but if there is no one, I use my son's name to tell him like, *"son, tell your grandfather about this"*. Next, as I am the eldest among SILs, my younger SIL s obeys me' (AWF10).

'I am a member of a project's farmers group undertaking in our village. My FIL, BIL are also member of the same group. It was difficult for me to speak in the group as in our culture as a DIL I must not speak in front or with FIL and BIL. I must pay respect. For me it was an awkward situation to talk with them in the group activities, so I remained quiet most of the times' (BWF1).

An agriculture project handed hybrid seeds of cauliflower to our farmers group [collective of men and women]. We collectively purchased trays and planted the seeds. When the seedlings were ready to transplant, one of the male members grabbed them all. Overnight he hired tractor to prepare his land, and early morning all the cauli seedlings were planted on his land. He explained as other members ignored to take the seedlings when it was ready to transplant urgently, and he did it. Despite everyone knew it was incorrect, no one could argue or confront him for the incident. I did not too, as I was afraid of him. I recall one incident when a village woman's cow ate his moong bean, he assaulted her by beating [she laid on the ground] and verbally abuse [whole village heard]. ... I am a widow, in my family there is no man so avoid getting into any arguments. Along it, I am also dependent upon him for his farm assets like oxen plough to plough and tube-well to irrigate my land. If I argue he might deny giving when I am need' (BWF2).

"Women farmers in the group speak but people do not value what she says. For example, in a farmers group of the project, a woman farmer gave some suggestion to the secretary who was a male. Instead of listening to what she was suggesting he blasted in anger to her saying, *"when my wife cannot speak in front of me then who are you to suggest, do what I say"*. She then complained this to the supervisor' (BWF5).

Cultural practices

'I must pay the rent decided for my tenancy, I cannot bargain. In this village, it is a practice that once the rental-tenancy is confirmed between landlord and tenant it must be paid in *mankhab* [fixed-rate] or *adhiya* [shared-cropping]. The landlord will take it anyways and everyone does it. Our livelihood depends upon our farm yield, but it is damaged during drought, flood and hailstorms. I fear to lose the land' (CWF3).

'In our village, *Kujras* sell vegetables. So, instead of producing vegetables my parents never sold at market. However, bottle gourds production at my home this year was extraordinary. Looking at its heap, I thought to sell. But my parents disagreed with the idea initially due to their concept of *Kujras* can only sell. However, I convinced them that I can sell. The next day, I took the bottle gourds to Nanaur *hatiya* [market] on bicycle. While riding to the market, my friends and neighbouring women found I was going to sell, and they teased me, *"hey! are you becoming a Kujra"*. I reached to the market and sold all the bottle gourd. I came home with a mixed feeling - I was 'happy' that I was sold all and earned money, but I was upset that I was made fun for it. Later, I decided to quit and never tried to sell anything again' (CWF11).

'My family lineage has produced what we eat all i.e all the grains, vegetables and milk. We sold the additional milk produced but never sold vegetables as there were *Kujra* were assigned people to sell vegetables. Farmers are in the higher position to *Kujras*. I am a milkman *guala*. Daily I collect 25-50 lit of milk that I proudly sell in the Nanaur market. I feel proud - "*aan baan aur shan*" when I sell milk. However, it is matter of losing my dignity when I go to sell vegetables in the market. My relatives and the people who know me would think I am degraded. My status will be lowered, and people will make fun of me. People will believe I have degraded to the level of *Kujras* by selling

Themes Identified	Results from Interviews
	vegetables. Hence, I still follow the belief of my ancestors and do not sell vegetables in the market. (CWF8).
	<i>Kujarni</i> sells vegetables or other products in the market and, they carry it to villages on their head. Being <i>kujarni</i> is linked to be less dignified as they cheat by measuring very fast and make you believe you got a better deal while in actual, they make better deal. Farmers do not like to become a seller like them. I never did and never will sell like them' (DWF1).
	'I am aware that if I go to sell my farm produce in the local market, the villagers will gossip on me, " <i>Oh! Look how she has come to sell vegetables; she has become a Kujrarni</i> ". Selling work is done by Kujra people who has lower status than farmers. So, I do not sell in the market' (CWF1).
Gendered farm practices	'Farm rental tenancy is dealt among the men, so I do not get involved in the process. In our practice, a household head finalises the farm tenancy deal with the landlord. Women's involvement in such dealings is not practiced and accepted hence, I have never done and have not any plan to deal on this matter with landlord' (CWF3).
	'I do not get involved in the tenancy agreement, it is confirmed by my husband and the landlord. If male member from the family is not present, then anyone from the village like relative or neighbouring male who can ask for rent must take part. Women do not deal in the land matters. But later during harsh situation, even I can tell the landlord to reduce the rent' (AWF2).
	'In our village, mostly women sell farm produce. So, I will bargain as needed' (AWF5).
Encouragement	'I participate in farmers meetings and training organised in our village. I also sell vegetables from home to <i>Paikar</i> [Trader]. If the <i>Paikar</i> do not give me the price I ask I do not sell as I know the price of the vegetable in the market. It is because of my husband's encouragement. He never stops me to talk with anybody. I am glad for his support and I will keep working like this' (AWF4).
	'My husband is very supportive for my farm participation. He encourages me to experience the farm market responsibility. I disagree but I think of women [from village] who lack any support and constantly gets devalued by husband and family and must struggle in farming. So, for what my husband says I need to improve my confidence. I think, gradually, I will be able to do what he expects' (BWF1).
	'I feel when I participate in farmers' meetings/trainings, my family do not like it they share a story of a lady recently elected as a woman representative for our village committee strongly criticized for being disoriented from farming with no outcome. Our culture is to listen to our elders and when they say to bargain is getting into a controversy we do not practice. Because we need support to stand beside us and when elders tell only to focus on farm nothing else. Women farmers get discouraged and avoid bargaining, so do I' (BWF2).

Perceived Behavioural Control Themes	Results as Respondent's Quotes from Interviews					
Confidence	'I usually sell at the Kathauna <i>bazar</i> which is one km away from my home. I must take a bus from Traffic chowk to the market. I can sell on my own and I am fine to bargain and do it well. While returning, I purchase the items needed for my farm and <i>ghumti</i> shop [small grocery shop at the village] for which I again need to bargain. I look to bargain when I must sell or buy any goods' (AWF1).					
	'I do not need to do farm bargaining, as it is done by my husband or FIL. When they are available, they get involved in purchasing and selling. But sometimes when they are not in the village, I am responsible for farm dealings. When I regularly get involved in it, I feel confident to bargain. I can bargain and make my choices.' (BWF1).					
	'Yes, I can bargain well as if some customer or trader wants in very cheap price then I will say, "I do not want to sell to you or else you must give the price. If you feel like buying, then only you talk to me". I stick to my price' (CWF7).					
	'The rate for tractor ploughing is flexible. Usually, the tractor owner charge for <i>sukhjot</i> [dry ploughing] Rs. 50 and for <i>kadwaa</i> [wet ploughing] for paddy Rs. 120. I ask to reduct the cost by Rs. 10-20 and they agreed, I pay 100 only for <i>kadwaa</i> '. I always bargain. (DWF2).					
	'Yes, I am confident to bargain, and I can do. I do more bargaining than my husband' (CWF6).					
	'Yes, I am confident that I can bargain' (AWF5).					
	'I can do bargaining well' (BWF2).					
	'I feel I can do bargaining' (CWF4).					
	'Women farmers can do bargaining well' (BWF3).					
	'I feel selling farm produce is easier' (AWF7).					
	'Yes, I think I can do bargaining well' (CWF9).					
	'I can tell if a seller is saying an unnecessary high price or not. I gained the knowledge or price by my experience and discussing with my fellow farmers. I ask seller to reduce the cost. When I get frustrated, I tell the seller 'see, if you like to sell at this price then I am happy to buy but if not then you go to your home and I will go to my home' (DWF5).					
	'I do not prefer to bargain as I get stressed from the argument for it. I am not confident enough to bargain. I go shopping with neighbours and friends and ask them to help in bargain for me' (BWF7).					
Control over price	' but some items like the costs for hiring tractor and labours are already fixed, and I have to follow them'(AWF2).					
	'There are somethings while purchasing whose price is fixed and there are somethings whose price is flexible' (AWF3).					
	'Besides, for the stuffs that has fix rate bargaining is not considered or practiced because we already know the rates. The existing rate must be known by the farmers' (AWF4).					
	'As I have 4 Bigga of land that needs to be plough. I need to hire a tractor for bulk ploughing but for ploughing is rate fixed, it is same for me and for any farmer who has only few <i>Katta</i> of land (smallholders)' (CWF4).					
	'The price of the input items is fixed. There is no bargaining for input items' (DWF7).					
	Usually, the seeds price is flexible, so, I bargain while purchasing. I buy input from Rudrapur or Nanaur chowk. We can buy at any shop where it is comfortable as well as cheaper. The price at the input suppliers is similar sometime Rs. 2 more or less. When m					

Table B4. Perceived Behavioural Control Themes and Related Quotations Linked to Bargaining Intentions

Perceived	Results as Respondent's Quotes from Interviews				
Behavioural Control Themes					
Control Themes	husband goes to sell milk while returning, he buys from the market using the money gained from selling of the milk' (CWF3).				
	'When a Trader comes who wants to purchase, I ask to increase the rate. There is a current rate for main items like rice, wheat, potato etc in a certain area. So, the traders mention to pay the current rate but not increase than it. It is Fixed rate. For example, for a rice Trader he proposed 900 per Quintal while I asked 1000, or 950 But he just gave 900 not increased a single rupees' (CWF5).				
	'The tractor use for land preparation is flexible, so I can bargain. For Dry ploughing - <i>Sukhjot</i> Rs. 50 only while for Wet ploughing - <i>Kadwaa</i> for paddy tractor asks for 120 then I pay 100 only' (DWF2).				
	'No, it is fixed. The rate to mill rice is Rs.10 per Tin (10 kilo) and for wheat is Rs. 2.5 per kilo' (DWF4).				
	' I know that it is the same rate in the village. When the villagers talk, I hear and sell in the same price. The traders roam around the village' (CWF9).				
Channer	' as the village operates on the knowledge that one farmer shares with other or one farmer seek from another? In this way everyone knows what the rate of the item is or services and that no one can cheat. So, we must follow the rules' (DWF1).				
Shyness	'I feel shy to go to <i>hatiya</i> and when I bargain. So, I avoid bargaining. In my home, my FIL shops for our family (DWF4).				
	'Our village women would not involve in outdoor activities because they feel shy and cannot bargain' (BWF1).				
	'After my marriage, I came to this village I was very shy to speak with anyone. Also, a newlywed is shy in our culture. My behaviour was like that for many years. Then gradually, as our family expanded and our needs started to grow after having children, and my husband migrated to Bombay for work. I decided to support in earning livelihood, so, I got involved in farming. I could not talk well with traders due to my shyness. I did not bargain' (DWF3).				
	'I disliked how the male member grabbed our seedlings. But I am shy and afraid of him. I cannot negotiate with him because he is a loud and verbally abusive person. And, I will not get involved as my family also restricts me to get into such issues' (BWF2).				
	'earlier I was a shy person, but now, I feel it is important for me to speak up and for farm issues I involve in bargaining as well' (AWF6).				
	'Women do not shy to bargain for the price (laughs), not only for vegetables women can also bargain for other consumables' (AWF5).				
Comfort	'I feel comfortable to bargain. I have been involved in selling and purchasing for farm since a long time, even before marriage. It comes to me naturally. I am great at bargaining' (AWF2).				
	'Yes, I can bargain. I negotiate to get the best value for my farm produce, and I am comfortable to make the deal with the buyers and customers' (DWF5).				
	'Yes, I am comfortable to deal with traders to get the best price for my vegetables' (CWF3).				
	'Earlier, when I bargained, I felt <i>dikkat</i> (uncomfortable) because I had never dealt with farm related marketing before my marriage and all the time my husband and FIL did it for us. However, when I must purchase myself when my husband and FIL are absent, I have improved a lot by practicing. Now, I have started to feel comfortable to bargain' (BWF1).				
	'In my whole life, I had never done any selling. I feel uncomfortable to argue on price so, I mostly avoid it' (CWF1).				
Skills	'If women have speaking power [bargaining] they can be successful but sometime despite they can speak they do not make significant difference because they make their argument				

Perceived	Results as Respondent's Quotes from Interviews				
Behavioural Control Themes					
Control Themes	without thinking. For example, they are loud, but they are weak in mathematics and cannot do correct calculation when they sell or purchase their goods' (AWF4).				
	'I ask FIL that do you want the price. I look forward for guardian. I have never sold the goat on my own. If it is of less amount then I can do it by myself like 50, 80, 100 Rs I can do myself' (BWF4).				
	' It is difficult for me to negotiate with traders to sell rice and wheat as they are sold in quintals. I am afraid of error in calculation while negotiation, as selling in bulk needs bigger calculations. Therefore, I avoid dealing with Traders No, they will not agree or listen to us. They will say if it is that difficult to pay the rent of the land that is <i>adhiya</i> then leave the land' (CWF3).				
	'I am not good at calculation, and I find it is hard to negotiate with suppliers. Even if I bargain, he will take the full price without any discount. Therefore, I don't want to bargain' (AWF8).				
	'As I do know to ride a bicycle. It is difficult for me to go to the Hanumannagar [market]. So, I sell at the <i>Chatti</i> in <i>hatiya</i> [the local market]. In <i>Chatti</i> the price of rice is cheaper than in rice Mills. So, the <i>Chatti-person</i> collects it from villagers and sell it at a Mill' (BWF4).				

Appendix C: Ethical Approval Grant from USQ Human Research

OFFICE OF RESEARCH Human Research Ethics Committee PHONE +61 7 4631 2690| FAX +61 7 4631 5555 EMAIL human.ethics@usq.edu.au



13 April 2018 Ms Dipika Das Darling Heights 4350 Dear Dipika

The USQ Human Research Ethics Committee has recently reviewed your responses to the conditions placed upon the ethical approval for the project outlined below. Your proposal is now deemed to meet the requirements of the *National Statement on Ethical Conduct in Human Research (2007)* and full ethical approval has been granted.

Approval No.	H18REA062
Project Title	Women's bargaining power in agricultural value chains: A gender perspective from eastern gangetic plains
Approval date	13 April 2018
Expiry date	13 April 2021
Status	Approved with standard conditions

The standard conditions of this approval are:

- responsibly conduct the project strictly in accordance with the proposal submitted and granted ethics approval, including any amendments made to the proposal;
- (b) advise the University (email: ResearchIntegrity@usq.edu.au) immediately of any complaint pertaining to the conduct of the research or any other issues in relation to the project which may warrant review of the ethical approval of the project;
- promptly report any adverse events or unexpected outcomes to the University (email: <u>ResearchIntegrity@usg.edu.au</u>) and take prompt action to deal with any unexpected risks;
- (d) make submission for any amendments to the project and obtain approval prior to implementing such changes;
- (e) provide a progress 'milestone report' when requested and at least for every year of approval;
- (f) provide a final 'milestone report' when the project is complete;
- (g) promptly advise the University if the project has been discontinued, using a final 'milestone report'.

For (d) to (g) forms are available on the USQ ethics website: <u>https://www.usq.edu.au/current-students/academic/higher-degree-by-research-students/conducting-research/human-ethics/forms-resources</u>

Please note that failure to comply with the conditions of approval and the National Statement (2007), may result in withdrawal of approval for the project.

Yours sincerely,

Mrs Nikita Kok Ethics Officer

Appendix D: Approval letter from DSI4MTF project for this research



8 March 2018

Dear Dipika

Your PhD project is funded by John Allwright Fellowship of ACIAR and is supported by current ACIAR project LWR 2012 079.

As project lead, permission is granted for you to use baseline census survey data and relevant updates for purposes of completing your PhD studies and dissertation, with due acknowledgement of ACIAR and the project.

Yours sincerely

Erik Schmidt Deputy Director National Centre for Engineering in Agriculture (NCEA) Email: Erik.Schmidt@usq.edu.au Phone: 07 4631 1347 Web: www.usq.edu.au/ncea

usq.edu.au/ncea

University of Southern Queensland • West Street • Toowoomba Qld 4350

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UNIVERSITY OF SOUTHERN QUEENSLAND

Appendix E: Participant Information for USQ Research Project -Interview

Project Details					
Title of Project: A Qualitative Analysis of Farm Bargaining Intention of Smallholde Women Farmers in agricultural context of the Eastern Gangetic P					
Human Research Ethics Approval Number:	H18REA062				
Research Team Contact Details					
Principal Investigat	or Details	Principal Supervisor Details			
Ms. Dipika Das		Professor Retha Wiesner			
Email: <u>Dipika.Das@usq.edu.au</u>		Email: <u>Retha.Wiesner@usq.edu.au</u>			
Telephone: (07) 4631 2402		Telephone: (07) 4631 4519			
Mobile: 0472981362		Mobile: 0412471839			

Description

This project is being undertaken as part of Dipika Das' Doctor of Philosophy.

The purpose of this project is to understand the dynamics of women farmers' bargaining power in the agriculture of the Eastern Gangetic Plains. For this study, the research team has selected your village and is looking to explore on the overall dynamics of bargaining on the farm.

The research team requests your assistance because we consider you as one of the important actors in the agricultural sector. Your experience in agriculture is valuable for this study as it can help us to provide an in depth understanding of the dynamics of bargaining in the agriculture.

Furthermore, understanding the dynamics of bargaining power can help strengthen smallholder women farmers who struggle to bargain. The outcomes of this study will also provide some practical and policy guidelines that can benefit women farmers in their bargaining endeavours.

Participation

Your participation will involve participating in an interview that will take approximately 60 minutes of your time.

The interview will take place on Date:, Time:, Time:

Venue:, Address:.....

[This details will be decided after reaching to research site in each site of Nepal and India before interviews in consultation with key person]

Examples of questions are: what are the bargaining areas that women farmers have to bargain in order to participate in agriculture? How does bargaining happens on home, farm, market etc. related to agriculture? And so on.

The interview will be audio recorded.

Your participation in this project is entirely voluntary. If you do not wish to take part you are not obliged to. If you decide to take part and later change your mind, you are free to withdraw from the project at any stage. You will be unable to withdraw data collected about yourself after you have participated in the interview. If you wish to withdraw from the project, please contact the Research Team (contact details at the top of this form).

Your decision whether you take part, do not take part, or to take part and then withdraw, will in no way impact your current or future relationship with the University of Southern Queensland and International Water Management Institute (IWMI).

Expected Benefits

It is expected that this project will not directly benefit any interview participants including you. However, while discussing the questions as a participant you may rethink the way in which you bargain which can help you achieve positive change in your bargaining efforts.

Risks

There is no anticipated risks associated with your participation in this project. However, some questions may cause emotional distress and time imposition to the participants.

Sometimes thinking about the sorts of issues raised in the interview can create some uncomfortable or distressing feelings. If you need to talk to someone about this please immediately contact the researcher so you can withdraw your participation or contact Lifeline on 13 11 14. You may also wish to consider consulting your General Practitioner (GP) for additional support.

Privacy and Confidentiality

All comments and responses will be treated confidentially. Any data collected as a part of this research will be stored securely as per University of Southern Queensland's Research Data Management Policy.

The audio recording will be transcribed later by the Principal Researcher Dipika Das. Analysis and report writing will be done by the Principal researcher.

Consent to Participate

We would like to ask you to sign a written consent form (enclosed) to confirm your agreement to participate in this project. Please return your signed consent form to the researcher prior to participating in your interview.

Questions or Further Information about the Project

Please refer to the Research Team Contact Details at the top of the form if you have any questions or request further information about this project.

Concerns or Complaints Regarding the Conduct of the Project

If you have any concerns or complaints about the ethical conduct of the project you may contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email <u>ethics@usq.edu.au</u>. The Ethics Coordinator is not connected with the research project and can facilitate a resolution to your concerns in an unbiased manner.

Thank you for taking the time to help with this research project. Please keep this sheet for your information.

Appendix F: Consent Form for USQ Research Project - Interview

Project Details						
Title of Project: Smallhold		ative Analysis of Farm Bargaining Intention of Ider Women Farmers in agricultural context of ern Gangetic Plains				
Human Research Ethics Approval Number: H18REA		062				
Research Team Contact Details						
Principal Investigator Det	ails	Principal Supervisor Details				
Ms Dipika Das		Professor Retha Wiesner				
Email: <u>Dipika.Das@usq.edu.au</u>		Email: <u>Retha.wiesner@usq.edu.au</u>				
Telephone: (07) 4631 2402		Telephone: (07) 4631 4519				
Mobile: 0472981362		Mobile: 0412471839				

Statement of Consent

By signing below, you are indicating that you:

- Have read and understood the information document regarding this project.
- Have had any questions answered to your satisfaction.
- Understand that if you have any additional questions you can contact the research team.
- Understand that the interview will be audio recorded.
- Understand that I [will / will not] be provided with a copy of the transcript of the interview for my perusal and endorsement prior to inclusion of this data in the project.
- Understand that you are free to withdraw at any time, without comment or penalty.
- Understand that you can contact the University of Southern Queensland Ethics Coordinator on (07) 4631 2690 or email <u>ethics@usq.edu.au</u> if you do have any concern or complaint about the ethical conduct of this project.
- Are over 18 years of age.
- Agree to participate in the project.

Participant		Thumb	Print	(if
Name		relevant)		
	Ī			
Participant				
Signature				
Date				

Please return this sheet to a Research Team member prior to undertaking the interview.

Appendix G: Data Management Plan



University of Southern Queensland

Further information: https://www.usq.edu.au/library/getting-help/research-support/researchdata/managing-data

Data Management Plan

The rationale for retaining research data and material is stated in the *Australian Code for the Responsible Conduct* of *Research*, <u>http://www.nhmrc.gov.au/ files_nhmrc/publications/attachments/r39.pdf</u> which states:

"The central aim is that sufficient material and data are retained to justify the outcomes of the research and to defend them if they are challenged. The potential value of the material for further research should also be considered, particularly where the research would be difficult or impossible to repeat."

The USQ Data Management Plan guides researchers to document and establish key elements of research data management including:

- Ownership of research data
- Research data processing
- Storage and backup of research data
- Retention and disposal of research data

 Access to research data for sharing and reus 	and reuse	naring and	for shar	ata i	research	to	Access	•
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Project name:	Women's Bargaining Power in Agricultural Value Chains: A Gender Perspective from	Project contact:	Dipika Das
Project ID:	Eastern Gangetic Plains	Contact email:	Dipika.Das@usq.edu.au
Funding body/s:		Contact number:	0472981362
Duration of project:	Aug 2016- Aug 2019	Date submitted:	2/03/2018
		-	

1. Research Data Summary

Provide a summary of data being created or collected. Include:

- Description of data to be collected: Collect interviews and focus group discussions with farmers in Nepal & India
- Estimated data volume: 25 GB
- Estimated cost of data management during the project: NO

Where applicable, indicate where data will be considered sensitive or confidential.

2. Research Data Ownership and Intellectual Property

Identify if data will be owned by: Researcher

- USQ; or
- The researcher; or
- Another party, and if so, what terms and conditions apply to use

Identify copyright issues:

- Will the data be protected by copyright? Yes
 - Does Australian copyright apply? Yes
 - Will data be created or collected outside Australia where equivalent copyright applies? Provide details

Support:

Intellectual Property Policy & Procedure <u>http://policy.usg.edu.au/documents.php?id=13345PL</u> Practical Data Management: A Legal and Policy Guide [national guide] <u>http://eprints.qut.edu.au/14923/1/Microsoft_Word_-_Practical_Data_Management_-</u> <u>_A Legal and Policy_Guide_doc.pdf</u>

3. Research Data Processing

Identify resources required to process the data to get the research results:

- · Computer hardware e.g. desktop processing or super computer needs: Personal Laptop and USQ Work desktop
 - Computer Software e.g. research project management, data analysis software : NVIvo
- Network e.g. data transfer bandwidth requirements

Identify privacy, security and confidentiality issues:

- · Computer software licence compliance : Password protection will be used in all devices
- Network communication security

Support:

As a member of QCIF (Queensland Cyber Infrastructure Foundation) USQ researchers have free access data storage, large data file transfer, video collaboration, research project management, and high performance computing.

http://www.usq.edu.au/research/support-development/development/eresearch http://www.gcif.edu.au/

Contact: Francis Gacenga – USQ QCIF eResearch Analyst at gacenga@usq.edu.au

4. Data Format

Describe the data formats, software and equipment that you plan to use during your research:

- · What file formats will you use? Raw and Processed data will be used respective docx, mp3 format
- What naming conventions will you apply to your data? Conventional naming style will be adopted
- Is your data linked with particular software? And will that impact on the storage format? no
- What software (including version) will you use? NVivo for analysis
- Do you require specialist software and/or equipment to view and/or analyse your data?
- What metadata standards will you use to describe data?

Support:

Planning http://ands.org.au/resource/data-management-planning.html File formats and naming http://www.ands.org.au/guides/file-formats Metadata http://ands.org.au/guides/metadata-awareness.html

5. Data Storage

Describe the data storage arrangements that will be used for your research data:

Digital data:

- · Will you use USQ storage or non-USQ storage? USQ storage- Next Cloud will be used, it will save 3 copies
- What are the backup arrangements for your data? Data will also be backup in personal portable Hard drive
- What security is required for your data and how will you achieve this? All the data stored in personal laptop, portable hardisk will be password protected.

Non-digital data:

- Secure facilities located within USQ? Provide details
- Secure facilities located outside of USQ? Provide details

Support:

Storage http://ands.org.au/guides/storage.html

As a member of QCIF (Queensland Cyber Infrastructure Foundation) USQ researchers have free access data storage, large data file transfer, video collaboration, research project management, and high performance computing.

http://www.usq.edu.au/research/support-development/development/eresearch http://www.gcif.edu.au/

Contact: Francis Gacenga - USQ QCIF eResearch Analyst at gacenga@usq.edu.au

6. Data sharing and reuse

Describe the data sharing and reuse strategy planned for your research: It will follow

- Clarify if data sharing is a requirement of your proposed funding body. No
- Can your data be shared with other parties? Provide details Yes incase if researchers or any organization
- How will your data be made available for sharing? Institutional data repository
- Are there any ethical, consent or privacy issues associated with data sharing? Provide details on how you
 will handle these concerns : Concent to maitain privacy of the name of respondents will be done hence any
 data shared will be made the respondent unidentifiable to the any other reserchers

Support:

Sharing http://ands.org.au/guides/ethics-working-level.html Discovery, access & reuse <u>http://ands.org.au/discovery/discoveryandaccess.html</u> Ethics <u>http://ands.org.au/discovery/ethics.html</u>

7. Data retention, archiving and disposal

Describe the data retention, archiving and disposal strategy planned for your research:

- State the appropriate data retention period for your research data. Provide details if storage beyond the stated period is required: Data will be retained next 5 years after PhD compeltion.
- Describe the archiving arrangements for your research data:ereserach archiving will be used generating DOI
- · Describe how you will dispose of research data at the completion of the data retention period : After transcribing
- hardcopy will be destroyed by burrying or burning, Data will be deleted from Nextcloud

Support:

Retention http://ands.org.au/guides/dmframework/dmf-policies-and-procedures.html

Retention schedules http://www.nhmrc.gov.au/_files_nhmrc/publications/attachments/r39.pdf

8. Data used but not created by this research project

Describe the data management arrangements for data used but not created by your research: Secondary source of data will be used form ACIAR funded project in resaerch sites.

- Include source, ownership and terms of use for:
 - data that will be purchased commercially
 - o data that will be obtained under an Open Access license
 - o data obtained through other means: Copyright licence will be obtained from the project

Support:

Intellectual property <u>http://policy.usg.edu.au/documents.php?id=13345PL</u> Practical Data Management: A Legal and Policy Guide [national guide] <u>http://eprints.gut.edu.au/14923/1/Microsoft_Word_-_Practical_Data_Management_-</u> <u>A Legal and Policy_Guide_doc.pdf</u>

Refer USQ Policy Library for Data Management Policy: http://policy.usg.edu.au/documents.php?id=13281PL