THE VIEW FROM HERE:
AGRICULTURAL POLICY, CLIMATE CHANGE, AND THE FUTURE OF FARM WOMEN IN SASKATCHEWAN

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ABSTRACT

There are few things that affect agricultural production more than changes in public policy and weather. Agricultural policy and climate change are macro-level phenomena; they are “big” problems that are often seen to be outside farmers’ control, yet they have dramatic effects on both farm livelihoods and food production in general. It can be difficult to trace the everyday, lived effects of major changes in agricultural policy and climate, and even more difficult to understand the gendered dimensions of these changes.

In this research project, I explored the interaction between public policy, climate change, and gender in Saskatchewan. I used semi-structured interviews combined with historical document analysis to understand and explain the experiences of 30 Saskatchewan farm women who live and work in an increasingly competitive and uncertain agricultural environment. The project combined a feminist political economy framework with critical realist methodology. Very little has been written about the combination of these two frameworks; therefore, I provide a model for the practical application of critical realism in feminist research and offer a coding structure for qualitative data processing.

The changing context of prairie agriculture was examined through two case studies. First, I examined two controversial policy changes, one historical and one more contemporary, both of which permanently altered the face of prairie agriculture. The first was the 1995 elimination of the historic and much-loved “Crow Benefit” (and its predecessor policy, the “Crow Rate”), a transportation support program for prairie farmers. The second policy remains a priority on governmental agendas today: the expansion of plant breeders rights legislation, which facilitates an international system of
intellectual property rights on seed and plant varieties. Both policy changes exemplify the broader neoliberal policy paradigm that is dominant today.

The second case study examined the interaction of farm livelihoods with the growing threat of climate change. The prairie region has one of the most variable climates in Canada. Climatological scenarios warn of increasingly frequent and severe climate events in the future, as anthropogenic climate change continues to affect natural climate cycles. I examine gendered forms of vulnerability and resilience in the face of extreme events such as flood and drought. I explore farm women’s perceptions of climate change and the gendered dimensions of awareness and mitigation. The burgeoning literature on gender and climate change has focused primarily on the global South; this research aims to fill a significant gap in the literature on gender and climate change in the global North, focusing on a population that is highly dependent on weather.

Taken together, the two case studies offer a glimpse into the forces of structure and agency that shape farm families’ responses to macro-level events. The agency of farmers, and particularly farm women, is understood in the context of rapidly industrializing and ever-larger scales of production on prairie farms. An understanding of these forces and their everyday impacts is essential for future public policy that will reduce the economic and human costs of climate extremes, while ensuring sustainable systems of food production into the future.

**Keywords:** gender; farm women; Canada; Saskatchewan; agriculture; public policy; agricultural policy; climate change; climate extremes; vulnerability; adaptation; critical realism; feminist political economy; qualitative methods; coding.
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DEDICATION

This dissertation is dedicated to my parents (and my favourite farmers of all), Sharon and Mark Fletcher, with love and thanks – for everything.
# TABLE OF CONTENTS

Abstract .......................................................................................................................... i
Acknowledgement ........................................................................................................ iii
Post Defence Acknowledgement ................................................................................ iv
Dedication ..................................................................................................................... v
Table of Contents ......................................................................................................... vi
List of Tables ............................................................................................................. viii
List of Figures ........................................................................................................... ix
List of Appendices ...................................................................................................... x
List of Abbreviations ................................................................................................. xi

**Chapter One: Introduction** ...................................................................................... 1
Thesis Overview .......................................................................................................... 9

**Chapter Two: Literature Review** ........................................................................... 13
Overview: The Development of Literature on Farm Women's Work ......................... 13
Themes in Farm Women's Work ................................................................................ 21
Theorizing Farm Women's Work ............................................................................... 32
Conclusion .................................................................................................................. 34

**Chapter Three: Policy and Environmental Context** ........................................... 36
Policy Change ............................................................................................................. 37
Policy Change Study 1: The Story of the Crow ......................................................... 41
Policy Change Study 2: Plant Breeders' Rights ......................................................... 57
Climate Change: Trends, Projections, and Effects ................................................... 70
Gender and Climate Extremes .................................................................................. 74
Conclusion .................................................................................................................... 77

**Chapter Four: Theoretical and Methodological Framework** ............................... 79
Theoretical Framework: Feminist Political Economy, Democratic Theory .............. 79
Methodological Framework: Critical Realism .......................................................... 89

**Chapter Five: Methodological Design** .................................................................. 101
Methodology .............................................................................................................. 101
Method ....................................................................................................................... 109

**Introduction to Part II** ......................................................................................... 125

**Chapter Six: Understanding Farm Women's Lives: Events and Experiences** .... 127
Abstractions / Participant Demographics ................................................................. 127
Understanding Farm Women's Work ...................................................................... 133
Public Policy, Gender, and Everyday Life ............................................................... 154
  Gendering the Crow ............................................................................................... 154
  Plant Breeders’ Rights ......................................................................................... 169
  Structure, Agency, and the Role of Government ................................................... 176
Gendering Climate Change ...................................................................................... 187
Conclusion .................................................................................................................. 200

**Chapter Seven: Explaining Change: Corporatization and Control** .................... 203
Theoretical Redescription of Off-Farm Work .......................................................... 204
Corporatization, Control, and Canadian Agriculture ............................................ 208
Corporatization, Control, and Everyday Farm Life ............................................... 212
Conclusion .................................................................................................................. 238

**Chapter Eight: Conclusions, Policy Implications, and Future Directions** ........ 240
Summary and Conclusions ....................................................................................... 240
Public Policy Implications ....................................................................................... 247
Knowledge Mobilization ......................................................................................... 253
Limitations and Future Research Directions....................................................... 253
References............................................................................................................. 257
Appendix A: Ethics Approval Letter, University of Regina..................................... 290
Appendix B: Recruitment Poster........................................................................... 291
Appendix C: Consent Form (Farm Women)............................................................. 292
Appendix D: Interview Questions (Farm Women).................................................... 294
Appendix E: Interview Questions (Farm Organization Leaders)............................... 302
LIST OF TABLES

Chapter Three
Table 3.1. Key policy events related to the Crow............................... 49

Chapter Five
Table 5.1. Participant recruitment methods.................................. 118

Chapter Six
Table 6.1. Age groupings of participants...................................... 130
Table 6.2. Participant income demographics.................................. 132
Table 6.3. Participants’ job titles.................................................. 134
Table 6.4. Farm tasks performed by participants.............................. 137
Table 6.5. Farm women’s reasons for taking off-farm work, average scores 148
Table 6.6. Ideal work arrangements............................................. 151
Table 6.7. Adaptive strategies in response to Crow change............... 160
Table 6.8. Cost/benefit opinion of Plant Breeders Rights.................. 173
Table 6.9. Participants’ policy suggestions by theme........................ 186

Chapter Seven
Table 7.1. Main challenges affecting the farm................................ 219
Table 7.2. Causes of challenges.................................................. 221
LIST OF FIGURES

Chapter Three
Figure 3.1. Pages from the *Crow’s Nest Pass Agreement*, 1897, showing freight reductions ................................................................. 44

Chapter Five
Figure 5.1. Geographic diversity of participants ........................................ 115

Chapter Six
Figure 6.1. The gendered division of labour – near Paynton, Saskatchewan .... 141
Figure 6.2. Farm women's reasons for taking off-farm work, distribution of scores 149
Figure 6.3. Grain, oilseed, and pulse crop deliveries in western Canada, 1995 .... 163
Figure 6.4. Grain, oilseed, and pulse crop deliveries in western Canada, 2010 ..... 163
Figure 6.5. Privately owned elevator with a banner for Farmers For Justice, an anti-CWB organization – Kenaston, Saskatchewan ......................... 179
Figure 6.6. Pro-CWB sign on bales – along Highway 11, Saskatchewan ........ 179
Figure 6.7. Farmer's homemade sign – near Paradise Hill, Saskatchewan ...... 197

Chapter Seven
Figure 7.1. Coding tree map for “Agriculture” ........................................... 216
Figure 7.2. Average Saskatchewan Farm Size, 1921-2011 .......................... 227
Figure 7.3. Increases in Average Saskatchewan Farm Size, 1921-2011 ........... 227
Figure 7.4. Farm machinery advertisement: “You’re Going to Want a Bigger Farm” – near Davidson, Saskatchewan ............................... 231
## LIST OF APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Ethics approval letter, University of Regina Research Ethics Board</td>
<td>288</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Recruitment poster</td>
<td>289</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Consent Form (Farm Women)</td>
<td>290</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Interview Questions (Farm Women)</td>
<td>292</td>
</tr>
<tr>
<td>Appendix E</td>
<td>Interview Questions (Farm Organization Leaders)</td>
<td>300</td>
</tr>
</tbody>
</table>
LIST OF ABBREVIATIONS

CR: Critical Realism

CWB: Canadian Wheat Board

FPE: Feminist Political Economy

GM: Genetically modified

NFU: National Farmers Union

PBR: Plant Breeders Rights

UPOV: International Union for the Protection of New Varieties of Plants (acronym is based on the French Union internationale pour la protection des obtentions végétales)

WTO: World Trade Organization
Major changes in public policy and climate can have dramatic effects on the lives and livelihoods of Canadian food producers. However, it can be difficult to definitively connect such large, macro-level phenomena to their effects at the micro level of everyday life. It can be even more difficult to understand whether and how these broad phenomena interact with power differentials at the social level. This dissertation focuses on the connections between agricultural policy, climate change, and gender through the experiences of farm women in the Canadian prairie province of Saskatchewan. I examine how women on family farms¹ are affected by, and respond to, major changes in agricultural policy and climate. The analysis ultimately contributes to further understanding of social vulnerability and adaptation in the face of major political and climatic change.

The project examines two major policy changes that have shaped the face of prairie agriculture today: the 1995 elimination of the “Crow Benefit” (and its predecessor, the “Crow Rate”), a freight rate support program for Canadian prairie producers, and the 1990 introduction of Plant Breeders’ Rights (PBR) legislation. The first policy focus takes a longitudinal perspective, illustrating the effects of neoliberal

¹ A family farm can be defined as “an enterprise that retains household ownership of business capital and land, exercises full management control, and supplies a significant proportion of the labor, although the farm may be integrated into circuits of capital through technological dependence, marketing linkages, and credit relations” (Roberts 1996). As Magnan (2012) has pointed out, the definition of a “family farm” is contentious, especially considering the recent trend toward very large, highly capitalist family farms wherein most labour is hired and family members act as managers. For the purposes of this dissertation, I have followed Roberts’s (1996) definition. Although my participants represent a range of farm sizes, all farms in the study were operated primarily by the family members (although some relied on seasonal hired help).
policy changes after almost two decades. The second is a policy issue that will continue
to shape agriculture into the future. Both have had unique effects in Saskatchewan and
have contributed to a fundamental change in the relations of agricultural production.

Another issue of present and future concern is the changing climate. The
province of Saskatchewan is a key agricultural region and global food producer. It holds
40 percent of Canada’s farmland and exports over half of the world’s lentil, pea, and
flaxseed supply as well as over 30 percent of durum, canola, and mustard (Government
of Saskatchewan 2012a). The province is also the second largest producer of beef cattle
in Canada (Government of Saskatchewan 2012a). Yet, at the same time, Canada’s prairie
region has one of the most variable climates in the country (Sauchyn 2010). A significant
amount of food production occurs within a 200,000 kilometre area known as “Palliser’s
Triangle”, a semi-arid region prone to severe drought and known in history as a “cursed
land” known to “destroy livelihoods” (Marchildon, Pittman, and Sauchyn 2009:32).
However, in recent years, this dry region has experienced unprecedented levels of
flooding, and local producers and governments have been forced to adapt quickly.

These extremes are expected to increase in both severity and frequency as
anthropogenic climate change interacts with natural climate cycles (Dai, Trenberth, and
Qian 2004; Sauchyn 2010). As the number of areas considered “very dry” continues to
expand across the globe, climatological scenarios indicate that the southern prairies, in
particular, will be subject to more severe and extended droughts (Dai et al. 2004;
Sushama, Khaliq, and Laprise 2010). It is crucial to understand how farmers are affected
by such extreme climate events and how they adapt to them. This research identified the
most significant sources of vulnerability for Saskatchewan farm families facing extreme
climate events, focusing particularly on gendered forms of vulnerability and adaptation.

A feminist perspective guided this research project. The project sought to understand how these historical and contemporary issues produce gendered effects and responses. Canadian farm women are an understudied population. Social scientific research on Canadian farm women’s lives began to emerge only in the 1980s, and focused primarily on documenting the many contributions of women to the family farm. Until that time, women’s contributions had been largely invisible in the academic literature and, in many cases, on the farm as well. Scholars have attributed this marginality to patriarchal gender relations on the family farm, which position men as the central “farmers” and women’s contributions as peripheral (Alston 1995, 1998; Kubik 2004; Kubik and Moore 2005; Sachs 1983, 1996).

Much of the existing research has been conducted from a socialist feminist perspective, which attributes the devaluation of women’s work to its association with the “reproductive” or domestic realm as opposed to the “productive” sphere of economically valued activity. Other work has built on this perspective and incorporated standpoint feminist theory, which posits that systems like patriarchy can best be understood through the experiences of those most oppressed within them. This dissertation expands on both socialist and standpoint feminist work by applying a feminist political economy (FPE) approach to the study of farm women’s lives. An FPE perspective allows us to look beyond household relations (historically the realm of socialist-feminist analysis) and beyond individual articulations of experience (the focus of standpoint theory) to
understand the multi-level interaction of political-economic events with gendered forms of agency.

Recent work in FPE has challenged a particular policy paradigm, which has become increasingly dominant across the globe over the past three decades: neoliberalism. David Harvey (2005:2) has defined neoliberalism broadly as “a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade”. In neoliberal theory, “the role of the state is to create and preserve an institutional framework appropriate to such practices” (Harvey 2005:2). Accordingly, neoliberal states have implemented domestic policies of deregulation and privatization while promoting international regulatory regimes such as free trade agreements. More theoretically, neoliberalism has been described as the triumph of economic liberalism over social democracy (Caterino and Hansen 2009). This research traces the effects of two particular policy changes, both of which emerged at different points in the paradigm’s development and represent the neoliberal processes of deregulation and reregulation.

In the neoliberal context, Canadian agriculture is in a state of change. With it, the conditions of farm women’s lives are also changing. Sociologists have documented the increasing corporatization of agriculture, with corporations gaining market power in every link of the food chain, from production to marketing (Epp and Whitson 2001b; Kuyek 2007). The growth in corporate market share has been facilitated by changes in agricultural policy over the past several decades. Beginning with the 1969 Task Force on
Agriculture, which recommended the elimination of small family farms in favour of large-scale industrialized production, the neoliberal policy paradigm can be seen in a number of policy changes, including the elimination of producer-focused price stabilization programs and freight assistance programs (Roppel, Desmarais, and Martz 2006).

The family farm has changed accordingly. There is an evident trend in Canada towards highly industrialized production by large, incorporated family farms (Magnan 2012). Across the country, average farm size continues to grow, as small- to medium-sized operations either expand or cease production. The “get big or get out” model of agricultural production has led to intense competition and a dramatic rise in the price of farmland. As the productivist paradigm takes hold, farmers find themselves increasingly reliant on high-cost inputs such as large machinery and patented seed/chemical combinations. Combined with the volatility of international market fluctuations, the well known “cost-price squeeze” has been exacerbated and new relations of production have resulted in a growing loss of control by farmers over both inputs and markets.

In the midst of these political and economic challenges, agricultural producers face an increasing risk of climate extremes such as flood and drought. In 2001-02 and again in 2009, the prairie provinces saw extreme drought years (Bonsal et al. 2011), which were followed, in 2010-11 and 2013, by the highest levels of precipitation and flooding ever recorded in some areas (Chun and Wheater 2012). The 2011 flood event resulted in federal payments of over $956,350,000 and the evacuation of 2065 people in southern Alberta and Saskatchewan (Government of Canada 2011a). Climate change scenarios predict more frequent and severe extremes as anthropogenic climate change
amplifies natural climate variability. Agricultural producers now find themselves adapting not only to dramatic political and economic changes, but also to dramatic changes in climate.

What role does gender play in all of this? The goal of this research project is to explore if, and how, gender shapes vulnerability and adaptation (to borrow terminology from the climate change literature) to major changes on the family farm, both political-economic and climatic. This state of affairs creates the context for the central research question of this thesis: how are Saskatchewan farm women affected by major changes in agricultural policy and climate, and how do they respond to these changes? The question acknowledges both structural effects and agential responses, and allows consideration of the potentially negative and positive outcomes of major changes.

This research responds to several gaps in the academic literature. First, although notable exceptions exist (e.g., Roppel et al. 2006), there is little research that draws a direct link between specific agricultural policy changes and their effects on Canadian farm women. The majority of feminist policy analysis has focused on social policy (e.g., childcare), the effects of which can be linked to gender in very direct ways. There is much less gender analysis of other macro-level policies (e.g., agricultural or trade policies), which are often seen as gender-neutral or unrelated to gender, although there is a recognized need for this type of analysis (Çağatay and Ertürk 2004). As Nettie Wiebe (1995:59) has pointed out, there has historically been an analytical separation between “farm issues” (e.g., commodity prices) and “women’s issues” (e.g., rural childcare), with the latter often seen as a secondary concern.
Future research must link these imaginary spheres of “production” and “reproduction”. It must illustrate their interconnectedness while keeping focus on the material consequences this imagined division has created in everyday life. Examining the gendered impacts of supposedly “gender neutral” macro-level policy is one way of making this connection. Furthermore, asking farm women about farm policy issues is another way of recognizing their expertise and their centrality to agriculture.

Second, this project addresses a need for multi-scale empirical research on gender and policy in the global North. Feminists have exposed the gendered effects of macroeconomic policies both in broad, global terms (e.g., Çağatay and Ertürk 2004; Elson and Çağatay 2000; Elson 2003; Razavi 2009) and with empirical case studies (e.g., Barndt 1999; Cupples 2005; Ewig 2010; Gideon 2006; Salzinger 2004). Many of these studies have been focused on the global South. In contrast, there are relatively few empirical studies documenting the links between macro-level neoliberal policies and their gendered effects “on the ground” in the wealthier countries of the global North, where higher incomes and social supports can make policy consequences less visible and apparent (Milne 2005). Although it can be difficult to link such policies to their specific effects in everyday life (Elson 2003), it is necessary in order to understand that policies which seem very broad and abstract – so much that many people do not recognize them as relevant to our everyday lives – can and do have very tangible real-life effects.

Furthermore, in 2002, Angeles pointed out the strong urban bias in many feminist analyses of neoliberalism. She called for future research on how the globalization of the agro-food system and trade liberalization policies “are affecting the organization of work (i.e., work intensity and flexibility, gender hierarchies, gender-division of labour, cost-
“cutting, etc.” amongst female agricultural producers (2002:37). Her call remains relevant today. In their 2007 analysis, Allen and Sachs (2007:1) also identified “substantial gaps” in the literature connecting gender with material/structural issues in the agri-food sector. They suggested that a combination of feminist studies, political economy, and sociology would provide a strong theoretical framework for the analysis of gender in agri-food systems. The research presented here employs this framework.

This research project contributes not only to the feminist literature. By tracing the effects of an agricultural policy change that occurred in 1995 (i.e., the elimination of the Crow Benefit), I provide a longitudinal perspective on the long-term effects of this change. In 2001, Ramsey and Everitt wrote that “the first five years since the loss of the Crow Rate have been a period of great change, though it is difficult to project that change into the future” (2001:15). This research looks back to answer this question, while simultaneously looking forward to understand the potential future effects of a contemporary issue: plant breeders rights (PBR) legislation. Lessons drawn from the 1995 elimination of the Crow Benefit can be applied to current and future agricultural changes, such as the 2012 dismantling of the Canadian Wheat Board (CWB) as a single-desk seller of Prairie wheat and barley.

On the climate side, Alston’s research in the Australian context has shown that climate stress simultaneously entrenches and challenges conventional gender roles on the farm (2006). Alston’s work revealed that Australian “drought policy has been gender blind” and this has negative effects for farm women (2006:178). Similar research is needed in the Canadian context, particularly to inform policy responses to future climate stressors through a gender lens. Indeed, a key goal of this project is to provide a clearer
understanding of the gendered dimensions of policymaking by documenting its everyday effects in women’s lives. This analysis will highlight implications for future policy on agriculture and climate change using a gendered lens.

THESIS OVERVIEW

To set the stage for the analysis, **Chapter 2** presents a critical review of the scholarly literature on farm women in the global North, with an in-depth focus on several key Canadian contributions. I trace the chronological development of research on Canadian farm women. I identify the main theoretical perspectives in the literature and recommend areas for further expansion, both topically and theoretically, particularly the need for a feminist political economy perspective.

**Chapter 3** provides the policy and environmental context for the study. The information in this chapter represents the extensive data collection phase, which is a key part of the Critical Realist (CR) research process (discussed below and in Chapters 4 and 5). In this chapter, I trace the major policy events surrounding the elimination of the Crow Benefit and the introduction of plant breeders’ rights legislation by drawing on historical documents such as the Hansard, parliamentary committee reports, reports of royal commissions and task forces, documents from non-governmental organizations, and other “grey literature”.

Particular attention is paid to the role of policy entrepreneurs both inside and outside government, and key concepts from the public policy literature are applied to the two case studies. Freight rate data is used to quantitatively illustrate the effects of the policy change on prairie farmers, and provides useful context for the qualitative findings described in Chapter 6. Finally, Chapter 3 also includes a brief overview of climate
science data pertaining to the Canadian prairies and discusses recent occurrences of climate extremes in the region. Particular focus is placed on recent literature addressing gender and climate change, although such literature is currently very limited.

Chapter 4 presents the theoretical and methodological frameworks of the study. I begin with an overview of FPE, which is a key theoretical framework guiding this project. I outline the historical development of FPE, discuss its key insights and contributions, and recommend future areas of focus. I draw connections between FPE and my second theoretical framework, democratic theory, showing how both theories are useful for understanding gender relations, structure, and agency in the current political-economic paradigm. Particular attention is paid to the democratic theory of Phillip Hansen and Brian Caterino, whose work provided several conceptual tools used in my analysis. The second half of Chapter 4 provides a brief overview of Critical Realism (CR), the methodological framework for the study. It introduces readers to the general concepts and processes of CR research.

Chapter 5 shows the practical application of CR through methodological design. There is very little research that combines CR with feminist theories and methods; therefore, this chapter addresses two important considerations when combining the two perspectives – namely, the issue of objectivity and the use of reflexivity as a research tool. The second half of Chapter 5 responds to the lack of literature on applied CR. I discuss the practical application of CR in feminist research. I present and justify the methods used to carry out and analyse qualitative research with farm women in Saskatchewan. This chapter will prove useful to researchers seeking to apply CR
methodology in feminist empirical research, particularly those seeking a coding strategy conducive to CR analysis.

**Chapter 6** presents the empirical findings of the research. The chapter begins with the starting point of CR – abstraction – and presents the intensive data gathered through qualitative interviews. Participant demographics are presented, and the coded qualitative data is drawn together into a cohesive set of findings. The findings are organized according to the main foci of the research: farm women’s work, public policy and gender, and the connections between gender and climate extremes. In this chapter, I extend and build upon existing FPE theory by positing the concept of “farm reproduction” as a new way to counter the invisibility of farm women’s contributions.

**Chapter 7** employs this new concept to facilitate a deeper understanding of farm women’s work and the generative mechanisms that structure it. As such, the chapter represents the CR process of retroduction, in which generative (i.e., causal) mechanisms operating at the deepest level of reality are identified. This process involves continuous movement between the empirical and real levels; as such, I draw upon the findings to justify my analysis and conclusions. Ultimately, I identify two causal mechanisms – corporatization and gender ideology – that, taken together, explain the empirical data presented in Chapter 6 and offer new insights into the interconnection of structure and agency, and of macro- and micro-level events.

The final chapter, **Chapter 8**, presents a summary of the conclusions. It discusses several limitations of my research and suggests directions for future research in this area. Both CR and feminist research strive for positive social change. In keeping with this goal, the final section suggests policy implications and some general directions for future
policy that is attentive to the needs of farmers, and especially farm women, in Saskatchewan.
Prior to the 1980s, Canadian farm women were virtually invisible in the scholarly literature. However, the 1980s brought about several important studies, which began to expose the breadth and importance of the work done by farm women. Over the past three decades, research shows that farm women’s work has expanded in a number of different directions. Current work shows that, as the structure of Canadian agriculture changes, so too do the roles of farm women.

This chapter provides a critical review of the research on farm women and work in Canada. It traces the origins of this research and focuses in detail on several key studies conducted within the past ten years. Each piece has provided important insight into the lived realities of farm women, and each piece points toward directions for future research. I examine the contributions and exclusions of these studies, focusing on their theoretical and methodological frameworks. Although the dominant socialist feminist approach to women’s work has been beneficial in many ways, it has not used a feminist political economy (FPE) perspective. An FPE approach facilitates critical engagement with the current political economic context of Canadian agriculture, and in doing, responds to calls for more research on this topic (Angeles 2002; Kubik 2004).

OVERVIEW: THE DEVELOPMENT OF LITERATURE ON FARM WOMEN’S WORK

The 1980s: Visualizing Farm Women’s Work

Academic literature about women in North American agriculture was scarce prior to the 1980s. However, the decade brought about a new interest in the subject, as theorists –
many of them feminist – began to challenge and address the absence of scholarly work focussed on farm women. It was soon discovered that the invisibility of farm women’s contributions existed not only in academic work, but was also deeply embedded within the agricultural sector itself.

For this reason, the earliest academic studies on farm women sought primarily to document the existence and importance of farm women’s labour\(^2\) in the family farming operation. The major research emerging from the United States (e.g., Boulding 1980; Rosenfeld 1985; Sachs 1983) used both statistical and qualitative data sources to understand farm women’s experiences. In contrast, Canadian research throughout the 1980s tended to focus on quantitatively documenting and categorizing the various tasks farm women engaged in. This work was done primarily by Canadian farm women’s organizations. In 1982, the National Farmers Union (NFU) produced an extensive quantitative study on the work of farm women and their spouses (n=207) in the Prairie region, the Maritime region, and Ontario (Koskie 1982), which provided comparative data for a longitudinal dissertation published in 2006 (Martz 2006). Following the NFU study, the Concerned Farm Women of Ontario conducted a study to document the off-

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\(^2\) Some Marxist political economists (Bakker and Gill 2004; Bakker 2007) posit a distinction between the concepts “work” and “labour”. Their distinction broadly construes “work” as a way of mediating between the social and natural worlds, which “combines the theoretical and practical activity of human beings”, whereas labour is seen as “a particular aspect of work, which, under capitalism, is characterized by the alienation of the labourer and the appropriation of surplus labour” (Bakker 2007:548). Throughout this paper, I intentionally use the terms “work” and “labour” interchangeably to illustrate a rejection of this distinction. I argue that this distinction sets up a binary wherein “work” denotes what is often seen as intellectual work (i.e, academic work), and “labour” denotes activities viewed as manual work (i.e., factory work or farming). Such a distinction is not only elitist – granting the power of distinction to those who have created the binary – but also sets up a victimizing portrayal of “labour” as having no theoretical or intellectual elements. Such a distinction is not useful for an analysis of farming, which many outside the field might consider to fall in the category of “labour” but ultimately requires its own forms of knowledge.
farm³, on-farm, and household labour of over 340 farm women in two Ontario counties (Ireland 1983). Similarly, in 1985, an eastern Ontario group, Women for the Survival of Agriculture, also produced a report intended to make farm women’s contributions visible (Watkins 1985). In particular, these studies sought to counteract the narrow conceptualization of farm women as merely “farmers’ wives”, a notion that has been uncritically employed by some theorists on this subject (e.g., Fink 1991; Gasson 1992).

The 1990s: Farm Women’s Organizing Work in Canada

Throughout the 1990s, a significant amount of research on farm women emerged internationally, much of it from Australia, Ireland, New Zealand, the United States, and the Scandinavian countries. Dominant themes included the invisibility of farm women’s work (Alston 1995, 1998), gender ideology and identity on the farm (Allan 2008; Oldrup 1999; Shortall 1999), and farm women’s off-farm employment (Danes and Solheim 1993; Haugen 1990; Oldrup 1999).

At the same time, in Canada, attention turned to agrarian feminism and women’s work in farm organizations. In 1995, Carbert published the results of her 1989 study of 117 farm women in the Huron and Grey counties of Ontario. The study explored potential linkages between farm women’s work and their level of politicization. Carbert (1995) discovered that mechanical work and manual labour were linked with reduced

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³ The terms “off-farm” and “non-farm” are both commonly used to describe paid employment that is done outside, or separately from, the farm operation. Throughout this dissertation, I have chosen to use the term “off-farm”, even though some farm women may engage in paid employment from home or farm buildings. Although imperfect, I prefer this term to “non-farm” because farm women’s employment may in fact be in a farm-related sector (e.g., working at a local elevator or implements dealer), making “non-farm” a misnomer. Further, “non-farm” erases the interconnection and interdependence between most jobs in rural communities (e.g., education, health services, retail) and the surrounding farms.
political involvement by farm women, while responsibility for farm administration was strongly correlated with political involvement.

In a similar vein, Wiebe (1995) analyzed the activist strategies of women who are involved with the type of political organizations Carbert discussed. Wiebe discussed the difficult positioning of women within the “mainstream” farm movement, particularly the contentious issue of whether to locate women’s sections as auxiliary to, or central within, mainstream agrarian organizations. Importantly, Wiebe situated her discussion of agrarian organizing within the context of Canadian farm restructuring and farm crisis. Wiebe’s article was also the first to postulate a “triple work day” for farm women, which results from the intersection of off-farm, on-farm, and household/caregiving labour (1995:143).

The Late 1990s and 2000s: Farm Women’s Work on the Canadian Prairies

From the late 1990s to 2000s, several Canadian studies were published on the topic of farm women’s work, some of which concentrated on the prairie region. The first of the prairie studies was Young’s (1997) thesis entitled Farm Women of Alberta: Their Perceptions of their Health and Work. Using qualitative interviews and two focus groups with a total of 19 farm women, Young explored the women’s perceptions of the relationship between their work and health from a nursing perspective.

Like the early American studies, Young’s work emphasized the “insider’s view” – that is, the use of farm women’s own views as the best avenue through which to understand their reality (1997:27). Although Young did not identify her work as such, her methodological perspective fits the criteria of standpoint feminism. This perspective, first described by Hartsock (1983), is an anti-oppressive methodology that gives “voice
to perspectives that otherwise are inaccessible because they are hidden or undeveloped” (Hundleby 1997:26), and looks for commonalities between the experiences of women in a specific social location. Further, standpoint feminists interrogate a “particular historical and material partiality”, which shapes women’s experiences of oppression (Hundleby 1997:26).

Young (1997) identified several factors that cause stress for farm women, including rural depopulation and the uncontrollable effects of weather on livelihood. She also found several key differences between her participants, which shaped their experiences of farming. Generally, participants who were more involved in the farm operation reported a high level of satisfaction with, and love for, farming work. In contrast, participants who were less confident in their farming ability reported feelings of anxiety and loneliness, and they also downplayed their own contributions. The latter participants expressed feelings of guilt about not being satisfied by farming. However, despite these differences, most of Young’s participants saw themselves as crucial to the survival of the farm and family. One respondent noted that, “farm women…they’re like a pillar of strength for that farm family” (quoted in Young 1997:40).

A slight incongruity emerged in the women’s definition of a “farmer” in Young’s study. The married farm women regarded their husband as the key farmer in the operation; however, at the same time, Young stated that “most” participants regarded themselves as “farmers”, and believed that they should claim this title more strongly (1997:52–53). Many of Young’s participants also reported feeling pressured to prioritize the farm before their own needs or wants. The expectation that “the farm comes first” was also expressed in more recent studies of farm women (e.g., Faye 2006; Kubik 2004).
In her 2006 Masters research entitled *Redefining ‘Farmer’*, Lisa Faye documented the gendered division of labour through qualitative interviews with four farm women in east-central Saskatchewan. Two interconnected frameworks guided Faye’s work: standpoint feminism and socialist theory. In Faye’s interviews, participants frequently expressed frustration that their work is seen as “interruptible” in comparison to men’s. They often felt pressured to postpone or discontinue their own tasks, such as domestic work or even off-farm employment, in order to act as “assistants” on the farm. This illustrates the continued marginalization of farm women’s activities, which was one of the first problems identified when research first emerged in the 1980s. Despite frustration over the devaluation of their work, the farm women interviewed did not view themselves as “farmers” in their own right, holding the view that a true “farmer” is essentially male. In this respect, the views of Faye’s participants contrast with those of Young’s.

Faye’s research contains a problematic assumption about the devaluation of farm women’s work. Faye stated that “farm women’s contributions…are almost always overlooked or considered of less importance by farm men. This perception is then internalized and farm women consider their work secondary” (2006:128, emphasis added). This observation contradicts Faye’s own socialist feminist perspective. Socialist feminism exposed how women’s unwaged and domestic work is devalued within capitalist social relations, wherein it is not considered “productive” because it is not commoditized. However, socialist feminism also emphasizes women’s ability to recognize and challenge such structures as conscious agents. In contrast, Faye’s perspective here is overly focused on individual relationships and not on material or
ideological structures, and does not consider women’s potential agency or consciousness of these conditions. The statement thus portrays the farm women as unconscious and unknowing victims of farm men. This perspective has been challenged by feminist theorists such as Chandra Talpade Mohanty (1988), who famously critiqued white, Western feminists for portraying “Third World” women as passive victims of the uniformly oppressive “Third World man”.

In her 2004 dissertation entitled *The Changing Roles of Farm Women and the Consequences for their Health, Well-Being, and Quality of Life*, Wendee Kubik further investigated farm women’s work and perceptions of it, and discussed the effects on farm women’s health and wellbeing. Using a mixed-method approach that involved 717 quantitative surveys and 20 individual interviews with Saskatchewan farm women, Kubik thoroughly documented farm women’s work in a variety of areas, and discovered that the three most important factors affecting farm women’s health are financial issues, overwork, and stress.

Kubik used standpoint feminism to understand how patriarchy shapes farm women’s everyday lives. She found that patriarchal gender roles create an idealized notion of the “traditional farm wife” who does not engage in off-farm employment, and who can effortlessly fulfil farm household expectations such as providing home-cooked meals, baking, canning, and gardening (2004:97). However, most participants were unable to live up to this ideal, particularly due to the increased financial pressure to work off the farm. Like Wiebe, Kubik argued that the increasing pressure on farm women’s labour is linked to the macro level political-economic context of Canadian agriculture. Both suggest the need for further research on this connection.
Diane Martz took up this challenge in her 2006 dissertation, which studied farm families’ work and decision-making patterns in the context of economic restructuring. Martz’s thesis used both quantitative and qualitative methods to explore how the work roles of 480 farm family members shifted between 1982 and 2002. Information from the aforementioned NFU study (Koskie 1982) was used as the 1982 baseline data, which was updated using focus groups, interviews, questionnaires, and time diaries with farm families across Canada.

Martz’s key argument was that farm families engage in livelihood diversification (i.e., “pluriactivity”) as an active, conscious response to macro-level structural changes. Such changes include the onset of free trade agreements and the associated elimination of agricultural subsidies and supports. While this is an important argument, Martz did not establish a clear link between the macro-level changes and the role changes on the family farm. This could have been done, for example, by using quantitative analysis of farm receipts and expenses, or through qualitative interviews wherein farm families were asked about their motivations. It seems likely that farm families did indeed change their work patterns between 1982 and 2002 as a response to the lived effects of policy changes, particularly since the 1980s marked the onset of neoliberal restructuring in agriculture. However, in Martz’s work, farm-level adaptations were attributed to macro-level events, but evidence of a causal link was not presented. Correlation was equated with causation.

Overall, recent studies on farm women’s work have provided a number of statistical and theoretical insights. When juxtaposed with the early studies of the 1980s, recent work indicates that farm women’s labour is indeed being stretched in more
directions than it was thirty years ago, but that the problems of recognition and
devaluation remain. In addition, each study contains its own unique method for
categorizing farm women’s labour, which illustrates the complexity of farm women’s
roles. The next section will discuss these categorization systems and the major themes in
research on farm women’s work.

THEMES IN FARM WOMEN’S WORK

*Categorical Issues and Models*

Farm women’s work is notoriously difficult to categorize. Due to the spatial, economic,
and familial interconnection of home and farm, work in these areas is often inseparable,
because “each one contributes to and depends on the other” (Kubik 2004:31). Farm
women often perform multiple tasks simultaneously, such as picking up farm parts while
buying groceries in town or entertaining children in the combine (Faye 2006). While one
task may fall clearly into the category of “farm work”, another, done simultaneously,
may be commonly considered a “domestic” task. Even off-farm waged labour is
sometimes done to support the farm, with its proceeds returning to the operation. In this
way, categorization and measurement of farm women’s multiple roles is complex.

Authors have classified farm women’s work in different ways. In her 1995 study,
Carbert classified the seventeen individual tasks done by farm women into four major
categories: (1) farm labour, which primarily included animal care, (2) internal
administration, such as research, bookkeeping, and cropping decisions, (3) external
administration, such as supervising hired help and interacting with salespeople, and (4)
mechanical work, under which Carbert categorized fieldwork, machinery repair, and
related tasks (54). In their comparative study of farm women’s work in Georgia and
Ohio, Barlett et al. (1999:350–1) based their categorization system upon Carbert’s; however, they replaced the category of “mechanical work” with “decision making”, choosing instead to categorize mechanical work under the farm labour category, which they rename “farm production”.

In contrast to these models, Young utilized Smith’s (1992:9) model, classifying women’s work spatially into the following categories: on-farm work (i.e., seeding and harvest, animal care, farm errands, marketing, bookkeeping), household work (i.e., childcare, laundry, cooking, cleaning), volunteer work, and off-farm waged employment. Faye (2006:113) chose to discuss farm women’s work by establishing a list of most common tasks they do; however, she did classify these specific tasks into the overarching categories of domestic/housework, caregiving, paid work, and community. Her discussion of farm work was interspersed throughout those sections.

Martz’s 2006 dissertation employed a slightly different fourfold system, comprising farm field work, livestock work, farm management, and household work. Interestingly, Martz (2006:80) classifies animal care “for family consumption” under the household category. This illustrates the relative complexity of farm women’s “domestic” or “household” tasks compared to those of urban women; tasks such as raising chickens or producing eggs for the family are not easily classified as either “farm” or “domestic”.

Overall, the sheer number of categorization schemes speaks to the complexity of farm women’s work and the difficulties of analyzing it. For the purpose of simplicity, and to summarize the previous research without imposing categories that do not reflect those original works, I have divided farm women’s work in this review into three broad categories: farm work, off-farm work (waged and volunteer), and household/caregiving
work. However, such categories are used with reservation, and solely for the purpose of understanding how farm women’s work has been discussed in the literature. The final section of this chapter will illustrate the theoretically problematic nature of categorization systems that separate “farm” from “household” labour.

Farm Production Work

Farm production is often stereotypically considered the domain of men, even by some farm women (Faye 2006; Kubik 2004). However, research shows that farm women engage in an increasing number of farm production tasks. The comparative data collected by Koskie and Martz indicated that farm women are more active in all farm tasks today, as compared to twenty years ago.

Throughout the literature on women’s farm work in Canada, certain key tasks are commonly listed. Care of livestock and poultry, farm errands, bookkeeping, farm management, and hauling grain are the most commonly cited farm tasks done by women (Kubik 2004:83; Martz 2006:80; Young 1997:42). Some farm women expressed a strong preference for hauling grain over other farm production tasks, because they are able to intersperse hauling with household tasks such as making lunch or checking on children (Faye 2006:116; Kubik 2004:86). However, many farm women do operate other machinery. In fact, while the percentage of women hauling grain grew from 28 to 54 percent between 1982 and 2002, the number of women driving combines also increased significantly – from 21 to 36 percent (Martz 2006:80).

Despite farm women’s increasing contributions to field work, it is important to note that most farm production is still marked by a gendered division of labour. Overall, the women in Kubik’s study performed 9.1 percent of all field operations, with their
spouses performing 70.3 percent (2004:83). Even women’s most common tasks were still done more frequently by men. For example, whereas 13.8 percent of Kubik’s participants did hauling, 61.4 percent of their spouses did (2004:83). In terms of tasks classified as “farm” work in most studies, women dominated only the category of farm bookkeeping, with 57 percent done by women (Kubik 2004:83). Indeed, Martz reported that farm men engage in approximately 2.9 hours of fieldwork per day, while women perform 0.9 hours (2006:83). However, when it comes to animal care, the gap narrowed, with women performing 2.8 hours to men’s 3.6 hours (Martz 2006:83).

Past studies have shown that farm characteristics, such as farm type or commodity, can affect women’s farm work and experiences. In her 2006 article on female potato and dairy farmers in New Brunswick, Matchum reported that women on dairy operations are generally more active on the farm due to the intense and regular nature of animal care, while women on potato farms experienced seasonally intensive demands on their labour. Similarly, both Young (1997) and Brueckner (2004) found that dairy and livestock operations require more regular farm work by women.

A small amount of research has examined the relationship between farm size and farm women’s work. Martz (2006:104) found that farm size did not correlate with either increased or decreased farm work by women. Hall and Mogyorody (2007:306) noted that women participated most on the smallest and largest of organic farms. Unfortunately, Hall and Mogyorody do not offer interpretation of why women’s participation is lower on mid-sized organic operations. Thus, further study is required to confirm whether or not rising farm size has meant increased dependence on farm women’s labour (Jaffe 2003).
Another factor that has made a difference in farm women’s labour is technology, or level of farm industrialization. Some theorists (Jaffe 2003; Wiebe 1995) argued that historical industrialization pushed women away from farm production, thus increasing the gendered division of labour (Wiebe 142, Jaffe 138-139). Indeed, in Faye’s (2006) study, farm women felt they could not self-define as “farmers” if they did not operate large machinery. Carbert (1995) and Rosenfeld (1985) also reported that women were less likely to be involved in tasks using large industrial implements.

In contrast, participants in Kubik’s and Young’s studies reported that new farm technology made it easier for them to perform farm work, such as combining. Similarly, in 1991, Shaver discovered that farm industrialization did not reduce women’s rates of farm work; in fact, farm women’s work was highest on “semi-modern” farms, or those that fell in the middle of the industrialization spectrum (1991:40). For Shaver, it was the interplay of capitalization (employment of hired workers) and industrialization that was significant. She concluded that industrialization does not displace women’s labour on the family farm; however, the combination of industrialization and hired labour can indeed have this displacement effect.

Off-Farm Work

As farm women increase their involvement on many different types of farms, statistics show that farmers are also working off the farm at historically high rates. According to the 2011 Canadian Census of Agriculture, 46.1 percent of Saskatchewan farm operators held an off-farm job or business, and the majority worked off-farm between 20 and 40 hours per week or more (Statistics Canada 2011). Statistics Canada did not provide sex-disaggregated data on off-farm work in the 2011 Census of Agriculture; however, the
2006 Census indicated that farm women worked off-farm at a slightly higher rate than farm men, at 50.4 percent compared to 47.6 percent for men (Statistics Canada 2006). In Kubik’s study, farm women worked an average of 30 hours per week off the farm, as compared to 40 hours for men; however, it is important to note that farm men’s employment tends to be more seasonal, with men in Kubik’s study working off-farm for an average of 40 weeks per year (2004:92). Although studies posit a number of reasons for women’s increasing off-farm work, most concur that financial pressure is a key factor.

In Kubik’s study, the two most commonly reported reasons for women’s off-farm work were to earn money for the household, and to earn money for farm operating costs. Together, these two factors comprised 53.3 percent of the total reasons given (Kubik 2004:91). Personal motivations, such as having one’s own income, establishing a career, and enjoying time off the farm, were much less common: combined, these factors constituted only 16.8 percent of reported reasons (Kubik 2004:91). The same study illustrated that women’s off-farm income is crucial to supporting the family farm, with 59 percent of women reporting that, without their waged labour, the farm could only continue with difficulty or not at all (2004:90).

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4 A study from the United States (Bharadwaj and Findeis 2003) indicated that health benefits were also a key motivator for farmers’ acceptance of off-farm work in these countries. This reason could be less relevant in Canada due to its public health system. In fact, Liao and Taylor (2010) noted that off-farm labour rates decreased with the introduction of a national public health program in Taiwan. Further research on this topic in the Canadian context is needed.
These points are supported by Martz’s (2006:99) study, which found that 51 percent of women worked off-farm for “extra money”\(^5\), and 35 percent “to supplement farm income”. However, personal motivations ranked higher on Martz’s study, with 33 percent of women reporting work-related “desire and enjoyment” as a motivation (2006:99)\(^6\). Young (1997:41) also found that, for five of the six participants working off-farm, financial issues were the main reason for this work. It is important to note that although financial reasons are the primary factor in women’s decision to work off-farm, many women reported high levels of satisfaction with their employment (Martz 2006:99; Young 1997:51). It has also been noted that off-farm labour can enhance farm women’s decision-making power in the farm household (Kubik 2004:130; Martz 2006:32–3), although 79 percent of Kubik’s (2004:131) participants did not perceive increased decision making in specifically farm matters. Kubik’s participants did, however, experience increased confidence from making a direct financial contribution to the household in the form of a paycheque.

Studies have shown that farm women’s waged labour tends to fall into traditionally “feminine” jobs, such as caregiving and education (Martz 2006; Young 1997); they often earn less for their non-farm employment than do farm men (Leckie 1993). Furthermore, increased work roles can mean more stress, particularly when they

\(^5\) However, the use of “extra money” on a qualitative questionnaire is unhelpful, due to the large number of reasons for desiring “extra money”, and the wide variety of interpretations. As a result, the reasons for this answer can be highly varied – while some women might require this extra income to support the farm household, others may have interpreted the question as referring to money for pure enjoyment.

\(^6\) However, this difference may be a result of the data categorization method. Although both studies allowed multiple answers, Kubik reported the total number of times each answer was given, while Martz reported the percentage of women who mentioned each answer. Kubik’s data offers a more adequate reflection of dominant and non-dominant motivators, by positioning them in relation to one another.
are not accompanied by a decrease in other responsibilities. Martz (2006) found that increased off-farm work did not correlate with a decrease in farm work; moreover, it has been shown that women are still overwhelmingly responsible for household work, even when working on and off the farm (Heather et al. 2005; Kubik 2004; Martz 2006). In their research with 34 rural Albertan women, Heather et al. (2005:92) concluded that, although paid work offered the women some time away from the farm, “the overall impact of [the women’s] workload appeared to create more isolation and stress, or more work than they wanted or could cope with”.

In addition to off-farm paid employment, many farm women also play an important role in rural communities through their volunteer labour. Scholars have argued that this labour, like many other contributions of farm women, often goes unnoticed and unappreciated. For example, Jaffe (2003:143) pointed out that “the invisibility of women in doing the work of community allows the general public, politicians, and farmers to uphold the myth of individualism and individual responsibility in farming”. Jaffe argued that community building has become ever more difficult in the face of agricultural restructuring, family farm stress, and diminishing rural populations. In fact, 82 percent of Martz’s (2006:95) respondents were active as volunteers in their community, despite the growing demand for their time in other areas. As Martz (2006:95) noted, however, “increased demands of farm and non-farm work have reduced the time farm women have available for voluntary and community work”.

*Household and Caregiving Work*

Women remain the main performers of household, or “domestic”, work in most geopolitical locations, and the farm is no different. Most of the women in Kubik’s (2004)
study acted as caregivers, whether in a physical, emotional, or mental care capacity. While 49.1 percent of her participants spent 1 to 5 hours per week in caregiving roles, 25.2 percent spent 6 to 10 hours per week, and another 23.5 percent spent between 11 and 45+ hours per week doing caregiving (Kubik 2004:99). The three most common types of caregiving, which amounted to a total of 82 percent of tasks, were emotional support, attending to needs, and cleaning house/meal provision/childcare (Kubik 2004:99). These high levels of care provision confirm the statement of a participant in Young’s study, who felt she was always putting herself last: “You’re always draining yourself to see that everybody else is supplied with everything. It’s physically and emotionally and mentally draining” (1997, quoted on page 60).

In their 2000 study, Jaffe and Blakley documented the challenges faced by rural informal caregivers, who provide care in the absence of formal healthcare services. The authors critiqued fiscal and structural cutbacks to rural healthcare services. Such cuts had been made throughout the 1990s by the newly elected NDP government of Saskatchewan, which was faced with a legacy of debt left over from the Progressive Conservative government of the 1980s (Marchildon 2007). The government had engaged in a process of regionalization and rationalization that resulted in cuts to healthcare services in some rural areas. Jaffe and Blakley (2000) linked these changes to increased caregiving work for rural women who, due to gender ideologies, were positioned as primary caregivers by default. Challenges for rural caregivers included isolation, lack of emotional and physical support, long hours, long travelling distances to provide care and attend appointments, and stress or deteriorating health due to their caregiving role (Jaffe
and Blakley 2000). Many of the participants in the study lived in poverty, and half had been forced to quit their jobs due to caregiving responsibilities (Jaffe and Blakley 2000).

Although women across Canada tend to perform more domestic and household labour than men, farm women also face unique challenges in this respect. Kubik (2004:129) found that farm women complete over 80 percent of domestic and household labour, or approximately four times that of farm men. In contrast, women across Canada do approximately 1.5 times that of men in general (Milan, Keown, and Urquijo 2011). Moreover, women’s “household” labour often encompasses a wide range of tasks specific to the farming lifestyle, such as growing large gardens, canning and freezing homegrown fruits and vegetables, driving long distances for groceries or children’s activities, and raising livestock or eggs for the family’s consumption.

For this reason, the description of farm women’s domestic labour as only “reproductive” is a misnomer. In fact, farm women’s domestic labour can be seen as highly productive (in the classical economic sense), because it often produces fresh produce and food items, as well as items for sale. In her historical account of farm women’s labour in Manitoba, Van de Vorst (2002:3) confirmed that “farm women always have and still do contribute to the economy of their farms in many direct and indirect ways”. Van de Vorst’s important book traced the history of farm women’s work from the settlement era, illustrating that women have always played a crucial role in farm activities, from “proving up” a homestead to raising poultry for the family, and that this work was historically considered “productive” in nature.

Jaffe (2003) expanded this point, arguing that industrialization caused the submersion of farm women’s contributions. She states that “the household has developed
from one in which all members were ‘productive,’ to one in which usually only the man is considered to be a productive member of the farm” (2003:138). Jaffe (2003:139) illustrated this point with the example of industrialized milk production, which caused women to be “pushed out” of this activity. In this way, Van de Vorst and Jaffe support the re-conceptualization of farm women’s household labour as “productive”, a point which will be elaborated further below.

Despite changes to farm women’s historical labour patterns, it cannot be said that women’s contemporary “reproductive” work is un-productive, which is a deeply flawed assumption of neoclassical economic theory. Nor can it be assumed that farm women’s “reproductive” work is identical to that of non-farm women. Jaffe (2003:139) argued that, since industrialization, farm women’s “domestic work now resembles that performed by their urban sisters”. This statement masks farm women’s unique experiences of domestic work, which often includes growing large gardens, mowing large lawns, canning fruit, and other tasks not generally performed by urban women. For example, even doing domestic work such as laundry is different on the farm as farm women are often responsible for cleaning chemical-sprayed clothes, which requires special care given the toxic nature of the pesticides used in non-organic farm operations (Kubik 2005).

Several conclusions can be drawn from this overview of farm women’s labour. First, farm women’s labour capacity is under continuous pressure to expand. Calls for women’s participation are heard from a number of directions: field and farm work, off-farm waged labour, community involvement and volunteerism, caregiving, and domestic work. In each case, the situation of farm women is different from that of urban women,
rural non-farm women, and farm men – whether these differences arise from the distance travelled to off-farm work, or even the challenges in doing farm laundry. However, although some general conclusions might be drawn about farm women’s work, it is nonetheless important to maintain attention to diversity. As illustrated, a number of demographic factors can affect women’s experiences of work, proving that farm women’s work is not monolithic and is always changing.

THEORIZING FARM WOMEN’S WORK: TOWARD A FEMINIST POLITICAL ECONOMY APPROACH

This review of the literature has shown that standpoint and socialist feminist perspectives are most common in the study of farm women’s work. While the socialist feminist perspective is useful for understanding the devaluation of farm women’s work, standpoint puts emphasis and value on the participants’ own experiences within broader material structures. Both perspectives also have shortcomings. For example, Faye (2006) used socialist feminist theory to understand the devaluation of farm women’s labour; however, her application of socialist feminist theory was voiced mostly in terms of waged and unwaged labour. For example, she stated that “men bring home the physical capital” in this system (2006:56), thus rendering their actions economically “productive” in contrast to women’s “reproductive” activities.

Although this is a characteristic argument of socialist feminism, it cannot be applied directly to the family farm in this way. This is because, unlike the waged labourers of classic socialist theory who sell their labour power to the bourgeoisie,
family farmers often own their means of production\textsuperscript{7} – for example, land and machinery – which is, in fact, a characteristic of the bourgeoisie in classical socialism. For this reason, family farmers have often been conceptualized not as proletarians but, rather, as “petty commodity producers” (Whatmore 1991) or “independent commodity producers” (Macpherson 1962a).

In her 1991 book *Farming Women*, Whatmore (1991:139–40) argued that prior research on agricultural producers (i.e., petty commodity producers) had taken “a narrowly productivist concept of labour restricted to the process of agricultural commodity production”. This narrow view is facilitated by a “divisive spatial imagination” which rigidly divides family from economy, and household from farm (Whatmore 1991:145), and has resulted in the invisibility of farm women’s contributions. Whatmore argued that the spheres of “productive” and “reproductive” activity must be analytically combined and seen as inseparable parts of an overall labour process. Other scholars have supported this view. For example, in her study of organic farmers, MacEachern (2008:15) stated that “splitting the locales of work and the value assigned to different types of work fails to acknowledge that all work is essential to maintain a family farm”.

\textsuperscript{7} One caveat is important here. Farmers typically own their means of production, if the means of production is considered to be land, machinery, and other forms of capital. However, in an increasingly corporate agricultural environment, farmers do not own many inputs (such as seeds and fertilizers). Since many farmers are increasingly dependent upon these inputs, particularly with the advent of processes like zero till agriculture and patented seed technology, they cannot be said to own the full means of production. Furthermore, in contrast to proletarian workers whose labour is subsumed through the wage relationship, farmers’ labour is subsumed through a more indirect means – unequal exchange. Farmers’ labour can be considered exploited, because surplus value is often extracted from this labour through systems of unequal exchange and unfair trade (Whatmore 1991).
Whatmore’s work implies the need to shift from a socialist-feminist “dual systems” approach, which allows capitalism and patriarchy to be analyzed separately, to a socialist-feminist “interactive systems” approach, which posits the integrated, interacting nature of capitalism and patriarchy and explores their combined effects (Tong 2009:112). However, an interactive systems approach is still not ideal for studying farm women. Just as the “narrowly productivist” view of farm labour ignores gender roles and women’s contributions, the interactive systems approach considers sex (patriarchy) and class (capitalism) but reifies both as somewhat apolitical. It is important to also include an understanding of the policy and political ideologies that have shaped the current economic context of agriculture.

A feminist political economy approach is well suited to the study of farm women’s work for two reasons. First, FPE has been valuable in asserting the interconnection of production and reproduction, just as Whatmore recommends. Second, it allows us to expand our analysis beyond the interconnection of economics and family, and into the more complex interplay of economics/family/politics. The FPE framework is discussed further in Chapter 4.

CONCLUSION

This chapter has presented a critical review of significant research on farm women’s work. It is evident that the demands on farm women’s labour capacity are growing stronger, yet under-recognition of their work remains a problem. Although many authors (e.g., Kubik 2004; Kubik and Moore 2005; Leckie 1993; Martz 2006; Roppel et al. 2006) have indicated the importance of studying farm women’s labour within the context of agricultural restructuring and agricultural policy change, the
currently dominant socialist and standpoint feminist perspectives are inadequate for this purpose. In the following chapters, I apply an FPE approach combined with critical realist methodology to explore the changing roles of farm women in direct relation to the changing face of Canadian agriculture.
Every day, actors navigate the social structure that surrounds them, exercising their agency within it. These actors have different levels of vulnerability and adaptive capacity to major structural issues as they occur. Public policy can act as either structure or agency or, in some cases, both. Public policy provides the conditions (i.e., structure) for our actions because it determines what members of a society can and cannot do. Yet, at the same time, policy is a source of agency. Through democratic activity and structures, actors can attempt to influence policymaking in ways that will advance their own interests. However, actors’ interventions are simultaneously shaped by the structure – for example, certain interventions into the policy process will be more effective than others. Thus, structure shapes agency, and agency also has the power to shape structure. The two are discrete but interconnected.

In this chapter, I discuss two examples of structural change that have affected the lives of agricultural producers in Saskatchewan: agricultural policy change and climate change. Both types of change can have dramatic effects on farmers’ lives; however, these effects are mediated by public policy, which can either exacerbate or mitigate the effects. In both cases, actors exercise agency and attempt to control circumstances that, at times, seem beyond their control. This activity occurs both inside and outside of policy systems.

In the case of agricultural policy change, I examine two case studies: one that has already occurred but has on-going effects, and another that is still unfolding. In both
cases I illustrate the interaction between structural factors, such as policy paradigms, and actors who attempt to shape policy. This has resulted in the particular agricultural policy paradigm in which Canadian farmers now live, work, and adapt. In the case of climate change, I conceptualize climate as structure. It both affects and is affected by human actors. I present an overview of current changes that are occurring and taking effect on the lives of Saskatchewan farmers. In comparison to the agricultural policy changes I discuss, climate change is a fledgling issue, one whose legitimacy as a pressing policy problem is still not fully recognized.

For the purpose of my analysis, both types of change have necessarily been abstracted from a larger social and political context. I selected these two case studies because both are linked to key issues affecting the lives of Canadian farmers today. In both cases, there is a notable lack of gender analysis in both their policy stories and their everyday effects. Thus, the findings presented in Chapter 6 will illustrate the gendered effects of these two changes in the lives of Saskatchewan farm women, as well as the women’s agency and response to such changes.

POLICY CHANGE

Public policy has been defined in a number of ways. One of the most popular is that of William Jenkins (1978:15), who described public policy as a set of decisions made by a political actor, or group of actors, about goals and how to achieve them. For Howlett and Ramesh (2003), the best definitions of public policy are those that emphasize policy as a process and highlight the link between a problem (or perception of a problem) and a government’s action on it. In other words, public policy is not only a tangible product or
outcome (a policy *per se*); rather, it is a complex process that follows the identification of a problem that the government needs to solve.

The first stage in the public policy process is “agenda-setting” or problem recognition. At this stage, certain problems receive the government’s attention and therefore get a space on the policy agenda (Howlett and Ramesh 2003). At any given time, a large number of problems and issues are vying for a space on the policy agenda, but only a limited number can be addressed through policy formulation, which is the next stage of policy making. At this stage, possible solutions to the problem (“policy alternatives”) are identified and presented. Policy formulation is followed by decision making (i.e., choosing which policy alternative to implement), policy implementation, and finally, evaluation of the policy’s effectiveness (Howlett and Ramesh 2003:13).

Although this framework is useful for thinking about the policy process in general, Howlett and Ramesh (2003) emphasized that policymaking is not a simple linear progression from problem to solution. There are a number of variables that can shape the process, from previous policies or resource availability to the ideological views and past experiences of actors inside and outside government. Indeed, Béland (2005) argued that policy alternatives emerge from broader ideological frames called policy paradigms. These policy paradigms contain a relatively coherent set of assumptions about the world and thus determine which policy problems and alternatives are palatable at a given time (Béland 2005). Paradigms act as a type of ideological “road map” for policymakers (Béland 2005). Ideology, then, can affect policymaking. Ideology can be causal.
Policymaking is influenced by a variety of actors and institutions with a variety of perspectives and interests (Howlett and Ramesh 2003). Advocates who influence (or attempt to influence) policymaking are known as “policy entrepreneurs”. These individuals or groups invest time and resources in hopes of getting their issues on the policy agenda (Kingdon 2003). Policy entrepreneurs can be inside or outside government, and may include international actors or institutions (e.g., the United Nations, the International Monetary Fund), elected or appointed government officials (e.g., cabinet members), civil servants, labour, business representatives, lobby groups, think tanks or research organizations, and journalists (Howlett and Ramesh 2003; Kingdon 2003). Their interest in a particular policy issue can be driven by a variety of factors, from personal values to bureaucratic turf-protecting, and they attempt to advance their issue through a number of strategies such as writing position papers, giving public talks, and meeting with public officials (Kingdon 2003). All these interactions occur in what is known as the “policy subsystem”, defined as “a space where relevant actors discuss policy issues and persuade and bargain in pursuit of their interests” (Howlett and Ramesh 2003:53).

In his important work on agenda setting in public policy, Kingdon (2003) identified three “streams” of the policy process: problems, policies, and politics. The successful formation of policy depends on the alignment of these three streams. Agendas are set by problems and politics, and potential solutions are generated within the policy stream. When a problem is acknowledged and its resolution is politically supported, and when the policy alternatives are politically appealing, the time is right for policymaking. Entrepreneurs try to connect the “streams” to create such an opportunity for
policymaking. They “hook solutions to problems, proposals to political momentum, and political events to policy problems” (Kingdon 2003:182).

Such “political momentum” is another necessary ingredient in agenda-setting and policy formation. Although “the public” plays a role in setting the policy agenda through voting, public opinion is heterogeneous and fluctuating; it cannot simply be “converted” into policy (Howlett and Ramesh 2003). However, the general policy mood or sentiment of a population at a certain time does shape the context for policymaking (Howlett and Ramesh 2003:77). Actors in the political stream will face ramifications for generally unpopular or controversial policies and, as such, the public mood can indeed shape the policy agenda. Policy entrepreneurs can also attempt to garner public support for their own policy alternatives (Béland 2005).

The following sections discuss the key actors, events, and context in two case studies of agricultural policy. One case study follows the elimination of an historic policy, while the other explores a relatively new policy that will continue to expand into the future. Both have had significant implications for Canadian agricultural producers, and both clearly illustrate the complex variables that shape agenda setting and policy formulation. The first case is the 1983 elimination of the Crow’s Nest Pass Agreement of 1897 (also known as the “Crow Rate”) as well as the elimination of its successor policy, the Western Grain Transportation Act (or the “Crow Benefit”) in 1995. Together, these policies were intended to stabilize freight rate prices for grain producers on the Canadian prairies, but became the object of intense debate and policy entrepreneurship throughout the latter half of the 1900s. The second policy study is more contemporary. The Plant Breeders’ Rights Act of Canada was passed in 1990 to protect the interests of seed
developers. This legislation is linked to an international agreement known as the International Convention for the Protection of New Varieties of Plants, and is therefore part of an increasingly globalized trend in policymaking. The issue remains high on the agenda of the current federal and provincial governments.

Policy Change Study 1: The Story of the Crow

The first policy story dates back to the late 1800s. In the early years of Confederation, the new Dominion government of Canada faced two interconnected problems. First, merchants in the St. Lawrence region predicted a decline in trade with the United States, which had become increasingly nationalist since the American Revolution (Fowke 1957/1973). As the merchants saw it, the solution was to encourage agricultural settlement of the prairie region, which would create an alternative market for their goods and implements (Fowke 1957/1973; McCrorie 1964). The second problem was the looming threat of American expansion into the west coast region (now British Columbia), where gold and mineral deposits had been discovered (Fowke 1957/1973). The solution to both problems was to build a rail line heading west. Competition with the Americans meant that only an entirely Canadian line would be appropriate (Fowke 1957/1973).

The Dominion government decided that railway building would commence as private enterprise; however, it would be facilitated by “liberal grants of land” and financial subsidies from the government (Fowke 1957/1973:46). The government began to construct the Canadian Pacific Railway in 1871. After some complications with contracts, the Canadian Pacific Railway Company (known to most today as the CPR) was finally incorporated in 1881. In addition to the 713 miles of rail already built under
government auspices, the CPR received the aforementioned land grants and subsidies, which amounted to a total of $25 million dollars, 25 million acres of agricultural land fit for settlement, land for rail infrastructure and buildings, tax exemptions, and a guarantee against competition in the west for 20 years (Fowke 1957/1973).

As a result of this guaranteed monopoly, the company began setting its rates at market value (Kroeger 2009). This meant that as settlement commenced, western homesteaders bore the market cost of freight on both the commodities they produced and the tariff-protected implements they received from the east (Kroeger 2009). This problem, known as the “cost-price squeeze”, continues to affect farmers today. Dissatisfaction with this situation shaped the political mood in western Canada and, as a result, the Dominion government bought out the CPR’s monopoly in 1888 in hopes of facilitating competition to drive down freight prices (Kroeger 2009).

Rail access to the prairies had been secured by the 1890s, but more gold discoveries in BC’s Kootenay Valley kept pressure on the Dominion government to expand further west, beyond the Rocky Mountains. In 1897, the CPR and the Liberal government under Wilfrid Laurier entered an agreement to build a rail passage from Lethbridge, Alberta, to Nelson, BC, through the difficult terrain of the Crow’s Nest Pass. The Dominion government agreed to provide the CPR with $11,000 per mile to a maximum of $3.6 million (Government of Canada 1897). The BC provincial government also contributed 3.75 million acres of coal-bearing land for the CPR’s use (Kroeger 2009). In return, the CPR committed to a series of statutory freight rates on wheat and flour moving eastward, and on implements moving westward (Fowke 1957/1973). The company was also required to surrender to the Crown 50,000 acres of the coal-bearing
lands it received from BC; this was to be used for the public good (Government of Canada 1897).

With this, the *Crow’s Nest Pass Agreement* of 1897 was born. The deal was mutually beneficial for government, capital, and western farmers. While the government secured control of the mineral-rich coastal region, the CPR was ensured access to growing industry in the BC interior. Eastern capital enjoyed its new market for implements in the prairies, and farmers received the benefit of government regulation over freight rates, which relieved some tension from the cost-price squeeze.
Figure 3.1. Pages from the Crow’s Nest Pass Agreement, 1897, showing freight reductions. Courtesy of Library and Archives Canada. Reference numbers e000008100 to e000008109.

[original in colour]
The *Crow’s Nest Pass Agreement* required freight reductions on specific goods heading in specific directions. Of particular future importance would be the required three-cent reduction on grain and flour moving east for export from Fort William. Based on the freight rates at the time, this meant a reduction in grain and flour shipments to 0.5 cents per tonne/mile or an average of 15 cents per bushel (Government of Canada 1982). This would become known throughout history as the “Crow Rate”. The Agreement stated that “no higher rates than such reduced rates and tolls shall be hereafter charged by the company upon any such merchandise carried by the company between the points aforesaid” (Government of Canada 1897:5).

The details of the *Crow’s Nest Pass Agreement* clearly illustrate the governmental agenda of its day: building a national economy through a dual focus on staples export and domestic industry. The dominant policy paradigm of the time favoured development assisted by strong government intervention. This continued through the inter- and post-war years of the 1920s to 40s, during which the Crow Rate was expanded to include additional railways, ports, and commodities. This regulatory paradigm was buttressed by the dominant public mood of the era. The 1920s and 30s were a time of agrarian collectivism and farmer protest against the extractive power of grain companies, the uncertainty of commodity prices on an international market, and high input costs due to tariff-protected goods from the east (Fowke 1957/1973; McCrorie 1964; Rennie 2000). Government intervention was a source of protection for farmers, and government policy was a venue for exercising their democratic agency.
Setting the agenda: Taking aim at the Crow

Issues earn a spot on the policy agenda in a number of ways. They can be brought to the government’s attention through notable statistical trends, through a dramatic “focusing event” that draws attention to the issue, or even through feedback on past policies (Kingdon 2003). In the case of the Crow, policy entrepreneurship played the most significant role, successfully drawing public and governmental attention to the issue and keeping it there for over 50 years.

By the 1950s, the CPR and CNR had begun to complain loudly about losses caused by the Crow Rate. Grain cars and other grain transport infrastructure were allowed to fall into disrepair as the railways refused to invest in what they saw as unprofitable grain transport (Storey 2006). Positioning themselves as policy entrepreneurs, the two railway companies began to push for an end to the historic Crow Rate.

From the 1950s to 1980s, a number of governmental commissions, inquiries, and reports documented the situation of western grain transport. These also kept the Crow issue on the government’s agenda. The policy alternatives presented in each report reveal a gradual shift in the broader policy paradigm: one that moved away from government intervention in support of export-oriented agriculture and toward a deregulated, free-market approach to agriculture as “industry”.

The first of these was the Turgeon Royal Commission on Transportation of 1948 to 1951, headed by former Attorney General and MLA for the Saskatchewan Liberal Party, W.F.A. Turgeon. The purpose was to investigate any regional disadvantages caused by the current freight rate system and to make recommendations for changes to
the rate structure (Turgeon 1951). Despite opposition from the CPR and the Board of Transport Commissioners, the Commission ultimately recommended that government continue to control freight rates. The decision was seen as a victory for western Canadian farmers. The Winnipeg Free Press stated that, “the west will thank the Transport Board to attend to its own business and to keep its hands off the Crow’s Nest Pass rates on grain and flour over which it has absolutely no jurisdiction” (Winnipeg Free Press 1952).

The Turgeon Commission’s recommendation reflected the dominant post-war policy paradigm of the day. Federally, the Liberal government was implementing a number of social welfare programs. Saskatchewan had seen the rise of the social-democratic Cooperative Commonwealth Federation (CCF) and its implementation of the first public healthcare system in Canada. Public support for government regulation and social provisioning ran high, and the Turgeon report fit the paradigm perfectly.

Indeed, this paradigm continued to shape policy alternatives into the 1960s. In 1959, the Progressive Conservative government of John Diefenbaker established the Royal Commission on Transportation, which was to be headed by the conservative politician and former Attorney-General of Saskatchewan, M.A. MacPherson. The MacPherson report recommended that government keep the Crow but compensate the railway companies for any losses (MacPherson 1961). The government responded by keeping the Crow Rate intact, but did not compensate the railways. However, the “pay the railways” policy alternative did not disappear entirely. It remained in the policy stream and would re-emerge at key junctures over the coming decades.

By 1967, it had become apparent that a new policy paradigm for agriculture was emerging. Canadian agriculture was being affected by a glut in the international wheat
market (Campbell et al. 1969). The Federal Task Force on Agriculture was created to examine current problems in Canadian agriculture and to suggest policy solutions. The Task Force’s key recommendation was for the Canadian government to facilitate a transition toward larger-scale and industrialized agriculture, with the eventual goal of decreased government involvement by the 1990s. However, the Task Force explicitly recognized the potential social consequences of its suggested economic policies. It recommended a series of social measures, such as educational and income supports for rural areas, to lessen the impact (Campbell et al. 1969). Certainly the report’s attention to social wellbeing increased its palatability in light of the dominant political mood of its day, but it represented a transition in the policy paradigm. Over forty years later, the report’s deregulatory and economic recommendations have indeed become the new norm for agricultural policymaking. Its recommendations for social policy are, for the most part, a vague memory.
Table 3.1. Key Policy Events Related to the Crow

<table>
<thead>
<tr>
<th>Date</th>
<th>Policy Event</th>
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<tbody>
<tr>
<td>1897</td>
<td><em>Crow’s Nest Pass Agreement</em> places statutory freight rates on eastbound grain and flour.</td>
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<td>1918-22</td>
<td><em>War Measures Act</em> temporarily suspends Crow Rate.</td>
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<td>1922</td>
<td>The Board of Railway Commissioners attempts to repeal Crow Rate on behalf of railway companies, but its decision is overturned by the Supreme Court.</td>
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<tr>
<td>1923</td>
<td>Government assumes control of several debt-burdened railways and forms Canadian National Railway (CNR). The added competition does not lead to a decrease in non-Crow freight rates for farmers.</td>
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<tr>
<td>1925</td>
<td>Crow Rate becomes statutory on all rail lines.</td>
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<td>1931</td>
<td>Crow Rate extended to grain shipped through Port of Churchill, MB.</td>
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<tr>
<td>1927-1945</td>
<td>Crow Rate gradually extended to certain feed grains and by-products of milling and brewing industries.</td>
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<tr>
<td>1948-51</td>
<td>Turgeon Royal Commission on Transportation recommends continued government control of freight rate. It assigns to government the cost of maintaining isolated track between Sudbury and Thunder Bay.</td>
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<tr>
<td>1959-1961</td>
<td>MacPherson Royal Commission on Transportation attributes annual railway losses of approximately $22.3 million to the Crow. It recommends keeping the Crow but with a government subsidy to railways.</td>
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<tr>
<td>1967</td>
<td>Pearson government passes <em>National Transportation Act (NTA)</em>, which implements the MacPherson Commission’s recommendations on branch line abandonment, but preserves several thousand kilometres in “public interest”. Due to strong western resistance, its attempt to include government compensation to railways in the NTA fails.</td>
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<tr>
<td>1977-78</td>
<td>Federal government (following the NTA) purchases 10,000 grain hopper rail cars and spends $700 million on branch line rehabilitation.</td>
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<tr>
<td>1975-77</td>
<td>Hall Commission of Inquiry into branch lines recommends protection of some branch lines and abandonment of others; it recommends maintaining the Crow Rate, but with government subsidies to the railways. This recommendation was not implemented.</td>
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<td>1976, 1980</td>
<td>Commission on the Costs of Transporting Grain By Rail (Snively Report) finds that the Crow has resulted in losses to railways.</td>
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<tr>
<td>1982</td>
<td>Gilson report recommends eliminating Crow Rate, with “Crow Benefit” payment to both railways (19%) and producers (81%).</td>
</tr>
<tr>
<td>1982</td>
<td>Liberal Transport Minister Jean-Luc Pepin presents “Pepin Plan” to eliminate Crow.</td>
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<tr>
<td>1983</td>
<td><em>Western Grain Transportation Act</em> eliminates Crow Rate but limits farmers’ share of freight costs to 10% of world grain price. Freight rates nearly triple over next decade. The difference between farmers’ rates and cost of service (“Crow Benefit”) will be paid to the railways.</td>
</tr>
<tr>
<td>1985</td>
<td>G.C. Hall report on the Committee of Inquiry on the Crow Benefit Payment recommends payment of Crow subsidy to farmers.</td>
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<tr>
<td>1992</td>
<td>Progressive Conservative government initiates public consultations on western transportation (“Transportation Talks”), carried out by a private consulting firm and Harvest Foods. Its report (Peat Marwick Stevenson &amp; Kellogg and Harvest Foods Ltd. 1992) finds that support for Crow Benefit payment depends on region, with majority of Saskatchewan respondents in favour of maintaining the Crow.</td>
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<tr>
<td>1993</td>
<td>Progressive Conservative government cuts Crow Benefit by 10% as part of fiscal cutbacks.</td>
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<tr>
<td>1995</td>
<td><em>Western Grain Transportation Act</em> (and Crow Benefit) repealed. Government provides one-time producer compensation of 1.6 million and legislates steps to fast-track branch line abandonment.</td>
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<tr>
<td>1995</td>
<td><em>Canadian Transportation Act</em> imposes rate cap on railways.</td>
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<tr>
<td>2000</td>
<td><em>Canadian Transportation Act</em> is amended to replace rate cap with revenue cap.</td>
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The Crow continued to be a hot issue over the next two decades, with economic discourse dominating the discussion. New policy entrepreneurs, such as the Canadian Cattlemen’s Association, entered the debate. They argued that eliminating the Crow would benefit the cattle industry by reducing the price of feed grain. The railways continued to cite profit losses from the Crow and to neglect grain transport infrastructure (Kroeger 2009). The federal government tried to hold the pieces together by purchasing hopper rail cars and rehabilitating branch lines in the late 1970s (Government of Canada 1982).

When the Liberal government of Pierre Trudeau was re-elected in 1974 with a majority but very few western seats, policy entrepreneurs inside and outside government presented various alternatives for the rail system. In 1975, Justice Emmett Hall conducted a Commission of Inquiry into the issue of branch lines. His report reiterated the recommendations of the MacPherson Commission 16 years earlier, advising government to keep the Crow but compensate the railways for Crow-related losses. Eliminating the Crow, Hall said, “would be a violation of promises made the producers of Western Canada” (Hall 1977:336).

Nonetheless, policy entrepreneurs inside of government were busy at work on the Crow issue. Canadian Wheat Board minister Otto Lang of Saskatchewan proposed two policy alternatives: in one case, the Crow would be eliminated and farmers would be compensated on a continual basis by the creation of a Crow Rate Fund; in the second case, the Crow would be eliminated and farmers offered a one-time payout (Kroeger 2009). Uproarious backlash from the west forced Lang to back down; however, he left
his mark on the debate by commissioning Carl Snavely, an American expert on railway
costs, to conduct the Commission on the Costs of Transporting Grain by Rail.

Snavely issued the first of several reports in 1976, after consulting a diverse
committee of representatives from the two railways (CPR and CNR), the provincial
governments of BC, Alberta, Saskatchewan, Manitoba, and Ontario, agricultural
organizations such as the United Grain Growers (UGG), the provincial wheat pools, and
the National Farmers Union (NFU) (Snavely 1976). The report concluded that the
railways were indeed experiencing losses from the movement of statutory grain. It stated
that the railways’ costs in running this grain exceeded the total income for it (from users
and the government combined) by approximately $53.2 million (Snavely 1976).

After the short-lived minority Progressive Conservative government of Joe Clark
was defeated on a budget vote, the Trudeau Liberals were returned to office in 1980 with
no western seats. Trudeau appointed Jean-Luc Pepin, a former political science professor
at the University of Ottawa, to be the Minister of Transport. It soon became clear that
something was going to be done about the Crow. In many circles, conversation turned
from the question of whether the Crow would be eliminated to the question of how it
would be eliminated and what its successor arrangements would be. Politics determined
which policy options were considered tenable. Eliminating the Crow without
compensation to western farmers was not an option for the Liberal government, as this
would further damage the government’s already weak relationship with the west. The
policy alternatives therefore focused on “method of payment”. Would the statutory rate
be eliminated with a compensatory payout to producers, or would the government
compensate the railways while keeping farmers’ rates stable?
Outside of government, farm groups took solid stances on the issue. The Commodity Alliance, an umbrella organization of commodity groups promoting a free-market ideology, pushed for elimination of the Crow Rate with acreage-based compensation to farmers (Jaques 2001). Concerned about the continued effects of the Crow on the quality of grain transportation and export, the three prairie wheat pools and the United Grain Growers worked together under the banner of the Western Agricultural Conference and advocated retaining the Crow temporarily, but hesitantly agreed to some future compromise on cost sharing (Jaques 2001). The National Farmers Union maintained a strong pro-Crow stance and pushed for its preservation.

The strongest support for the Crow was in Saskatchewan. More than Manitoba or Alberta, Saskatchewan was a centre for prairie grain production. With most of its grain-producing regions located far from the major ports at Vancouver and Churchill, its producers stood to lose most from the elimination of the Crow (Kroeger 2009). Its political mood, furthermore, had been profoundly shaped by a history of social-democratic politics and agrarian activism.

Amidst great opposition from farm organizations and the provincial government of Saskatchewan, Pepin introduced Bill C-155, the Western Grain Transportation Act, which became law on November 23, 1983. With this, the Crow Rate was officially eliminated. The first steps toward deregulating western grain transport had been taken. Instead of the statutory rate, the Act limited farmers’ share of freight costs to 10 percent of the world price in grain. It allowed the railways to set freight rates at a level that ensured their return on equity. The government was to pay the difference between the railways’ prices and the farmers’ rate, which in the first year amounted to a payment of
$658.6 million (B. Bell, Canadian Transportation Agency, personal communication, August 5 2011). This government payment soon became known as the “Crow Benefit”. Over the next decade, farmers saw their freight rates increase from $5.25/tonne for a 1000-mile haul to $14.72 for the same distance (B. Bell, Canadian Transportation Agency, personal communication, August 5 2011). However, the Act did require regular reviews of rail system costs by the Canadian Transportation Agency.

The Crow Benefit did not bring an end to the Crow debate, and an air of impermanence surrounded the new legislation. Over the next decade, western diversification became a key issue. Commodity groups representing the processing sector, such as the Canadian Oilseeds Processors Association and the Canadian Meat Council, spoke out publicly against the Crow Benefit (Munro 1993). They argued that it encouraged export-oriented grain production at the expense of domestic diversification. Just as many western farmers had a vested interest in maintaining the Crow Benefit, these groups had an interest in its repeal: an end to the Crow could ensure a ready source of oilseed inputs for the processors and low-cost feed grain for feedlot operators in the cattle sector. One way or another, everyone seemed to have an interest in the Crow.

By the mid 1980s, internationalization and free trade had captured national attention. Despite campaigning otherwise, Brian Mulroney’s Progressive Conservative party promptly endorsed a free trade agenda after its election in 1984 (Bradford 2000). Rather than disappearing from the agenda, the Crow debate took an increasingly international tone. Policy alternatives were shaped by this new, neoliberal policy paradigm. Critics argued that the Crow constituted an export subsidy that might be targeted in the General Agreement on Tariffs and Trade (GATT) negotiations, and the
PC government began to chip away at the Crow. In 1993, it cut the Crow Benefit by 10 percent. The move clearly did not endear the PC government to western voters. In the next federal election of 1993, the party won no seats in the prairie provinces as Canada elected a Liberal majority government under Jean Chretien.

Nonetheless, the free trade fascination of the 1990s had opened a policy window for the final elimination of the Crow. The newly elected Liberals saw the Crow Benefit as a barrier to their trade liberalization goals and in 1994, the Minister of Transport announced that the Crow policy would again be changed (Government of Canada 1994). Minister of Agriculture Ralph Goodale described the Crow elimination as part of “the requirements of the new GATT agreement” (Government of Canada 1995a:1620). Goodale promoted a producer payout as his favoured policy alternative to the Crow. Federally and in Saskatchewan, New Democrats protested the coming move, arguing that any change to the Crow would have dramatic social and economic consequences for the prairies. Some eastern members of parliament promoted a more extreme approach to the Crow elimination. Yvan Loubier, finance critic for the Bloc Quebecois, argued that western producers should not receive compensation because eastern producers had not received similar treatment (Government of Canada 1995b).

In 1995, the Liberal government eliminated the *WGTA* as part of budget bill C-76. Farmers would now pay the entire cost of freight shipment. The government provided a one-time payout of approximately $1.6 billion to producers through the Western Grain Transition Payments Program; this was allocated to provinces based on their historic share of the Crow Benefit (Doan, Paddock, and Dyer 2003). Although the railways could now increase freight rates, the government did impose a maximum freight
rate, or “rate cap” under the *Canadian Transportation Act* (B. Bell, Canadian Transportation Agency, personal communication, August 5 2011). All these changes elicited protest from provincial Transport Ministers in Alberta, Saskatchewan, and Manitoba, who argued that the *CTA* would not ensure adequate competition in the rail sector and that it unloaded large responsibility for road damage onto the provinces (Government of Saskatchewan 1995). The WGTA elimination had dramatic effects for farmers. Between the 1994-95 and 1995-96 crop years, the average cost paid by farmers for an approximately 1000-mile haul jumped from $14.72/tonne to $31.82/tonne (B. Bell, Canadian Transportation Agency, personal communication, August 5 2011).

Farmers’ freight rates rose modestly over the next five years, remaining below $35/tonne until 2000. In 1999, the federal government amended the *Canada Transportation Act* to remove the rate cap system and imposed instead a revenue cap for railways on hauling of western grain. The railways would now have full control over the freight rates charged to farmers, with the caveat that their net revenue not exceed the ceiling as determined by the Canadian Transportation Agency (*Canada Transportation Act* 1996). The revenue cap system remains in place today. Excess profits from railway transport are provided to the Western Grains Research Foundation, a non-profit organization that invests in the development of new wheat and barley varieties. The current system has been heavily critiqued by organizations such as the NFU, Canadian Wheat Board, and Producer Car Shippers of Canada. These organizations have argued that because the cap is on net revenue, the railways may simply redirect any excess revenue to other areas, such as shipping incentives to grain companies (Ewins 2001; Producer Car Shippers of Canada 2012).
Current freight rates vary by commodity, location, and destination; however, a
typical example is the cost of shipping from a farm located midway between
Saskatchewan Landing Provincial Park and Elrose, Saskatchewan, in the southwest
quarter of the province. From this farm location, comparing the costs at the 4 nearest
terminals, the freight rate ranges from a low of $38.66/tonne for wheat to a high of
$43.06/tonne for malt and feed barley (Rosaasen, Skotheim, and Lokken 2011). Shippers
can “price shop” to seek lower prices at other locations, but must also consider the cost
of trucking to further locations and availability of trucking incentives.

The rise and fall of the Crow policies is a case study in agenda-setting and policy
formulation. From a policy perspective, there were three key factors that determined the
final outcome of the Crow case: policy entrepreneurship, events in the political stream,
and policy paradigms. Due to the power and persistence of policy entrepreneurs on both
sides of the debate acting both inside and outside government, the issue remained on the
policy agenda for 50 years without definitive resolution. While other issues rose and fell,
the Crow debate persisted. Actors from outside government, including railways,
commodity groups, and farmers’ organizations, used the policy subsystem as a
democratic space for the pursuit of collective interests. They saw policy as a source of
agency and pushed for their favoured policy alternatives. While doing this, they ensured
that the Crow remained a policy problem on the government’s agenda.

Politics determined which policy alternatives were considered viable solutions to
this problem. Although it was certainly an option for various governments to simply
eliminate the Crow without any kind of compensation to farmers – indeed, this
alternative was promoted by eastern members of parliament – there was misalignment
between the policy and political streams in this regard. Two successive Liberal
governments had an opportunity to implement this alternative, but weak political support
in the west prevented the governments from taking such definitive action, which would
have further damaged their relationship with western voters.

The Crow was alternately buoyed and deflated by the dominant policy paradigms
of its day. From the agrarian protests of the early 1900s through the post-war welfare
state era, policy paradigms favoured government regulation and intervention and,
accordingly, they favoured the Crow. It was the internationalization of the policy
paradigm that facilitated its demise, as the Crow’s legality under new free trade regimes
came into question and created a policy window for government to act. For decades,
policy entrepreneurs had constructed the Crow as a policy problem and presented various
policy alternatives. The rise of a neoliberal policy paradigm provided the necessary
alignment of the problem, policy, and political streams. This facilitated the elimination
of a century-old policy. The next case study discusses a policy that was born into this
new, neoliberal global paradigm. As we shall see, the story of Plant Breeders’ Rights
reflects the more corporatized and globalized paradigm of its day.

Policy Change Study 2: Plant Breeders’ Rights

Compared to the Crow, the plant breeders’ rights story is relatively recent. Developments
are currently unfolding and the long-term effects remain to be seen. PBR legislation was
first enacted in Canada in 1990 through the federal Plant Breeders’ Rights Act. The
legislation, which is a form of intellectual property right (IPR), provides the developer of
a seed or plant variety with exclusive rights over the sale of that material. The World
Trade Organization (WTO) Agreement on Trade-Related Aspects of Intellectual
Property Rights (TRIPS) does not govern IPR of plants and animals, but it requires governments to implement their own stand-alone ("sui generis") legislation in this regard. As a result, there are two different forms of legal protection for Canadian plant breeders: patents and PBR.

In Canada, patent rights are reserved for gene sequences, as patents are not supposed to apply to whole plants or animals. PBR, which may be considered a “weaker” form of IPR, does cover these whole entities. Although often confused with patented seeds, PBR-protected seeds can be cleaned and reused by the farmer who purchased them; this is known as the “farmers’ privilege” and is not an option in the case of patented seeds, where it would constitute patent infringement (Lesser 2007). At the farm level, PBR legislation has two main effects: first, it imposes a royalty fee on seed growers who purchase PBR protected varieties and reproduce them for sale. This fee is returned to the breeder as profit. The royalty increases seed growers’ costs and is usually also passed on to farmers who purchase PBR-protected seed. Second, it prevents farmers from selling protected varieties of seed that they have reproduced on their farm (although the farmer can clean and reuse the seeds her/himself).

In order to qualify for PBR protection in Canada, a seed or plant must meet four specific criteria: it must be considered new, distinct, uniform, and stable (UPOV 1991). This set of regulations is laid out by the International Union for the Protection on New Varieties of Plants (or UPOV, by its French acronym), of which Canada is a member. All UPOV member countries are signatories to the International Convention for the Protection of New Varieties of Plants. The Convention extends Canadian plant breeders’ rights into all other member countries and applies national treatment rules amongst its
signatories, which allows plant breeders to collect royalties on their varieties if sold in other UPOV member states. Thus, the Convention is a way of ensuring PBR transnationally. The UPOV convention was first signed in 1961 and was updated in 1972, 1978, and 1991. Canada implemented its PBR legislation in 1990, one year before the UPOV convention was updated to its current version (i.e., UPOV 91); as a result, Canada is held to the rules of the earlier convention signed in 1978 (i.e., UPOV 78). Since 1998, the federal government has twice attempted to amend its PBR legislation in order to conform with UPOV 91, which extends PBR further than its predecessor agreements. The subject has been a matter of debate and intervention by a number of policy entrepreneurs. This section traces these developments.

The current debate must be situated in its historical context. Kuyek (2007) has posited three “seed regimes” in Canadian history after European colonization. Throughout these three regimes, “control over seeds has passed from farmers to the state and now to corporations” (Kuyek 2007:32). The first regime lasted from the early 1800s until the mid-1990s. It featured plant breeding primarily by farmer-settlers as well as some small private companies and government research farms (Buller 1919; Kuyek 2007). They adapted seed varieties from local indigenous communities and from the settlers’ European homelands (Kuyek 2007), seeking varieties that would be well suited to the local climate. The discovery of wheat varieties like Red Fife and Marquis, which suited the often-harsh prairie region, solidified the region’s position as “the Granary of the British Empire” throughout the late 1800s and early 1900s (Buller 1919:34). The prairies became a producer of grain monocultures destined for export.
Although the first government-run experimental seed farms had been established in the 1880s (Buller 1919), Kuyek (2007) pointed out that these farms were mostly limited to supporting farmers in their own development efforts. The introduction of the *Seeds Act* in 1923 brought about a new era of regulated and state-run seed development, which constitutes the second seed regime (Kuyek 2007). The *Seeds Act* established a system of variety registration. It was intended primarily to ensure quality seed for producers by making seed performance tests a requirement for registration (Curren 1990). The *Act* also prevented the marketing of seed under a registered variety name (Galushko 2008). However, this was done with an eye to the public interest, and farmers were allowed to reproduce and sell new certified varieties amongst themselves (Kuyek 2007).

Seed breeding remained a public endeavour into the 1980s, with over 95 percent of it occurring in public institutions (Kuyek 2007). Most of these publicly produced varieties were marketed through SeCan, a voluntary association of seed growers, which collected royalties on these varieties and returned them to breeders (Curren 1990). In this sense, a “partial” PBR system already existed in Canada to some extent (Curren 1990:12). By the 1970s, however, there was movement toward a more comprehensive PBR system.

The discussion began with a conference held at the University of Guelph in 1971, which concluded that some form of variety protection would be desirable in Canada (Curren 1990). The Canadian Agricultural Services Coordinating Committee, a committee of experts that was part of Agriculture Canada at the time, took up the recommendation and pushed Agriculture Canada to pursue a policy on PBR. Meanwhile,
other policy entrepreneurs entered the discussion. In 1977, the Canada Grains Council hosted a conference on the subject of PBR, to which it invited representatives of the federal government, the Canadian Seed Trade Association, a university plant scientist, and plant breeders from private and public institutions. All representatives commented positively on PBR and encouraged its development in Canada. It is notable that no farmers’ organizations were represented amongst the speakers (Canada Grains Council 1977), although this is not surprising as the Council’s membership consists mainly of agribusiness corporations and commodity groups (Canada Grain Council 2004).

At the same time, several farmer-based organizations and NGOs protested the potential expansion of PBR in Canada. The Canadian Organic Growers (CGO) expressed concern that PBR might increase the use of chemicals in agriculture as new varieties were genetically engineered for chemical use (Macey 2005). Nonetheless, by 1978 a bill had been drafted by the Department of Justice and the formal PBR legislation was introduced into Parliament by 1980 (Government of Canada 1989). It was the subject of a parliamentary debate that year, during which the NDP members of the House expressed concern over the potential of PBR to enhance corporate control of agriculture (Government of Canada 2002). Indeed, agricultural corporations with an interest in vertical integration had begun to set their sights on the seed sector (Kuyek 2007), where they could create and expand new markets through proprietary knowledge and the patenting of new crop varieties. Thus began the third, and current, seed regime. It is characterized by “state intervention to facilitate corporate efforts to harness the seed system for corporate objectives” (Kuyek 2007:41).
This intervention was apparent by 1980, when the Minister of State for Science and Technology appointed Maurice Brossard, director of business operations for the Quebec research university Institute Armand-Frappier, to chair a federal Task Force on Biotechnology. The task force membership was markedly different from those discussed previously. The various commissions and inquiries into the Crow issue had been carried out primarily by academics or legal experts, who then consulted with farmers, agribusiness representatives, and other stakeholders. Although each of these actors certainly had a particular political affiliation or ideological perspective on the issue being studied, the 1980 Task Force on Biotechnology was unique in its explicit inclusion of corporate interests in the task force itself.

The ten-person committee included Robert Bender, president of BIOLOGICALS, a biotechnology company. His company would receive a patent for DNA synthesis two years later (Bender and Duck 1982). The task force also included a director from the John Labatt corporation, a well-known beer company. Other members included two representatives of private pharmaceutical and biotechnology laboratories, a director from a private pulp and paper research institute, four academics from Canadian universities, and a policy advisor from the Ministry.

The purpose of the task force was to advise the Ministry on suitable policies and programs to develop biotechnology in Canada (Brossard 1981:iv). The task force’s 1982 report strongly promoted expansion of biotechnology in a number of areas, including plant species, and warned that “if Canada’s resource industries fail to innovate through biotechnology, their competitiveness in world markets will be jeopardized” (Brossard 1981:3). The report recommended tax write-offs for the biotechnology industry and its
investors, as well as salary supports and direct government assistance to private biotechnology firms in their start-up phase (Brossard 1981). The report recommended that research grants to academic researchers “be used to encourage interdisciplinary efforts focussed on the needs for industrial biotechnology” (Brossard 1981:4).

The task force also encouraged the adoption of PBR legislation. The only area in which it hesitated was the issue of compulsory licensing, which allows the government to override PBR if necessary for the public interest (Canadian Food Inspection Agency 2010). It also ensures that royalty rates are kept reasonable (Canadian Food Inspection Agency 2010). The task force recommended careful review of this provision “to ensure that it does not defeat the intent of the legislation” (Brossard 1981:6). Overall, the task force report’s emphasis on private, corporate development of biotechnology is clear. Many of the task force’s recommendations support Kuyek’s assertion of a shift from a public to private seed regime during the 1980s (Kuyek 2007).

The first PBR bills were introduced into parliament in 1980 and again in 1988, although neither reached its second reading. The first, Bill C-35, died when parliament was dissolved for the 1984 federal election, which saw the Liberals defeated by a majority Progressive Conservative government led by Brian Mulroney. The PC government introduced its own PBR bill, C-107, in 1988. It contained the basic provisions to comply with UPOV 78: it provided plant breeders with the exclusive right of sale over their varieties but did allow personal re-use by farmers (Curren 1990). The Bill also contained the aforementioned compulsory licensing provision that allowed the government to restrict PBR if necessary for the public interest (Curren 1990). Like its predecessor, Bill C-107 did not reach its second reading before the election of 1988.
The government soon re-introduced the *Plant Breeders’ Rights Act* through Bill C-15, which was almost identical to the previous bill (Curren 1990). The National Farmers Union and the COG spoke out against the bill during its deliberation. Opponents of PBR argued that it would lead to rising seed costs for farmers as varieties became a source of profit for companies. They expressed concern that PBR could result in declining support for public breeding and the domination of seed production by just a few multinational corporations, and also argued that proprietary systems would prevent the sharing of genetic material between breeders who, prior to the introduction of PBR, were working together for the public good (Curren 1990). Industry representatives, commodity groups, and some plant breeders countered with arguments that PBR would stimulate production of higher yielding and more disease-resistant seeds, which would be ultimately beneficial to farmers (Curren 1990). They argued that PBR could also stimulate public systems by allowing even public breeders to collect royalties (Curren 1990). Discussions in the legislative committee took similar dimensions, with Liberal and NDP members questioning the consequences for public breeding programs and Don Mazankowski, the Minister of Agriculture under the majority Progressive Conservative government, stridently defending his party’s legislation (Government of Canada 1989).

Despite the opposition, the Bill was successful and the *Plant Breeders Rights Act* came into force in 1990. Since then, there have been several attempts to amend the legislation to comply with UPOV 91. In order to comply with this international convention, Canada would be required to extend PBR from the current 15-year term to 20. Beyond this, the issue of “farmers’ privilege” has taken centre stage in recent debates. As it stands, the UPOV 91 agreement does not allow farmers to reuse harvested
material as seed; however, it contains an optional provision (Article 15, para 2) that allows national governments to preserve “farmers’ privilege” at their discretion (UPOV 1991).

The UPOV 91 convention allows the plant breeder to collect royalties not only on seed, but also on harvested grain produced from it (Canadian Food Inspection Agency 2011; UPOV 1991). Another key difference between UPOV 91 and its precursor is an addition to Article 15, which extends PBR to the act of “conditioning [i.e., cleaning] for the purpose of propagation” (UPOV 1991). The NFU has expressed concern about the implications of these changes for farmers. It argued that UPOV 91 could allow royalties to be collected at cleaning plants and grain elevators on grain produced from farm-saved seed, essentially eliminating the “farmers’ privilege” (National Farmers Union n.d.). Although the federal government has stated that the provision on seed conditioning will not affect farmers’ ability to have their farm-saved seed professionally cleaned for re-use (Canadian Food Inspection Agency 2011), farm groups have expressed concern about what how this may actually manifest (National Farmers Union n.d.).

The first attempt to implement UPOV 91 was in 1999, when amendments to the Plant Breeders’ Rights Act were included as part of Bill C-80, the Canada Food Safety and Inspection Act. It proposed extending the term of PBR from the current 18 years to 25 years (Government of Canada 1997). Bill C-80, which covered multiple areas of legislation, met with strong opposition and never passed. The policy window on UPOV 91 amendments was closed, and remained that way for five years.

The window reopened in 2004 with the release of the Report of the Seed Sector Advisory Committee. The report was the product of an industry-led review, known as the
“Seed Sector Review”. It was conducted by the Canadian Seed Trade Association (CTSA), Canadian Seed Institute (CSI), Canadian Seed Growers Association (CSGA), and the Grain Growers of Canada (GGC) (Government of Canada 2007). The review received $1 million in funding from the federal government (Adolphe 2005). The purpose was to assess the regulatory structure governing the Canadian seed industry and to make recommendations for future changes that would benefit the seed industry.

Farmers’ organizations expressed concern about the lack of farmer representation in the committee. The Saskatchewan Association of Rural Municipalities (SARM), for example, questioned the committee’s lack of specifically western farm representation (Pilsner 2004).

Many farmers’ organizations, including the NFU and SARM, were critical of the report and were particularly concerned about the committee’s suggestions for increasing the use of certified seed (i.e., seed produced from plant breeders’ protected varieties). These suggestions included linking the use of certified seed to lower crop insurance premiums and charging royalties on seed re-used by farmers. The organizations expressed concern about the increasing power these changes would provide to seed companies and the associated rising costs for farmers (National Farmers’ Union 2004; Pilsner 2004). Many organizations also responded to the report’s suggestion that Canada amend its PBR laws to align with UPOV 91. In response, the NFU launched a major public campaign to raise awareness of issues in the seed sector and promoted a public seed breeding system (National Farmers Union n.d.). Religious groups also became engaged as policy entrepreneurs in their own way. The United Church of Canada and the Catholic Women’s League of Canada passed resolutions and issued reports to promote
farmers’ right to reuse seeds (Catholic Women’s League of Canada 2005; United Church of Canada 2003).

Although the Seed Sector Review committee’s specific recommendations have not yet been implemented, it acted was a powerful policy entrepreneur that had the ear of the Canadian Food Inspection Agency (CFIA). Amendments to bring Canadian PBR law in line with UPOV 91 remain on the government’s agenda to date (Canadian Food Inspection Agency 2011), and policy entrepreneurs on both sides of the issue remain active. Research has shown that, since the implementation of PBR in Canada, the private seed breeding industry has grown substantially. A 2001 study reported a decrease in government funding for public breeding since the 1990s, with increased governmental emphasis on public-private partnerships in the sector (Carew 2001). The government’s own 10-year report on the PBR legislation, published in 2002, concluded that the private sector “has increased its investment by almost three-fold since the passage of the legislation” (Canadian Food Inspection Agency 2002:ii). However, the report also indicated that public sector breeding had benefited from the legislation; for example, it had generated $2.9 million per year in royalties for Agriculture Canada’s research stations (Canadian Food Inspection Agency 2002). The producers consulted for the 10-year review felt they bore a disproportionate burden of PBR due to increased seed costs (Canadian Food Inspection Agency 2002).

In 2013, farm and social justice organizations including the Canadian Biotechnology Action Network (CBAN), the National Farmers Union (n.d.), and the Council of Canadians, are expressing concern about a pending free trade agreement between Canada and the European Union. They say it could commit Canada to the
UPOV 91 regulations. The NFU obtained a leaked draft text of the agreement and expressed concern about the implications of the agreement for patent rights. In particular, the organization was concerned that the trade agreement could allow the seizure of farmers’ assets if suspected of seed patent infringement (National Farmers Union n.d.). The NFU is currently petitioning the Canadian government on this issue.

As a recent case study, the story of PBR is an example of increasingly international and corporate-driven agricultural policy. Although railway companies and farmer-owned grain companies were powerful policy entrepreneurs during the Crow debates, the implementation of PBR is marked by corporate intervention at a level unseen in the Crow case study. Both major inquiries into the PBR issue were directed by corporate and private interests: the 1980 Task Force on Biotechnology consisted primarily of industry representatives and the Seed Sector Review of 2004 was an industry-led initiative aided by public funding.

The case of PBR also illustrates the powerful role of international policy regimes in shaping domestic policy. Howlett and Ramesh (2003) argued that international agreements and conventions can limit governmental decision-making. However, in the case of PBR, the UPOV convention acted less as a limit on government and more as a tool for plant breeders (acting as policy entrepreneurs) to push government toward implementing particular legislation that would enhance their profit. Similarly, the introduction of free trade agreements acted as an important bargaining chip for policy entrepreneurs (both inside and outside government) who sought to eliminate the Crow Benefit.
Despite their obvious differences in time and subject matter, both policy changes discussed in this chapter were marked by intense debate between actors in the policy subsystem. The role of government was at the heart of both debates. Crow proponents wanted government regulation to prevent excessive profit-taking by railway companies at the expense of farmers, while the railway companies and some commodity groups saw an opportunity to increase their profit through a deregulated system. These roles were reversed in the case of PBR. Corporate and private interests pushed for increased government intervention (at both national and international levels) that would enhance their profitability, while concerned actors working from a social justice orientation rejected this form of government intervention.

The case of PBR exemplifies Stephen Gill’s notion of “new constitutionalism”. New constitutionalism is “a governance process that effectively locks in national and international commitments to market-based frameworks of accumulation and distribution” (Bakker and Gill 2008:19). Whereas deregulation is the elimination of government involvement in a particular area in favour of free-market operations, new constitutionalism is a type of “re-regulation”. States enter into agreements and implement legislation that actively facilitates more transnational and business-focused modes of governance. The Crow was a case of deregulation; PBR is new constitutionalism. In both cases, the change has empowered agribusiness interests and thereby reinforced the neoliberal policy paradigm. This chapter has presented the views of the significant policy entrepreneurs who both contested and facilitated a change in the dominant policy paradigm. There is little research on the direct effects these changes
have had on the lives of agricultural actors at the micro-level. Chapter 6 will explore the effects of both policy changes on the everyday lives of farm women.

CLIMATE CHANGE: TRENDS, PROJECTIONS, AND EFFECTS

Farmers worldwide are dependent on the weather for their livelihoods, but it is an area over which they have little control. Predicted changes in climate can lead to even less certainty in the future, especially in the absence of significant policy intervention.

Climate change is defined as a statistically identifiable change in the mean or variability of the climate over an extended period, such as a decade or more (Intergovernmental Panel on Climate Change 2007:30). There are indeed naturally occurring cyclical changes in the climate (Sauchyn and Bonsal 2012). However, an overwhelming majority of natural scientists agree that human activity is causing climate change (Intergovernmental Panel on Climate Change 2007; Oreskes 2004; Powell 2011). Human activities, including the burning of fossil fuels for transport and industrialized agriculture, emit greenhouse gases such as CO₂ that cause global warming (Weis 2010). Global warming alters and amplifies these natural cycles of climate variability, leading to unpredictable climatic change (Sauchyn and Bonsal 2012; Sauchyn 2010). Indeed, in the United Nations Framework Convention on Climate Change (UNFCCC) (1992), the definition of climate change is explicitly linked to the direct or indirect effect of human activity on the climate.

Climate data shows that the total area of “very dry” climate worldwide has doubled since the 1970s, and this will be exacerbated as anthropogenic (i.e., human-induced) climate change progresses (Dai et al. 2004). Global CO₂ emissions are expected to increase by an additional 40 percent by 2030, leading to even more global warming
Future climate change scenarios are complex and vary by location, but the Intergovernmental Panel on Climate Change (IPCC) generally predicts increased frequency of extreme climate events across the globe (Field et al. 2012). Unprecedented climate extremes have begun to manifest in many regions of the world. The past decade has seen climate-related migration and some of the first climate refugees from small island nations, such as the Carteret Islands of Papua New Guinea, which are at risk from rising sea levels. Australia has recently experienced record drought levels and associated problems with wildfires.

Since the prairies already have one of the most variable climates in Canada (Sauchyn 2010), this important agricultural region can expect dramatic changes including “increased climate variability and a larger range of extreme events” (Sauchyn and Kulshreshtha 2008; Sauchyn 2010:38). In particular, more severe and long-lasting droughts are expected for the southern prairies (Sushama et al. 2010), which already has a history of protracted drought. A large part of this region constitutes the “Palliser Triangle”, so named for the explorer John Palliser who declared the region unsuitable for agricultural production when he first visited during a dry period of the mid-1800s (Warren and Diaz 2012). This area is now a key site of agricultural production, but Palliser’s remarks show both the vulnerability of the region to drought and the importance of human adaptation.

Weather stations on the Canadian prairies have shown an increase in overall temperature of 1.6 degrees since the period of instrumental record began in 1895 (Sauchyn and Kulshreshtha 2008). Dramatic climate extremes have occurred in recent years, with rapid fluctuations between drought and flood that prove very taxing for
public disaster support programs. Parts of the prairies experienced drought in 2009, which was immediately followed by extreme flooding in 2010, 2011, and again in 2013. The 2010 floods resulted in government expenditures of $956,350,000 and the evacuation of 2065 people throughout southern Alberta and Saskatchewan (Government of Canada 2011a). Several communities in the drought-prone Palliser Triangle were among those most affected by these floods. In June 2013, extreme rainfall caused flooding that affected several Alberta communities near the Bow and Elbow Rivers, particularly Calgary, Canmore, High River, and the Siksika First Nation. The floods caused four deaths and evacuation of over 100,000 people (CTV 2013; Ogrodnik 2013).

Social factors on the ground also determine how, and to what extent, human populations will be affected by climate extremes when they occur. Several key concepts are used to discuss the social dimensions of climate change. First, in order for human populations (or animal populations, or infrastructure, for that matter) to be affected by climate extremes, they must be present in the area where the event occurs. This rather obvious concept is referred to as exposure. Exposed populations can experience varying levels of vulnerability to climate extremes. Although the concept has been used in a variety of ways (Adger 2006), vulnerability can be defined simply as the predisposition to be affected by an extreme climate event (Field et al. 2012). Vulnerability is determined by a variety of social, historical, political, and institutional conditions (Field et al. 2012), including the presence of physical capital or infrastructure (e.g., dams and bridges), economic capital (e.g., income levels and sources of income), social capital (e.g., community support networks), and institutional resources (e.g., government disaster payments).
Vulnerability is intertwined with coping and adaptive capacity. A system (i.e., an individual, family, community, country, organization, etc.) will be more or less vulnerable depending on its ability to cope or adapt. Coping refers to more reactive, tactical, and survival-oriented strategies in the face of a climate event (Field et al. 2012). Adaptation is more strategic, involving a reorientation of plans and proactive strategies to adapt to current conditions while also preparing for future ones (Field et al. 2012). If a system continues to use its economic and social resources for repeated coping, it is unlikely that adaptive capacity can be built and vulnerability is increased over time (Field et al. 2012).

In Canada, climate change policy addresses mitigation, coping, and adaptation. Large-scale mitigation efforts, such as reduction of greenhouse gas (GHG) emissions, are concentrated at the federal level while emergency response and adaptation planning are a shared responsibility between federal, provincial, and municipal governments. Public Safety Canada, for example, is heavily responsible for disaster mitigation, planning, and response at the federal level. At the provincial level in Saskatchewan, public safety and disaster response, including administration of the Provincial Disaster Assistance Program (PDAP), fall within the mandate of Government Relations. Local governments and organizations are often responsible for local-level disaster response and planning. Extreme climate events exemplify the dramatic “focusing events” described by Kingdon (2003). They can easily and quickly claim a place on the policy agenda due to public safety concerns; this is particularly true of flooding, due to its rapid onset and dramatic consequences.
Anthropogenic climate change is different. Beyond the fact that the very existence of climate change has been (and continues to be) a subject of public contestation (Powell 2011), climate change is an extremely macro-level policy problem that transcends national borders and challenges the economic status quo in oil-dependent economies like Canada’s. Currently, federal climate change mitigation policy has focused on the reduction of greenhouse gas (GHG) emissions in accordance with the non-binding Copenhagen Accord. The Conservative federal government has been heavily criticized for its approach to climate change mitigation, with critics (including, in 2011, Canada’s own Auditor General) pointing to a gap between planning and action. The current government withdrew from the legally binding Kyoto Accord in 2011 and has also been accused of silencing its own climate scientists and reducing funds for public sector climate scientists (e.g., Cuddy 2010). Such issues indicate that mitigation efforts currently claim a peripheral position on the governmental agenda.

*Gender and Climate Extremes*

Canadian climate policy has shown little attention to gender as a determinant of vulnerability and adaptation. For example, the *Federal Adaptation Policy Framework* makes no mention of gender as a determinant of vulnerability (Government of Canada 2011b). Nonetheless, the IPCC (Field et al. 2012) has confirmed that inequality based on social categories like gender, age, socioeconomic class, ethnicity, and ability can affect a system’s ability to cope with an extreme event. This is because climate “disaster risk is socially distributed in ways that reflect the social divisions that already exist in society” (Enarson, Fothergill, and Peek 2007:130). These inequalities result in unequal access to
resources before, during, and after an extreme event, thus affecting both vulnerability and coping/adaptive capacity.

The IPCC recommends increased attention to social inequalities, including gender inequality, in both disaster response and adaptation planning (Field et al. 2012). It is also important, however, to avoid essentializing discourses that treat “women” or “men” as homogenous groups, all of whom are affected by climate events in the same way (Enarson et al. 2007). Other forms of inequality and privilege, such as class, race, location, and ability, will also shape the way gender interacts with vulnerability and must also be attended to.

A significant amount of academic work (e.g., Cannon 2002; Dankelman 2010; Enarson and Chakrabarti 2009) and institutional research (e.g., Kapoor, Rai, and Chowdhury 2011; Kapoor 2011; United Nations Development Programme 2010) has examined the gendered dimensions of climate change in parts of the global South. The attention is largely due to the intersecting problems of gender inequality, poverty, and lack of institutional supports, which exacerbate vulnerability in low-income countries. This literature argues that the intersection between gender and poverty is a key determinant of vulnerability and can worsen the experience of an extreme event (Cannon 2002; Skutsch 2002).

In contrast, it has been argued that higher income nations like Canada may see less dramatic consequences from climate extremes, as higher incomes and government supports act as a buffer to reduce vulnerability and enhance coping capacity (Milne 2005). However, research in the global North has indicated that social differentiation and inequality can have extremely negative consequences, even in wealthy nations. One
example is the documented increase in domestic violence against women in the wake of a climate disaster (Enarson 1999). In their research on gendered impacts of Hurricane Andrew in the United States, Enarson and Morrow (1997) found that women experienced gendered and racial discrimination from aid workers. They also found that, due to socialized gender roles, single women experienced disproportionate difficulties in preparedness and response. Meanwhile, women also held an overwhelming responsibility for holding together families and communities through their waged, unwaged, and volunteer labour.

Research on drought in Australia has shown that the gendered effects of disaster are not always negative. In their work on female cattle producers’ experiences of drought in the 1990s, Stehlik, Lawrence, and Gray (2000) found that coping and adaptation to drought resulted in a reorientation of women’s roles, which increased men’s recognition of women’s contributions to the farm operation. Alston (2006) also found that adaptation to severe drought reshaped power relationships between Australian farm men and women, as women took off-farm work to support the drought-stricken farm operations, therefore assuming a “breadwinner” role for the farm family. Other historical gender roles were further entrenched by drought, however. Farm women continued to assume a supportive, caregiving role for the family and community and to take disproportionate responsibility for domestic and unwaged labour (Alston 2006).

As actors whose livelihoods are almost entirely dependent on the weather, farmers are particularly vulnerable to extreme climate events. Further, as discussed in Chapter 2, farm women play a major role on Canadian family farms. Despite all this, there is very little research that explores the intersection of gender and climate change in
Canada, and even less that is focused specifically on farm women. Simone Reinsch (2009) documented Manitoba farm women’s experiences with bovine spongiform encephalopathy (BSE), a cattle disease with a zoonotic variant that resulted in border closures and severe financial consequences for Canadian cattle producers. The challenges her participants faced were similar to those reported in studies of gender and climate disaster. Reinch’s participants expressed feelings of invisibility or lack of voice that were exacerbated by the BSE disaster, and they reported an extension of the historically feminine “caregiver” role as they sought to support children and spouses in the midst of financial crisis (Reinsch 2009). The research presented in Chapter 6 of this dissertation helps to fill the gap in literature on climate extremes, gender, and agriculture in the global North.

CONCLUSION

In this chapter, I have discussed two major types of change that affect the lives of farmers in Canada: agricultural policy change and climate change. Both are sites of interplay between structure and agency, and both speak to broader issues of control and lack thereof. In the case of grain transport and PBR policy, actors attempted to shape the terrain of public policy within a broader context of shifting political paradigms.

Depending on the context, government regulation was seen alternately as a source of agency or a restrictive structure. In the case of the Crow, farmers and farm organizations saw government intervention as a way to alleviate the extractive power of corporations over them. In contrast, corporations and agribusiness interests viewed such regulation as a strangulating structure that interfered with the proper functioning of market forces. In the example of PBR, corporations conversely sought regulation to
cement their control over markets, while many farm organizations saw PBR legislation as imposing limitations on their agency at the micro level of the farm. Although this chapter has conceptualized public policy as a site for the exercising of democratic agency, it has not explored the forms of agency that occur outside of the policy subsystem, in the realm of the everyday. Little has been written about the gendered effects of these policy changes and the micro-level responses to them.

Similarly, and perhaps due to the still-limited acknowledgement of climate change as an actual policy problem, climate change effects and adaptation have manifested primarily at the micro-level of the everyday where vulnerabilities are most pertinent. Although these effects are gendered, there is also little acknowledgement of the significance of gender in the context of climate events. In Chapter 6, I will present the results of my research on Canadian farm women’s experiences of agricultural policy change and climate extremes to enhance our understanding of gender and adaptation in everyday life.
The theoretical framework acts as a compass for research. It offers a philosophical orientation, guiding the selection of the research topic and the determining the key foci of the study. The theoretical framework is part of an intrinsic acknowledgement that the researcher does not approach the research without pre-existing ideas and interests. If the theoretical framework is the compass of the research, the methodological framework is the map. The methodological framework delineates the nature of the reality to be explored (or posits a rejection of that reality altogether) and marks out some general paths for knowing that reality. For example, the methodology typically determines which methods are best for understanding the issue. Further, methodology frames the presentation of our findings; it links the methods to the resulting product of the research. This research project is guided by two key theories: feminist political economy and democratic theory. The methodological framework, critical realism, guided the selection of methods but also determined the appropriate use of the guiding theories. This chapter outlines the major tenets of each theory or methodology as exemplified in the work of its key theorists. Taken together, they provide a broad philosophical framing for the research project.

THEORETICAL FRAMEWORK: FEMINIST POLITICAL ECONOMY AND DEMOCRATIC THEORY

Feminist Political Economy and Social Reproduction

Canadian feminist political economy (FPE) emerged in the 1970s when feminist academics began to challenge the invisibility of gender in the broader political economy
literature (Vosko 2003). Viewing classical political economy as overly focused on “formal state policies and monetized production processes” (Bakker and Silvey 2008:1), they began to analyse women’s labour in its waged and unwaged forms and to posit the importance of both patriarchy and capitalism in shaping relations of (re)production under capitalism (Bakker and Silvey 2008:1). As such, contemporary FPE traces its origins to Marxist theory, either as a critique or expansion of the latter.

Early work in FPE examined women’s experiences in waged and unwaged work in various countries and socioeconomic classes (Mutari 2001), thereby addressing the exclusion of such gendered analysis in Marxist theory. It has also posed a challenge to the masculine biases of neoclassical economics (e.g., Ferber and Nelson 1993). Historically, FPE viewpoints have diverged on the cause of gendered inequality, particularly on whether its origins lie primarily in patriarchal ideology or in the material conditions of capitalism (Mutari 2001; Vosko 2003). Debates have also raged about whether women’s unwaged domestic work should be considered “productive” or “reproductive” work within a Marxist model – i.e., whether or not this work generates surplus value (Fee 1976; Seccombe 1974). However, as Vosko (2003) pointed out, FPE has largely moved away from such debates. Like much work in feminist theory, recent FPE shows the influence of intersectional analysis. Empirical and theoretical research in FPE considers the influence of various categories of social difference like race, class, gender, age, sexuality, ability, and so forth. It also engages with macro-level economic and social policy in the current context of globalization and financialization.

A major contribution of FPE has been the articulation of social reproduction (SR) as a key area where gender interacts with systems of production. The theoretical
development of SR represented a shift away from early debates about domestic labour as generating surplus value (Mutari 2001). It was a way to expand FPE beyond the limited categories provided by the Marxist analysis of production while analyzing its centrality to economic systems (Mutari 2001). The concept of SR “refers to both biological reproduction of the species (including its ecological framework) and ongoing reproduction of the commodity labour power” (Bakker and Gill 2008:2). It includes activities like childbirth, childrearing and education, domestic work such as meal preparation and laundry, and other activities central to the generational and daily reproduction of workers. It is, as Braedley and Luxton (2010a:14) have succinctly described it, “the processes necessary to enable workers to show up on the job”. In this way, recent FPE work has argued that social reproduction is not peripheral but in fact central to the realm of economic production and exchange; it is social reproduction “upon which all production and exchange ultimately rest” (Bakker and Gill 2008:22; see also Bakker and Silvey 2008). The articulation of SR as a concept has enabled feminists to look beyond domestic work (an area in which there has historically been very little state involvement) to examine how reproductive work, construed more broadly, interacts with both economic and political systems.

Social reproduction is therefore not only linked to economic production, it is also interconnected with particular state formations and political rationalities associated with economic systems. Post-war welfare states, for example, were guided by a social liberal rationality that emphasized the role of (regulated) private capital and state involvement in social provisioning (Bakker 2007; Brodie 2008). The accompanying gender order was one in which state support was provided primarily through a male breadwinner model,
which was premised on women’s economic dependence and responsibility for carrying out SR in the “private” sphere (Lewis 2001). Although it reinforced patriarchal norms, the welfare state was receptive to lobbying by feminist activists and thus represented a site for equality claims to be made and manifested into policy (Brodie 1995).

_FPE and social reproduction in the neoliberal era_

More recent FPE contends with the currently dominant neoliberal paradigm and its institutional contexts. Feminist political economists (Bakker 2007; Bezanson and Luxton 2006; Brodie 2008) have shown that the negative consequences of neoliberalism are disproportionately felt by certain social groups: particularly women, racialized groups, and the poor. As discussed in Chapter 1, neoliberalism is a broad policy paradigm that emphasizes private property, privatization, and free trade (Harvey 2005). It is accompanied by an ideological preference for private industry over public, and has been increasingly marked by the international regulation of domestic policy which, as I discussed in Chapter 3, has been labelled re-regulation or “new constitutionalism” (Bakker and Gill 2008; Gill 1998).

Within this institutional framework, governments take steps to ensure a domestic economy suitable for international investment, which is seen as the key to growth. Neoliberal policies are marked by deflationary bias (Elson 2003), preference for low corporate taxation rates, and the prioritization of spending on debt reduction as opposed to social safety nets (Bakker and Gill 2008). The underlying premise of these policies is the neoliberal emphasis on market competition. Competition is seen as the most ideal

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8 However, it is important to note that the welfare state model and its dominant gender order were premised on middle-class norms, assuming that a single wage was sufficient for the needs of the entire family. This ideal excluded a variety of other familial formations and socioeconomic classes.
way to ensure economic wellbeing, which is often conflated with, or seen as a cause of, social wellbeing.

In Canada, the neoliberal promise of such “trickle down” benefits has led to the elimination of state mechanisms promoting equality, environmental responsibility, and support for social reproduction (e.g., childcare programs). Recent work in FPE has analysed the gendered assumptions and effects of this policy environment. In contrast to that of the welfare state model, neoliberal rationality assumes an individualized and disconnected social actor who can freely and equally compete in the competitive market economy. This ideology facilitates the erasure of gender as a legitimate site for equality claims; the assumption is, as Brodie’s (2008) aptly titled article pointed out, that “we are all equal now”. However, at the same time feminists have begun to document increased gender inequality caused by neoliberal policy decisions (e.g., Brodie and Bakker 2008).

New directions for FPE

There are two key areas in which FPE could be further expanded. First, although feminist political economists have examined and theorized both women’s waged and unwaged labour, few move beyond the dualism of waged/unwaged to understand forms of work that do not fit neatly into either category. The study of farm women’s work poses a challenge to this binary structure and, in some ways, evokes memories of the early debate over whether women’s work is productive or reproductive. Feminist

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9 Some Canadian examples include: the 2006 elimination of the planned national childcare program in favour of an individualized, per-child payment of $1,200 annually; elimination of support in 2006 for the Court Challenges Program, which provided citizens with financial support for court cases involving language or equality rights (although the language rights portion of the program was reinstated in 2008, its original mandate to support other types of equality-seeking cases was not restored); the 2012 elimination of federal support for the National Roundtable on the Environment and Economy and the National Council on Welfare, which provided research and advice to legislators on environmental and poverty issues, respectively.
scholars (e.g., Kubik 2004; Sachs 1996) have noted the interconnection of farm women’s “productive” and “reproductive” tasks. Is cooking a meal for seven hired farm labourers (in addition to one’s own family members) considered farm work or domestic work? In a family farm system, is this work technically waged or unwaged? Is it “productive” or “reproductive”? Is it both? These questions indicate the inadequacy of existing FPE theory for studying labour relations that blur the line between waged and unwaged.

Second, FPE has been developed in the area of macroeconomics and macro-level policy, particularly due to the work of Janine Brodie, Isabella Bakker, and Stephen Gill. This existing literature explores the gendered implications of neoliberal policy. It critically engages the retrenchment of state provisions for SR. What is missing is empirical work that connects data from particular contexts (such as women in agriculture) directly to these broad macro-level changes. Further, while existing literature discusses the retrenchment of social or equality programs (Brodie 2008; Brodie and Bakker 2008), research is needed that examines the micro-level gendered effects of policies that may, on the surface, appear to be gender neutral. For example, with rare but notable exceptions (e.g., Roppel et al. 2006), there is little empirical research on the gendered effects of agricultural policy, which is often portrayed as gender neutral.

Democratic Theory
Like FPE, Democratic Theory offers some valuable conceptual tools for understanding the conditions of the current neoliberal paradigm. In their analysis of social reproduction, feminist political economists have pointed out that neoliberalism is marked by the penetration of market values into daily life (e.g., Braedley and Luxton 2010a). In his critical history of early liberalism, C.B. Macpherson also recognized this marketization
of life, arguing that the commoditization of labour produces a society in which “market relations so shape or permeate all social relations that it may properly be called a market society, not merely a market economy” (1962b:48).

For Macpherson, a truly democratic society facilitates each individual’s developmental freedom; in other words, it encourages human flourishing and self-development and fosters each individual’s ability to enjoy and expand her/his own “uniquely human capacities” (1973:4). However, the current “market society” prevents flourishing and development because individuals’ time and energy is “extracted” when they must sell their labour to those who control the means of production. Like FPE, Macpherson wrote about a specific type of labour relationship, which involved the sale of labour for wages. Like FPE, then, his theory is not directly applicable to farmers; however, the concept of “extractive power” proves highly relevant in the current conditions of industrialized agriculture and will be applied in the analysis to follow.

The democratic theory of Caterino and Hansen (e.g., 2009, 2010) also provides useful concepts for analyzing farm women’s work and agricultural policy. The authors provide a helpful conceptualization of agency and suggest a “critical diagnostic perspective”, both of which, as discussed below, complement FPE and CR. Taken together, the three complementary frameworks facilitate an analysis of structure, agency, and the role of the critical researcher.

Structure and agency

Although it has been argued that FPE offers a more autonomous agency than the Marxist theory from which it originates (Olsen 2004), FPE theory nonetheless remains focused on the political and economic structures that shape and permeate social conditions in
gendered ways. Although it lacks an explicit and comprehensive theory of human agency, FPE theory is strongly connected to feminist social justice movements on the ground, and is thus linked to agency in a very concrete way. Efforts to articulate a theory of agency from an FPE perspective have considered feminist activism to constitute the realm of agency (Briskin 1989).

In contrast, democratic theory provides a solid theorization of human agency, although like FPE it is not inattentive to the other side of the relation – in this case, the social structure. For Macpherson, agency is found in the developmental power of the individual, which is intertwined with freedom from the extractive powers of others (which are part of the economic structure). Caterino and Hansen (2009, 2010) further developed a notion of agency in their critical democratic theory. Based on the work of Macpherson and Habermas, they recommended a notion of agency that bridges Marxist notions of structure with liberal notions of agency. In other words, the agent of critical democratic theory is one who is shaped and formed by the structures of society, but who is also capable of “choosing new alternative forms of attachment and identity, which create greater freedom” (Caterino and Hansen 2010:24).

Not only does their theory present a more liberating notion of human agency than strictly structuralist or poststructuralist perspectives, it also creates additional space for the critique of ideology. Critical democratic theory emphasizes a “diagnostic” perspective, in which the theorist is seen as an embedded member of the society who is subject to the same systems of domination as the other participants but who, because of agency, can choose to take a critical perspective on the social relations (Caterino and Hansen 2010). Thus, the critic can come to understand systems of domination and
“structural barriers to freedom”, and can demystify the ideologies that (re)present these relations as natural or inevitable (Caterino and Hansen 2010:23). This critique thus represents another form of agency and is the key to structural change.

The democratic theory perspective on structure and agency is well aligned with the critical realist view. This facilitates the concrete application of both. The CR view of structure and agency originated with Roy Bhaskar’s Transformational Model of Social Activity (TMSA), which is accessibly presented in the work of Andrew Collier (1994). Like democratic theory, the CR vision of agency rejects the atomism of individualist perspectives like rational choice theory, which underpins liberalism and views society as nothing but a collection of human actions (Collier 1994). Neither do critical realists view reality as constituted entirely by structures (Collier 1994). Like the critical democratic theory of Caterino and Hansen, CR instead studies relations between individuals and groups. Among such relations is Caterino and Hansen’s (2010) notion of intersubjective meaning, which forms a key part of their democratic theory. Further, just as Caterino and Hansen argue that humans are embedded within particular structural relations yet have the ability to engage those structures critically from inside, CR also asserts that “we are not split off or alienated from [the world] by any non-illusory dualism but [are] an emergent part of it and thus in a position to engage in ‘a constant dialectical exchange between theory, observation, and experimental practice’” (Hartwig 2007:332, citing Bhaskar 2002). Both CR and democratic theory facilitate a critical research approach.

In CR, causality flows both ways between structure and agency: “people make societies and societies make people” (Collier 1994:143). Collier (1994:144–45) has summed up the CR view of structure and agency in a strikingly similar fashion to that of
the democratic theorists, stating that “society produces us as the people that we are, ‘out of’ a biologically given raw material, and it continues to transform us throughout our lives. We in turn make new societies out of old societies by our actions, whether intentionally or not”. This is the essence of the TMSA. What makes it different from other notions of structure and agency is that in CR, structures and agency are distinguishable from each other, but neither is reducible to the other. While society “provides necessary conditions for intentional human action”, intentional human action is also a necessary condition for society to be as it is (Bhaskar 1979:46). This fact renders individualist or atomistic notions of human agency untenable (Bhaskar 1979), because there is always at least a small piece of structure inside every conscious action.

Further, structure and agency are each marked by dual properties (Bhaskar 1979). The dual properties operate in this way: structures can be both a condition of our agency and an outcome of it (Bhaskar 1979), and agency is both productive (conscious) and reproductive (unconscious). We must use some structures, such as language for example, to get by in the world and to be understood. This is productive or conscious praxis (Bhaskar 1979). However, by doing so we simultaneously reinforce those structures. This is reproductive or unconscious praxis (Bhaskar 1979). Bhaskar argued that most human activity represents unconscious reproduction of social structures (Bhaskar 1979).

Much like Caterino and Hansen’s theory of structural change, wherein the individual has agency to change structures through critique or diagnosis, the dual properties of praxis (agency) indicate that Bhaskar’s theory also leaves space for intentional transformation, although it occurs far less frequently than unconscious reproduction. Human activity is marked by intentionality and purpose, and as such
humans can offer commentary on their actions and understand the implications (Bhaskar 1979). As two distinct systems, structure and agency are mediated by a “position-practice system”. There are “slots” in the social structure that provide agents an opportunity to change or reproduce that system (Bhaskar 1979:51). However, Bhaskar warned us against the simplistic assumption that human agency is always conscious and therefore consciously brings about change (Bhaskar 1979). Intentionality, as a “power” held by agents, is only activated under certain conditions – these are the “slots” of which he speaks (Bhaskar 1979:49). Because social structures and agency each contain the necessary conditions for the other to exist as it is, it is usually possible for social changes to be explained socially via the social structuring of human consciousness. However, for the same reason and under certain conditions, conscious human activity can change social structures. Social structures can be enabling, not just coercive (Bhaskar 1979:50). It is the goal of democratic theorists to enhance these opportunities for individuals to intentionally alter social structures.

METHODOLOGICAL FRAMEWORK: CRITICAL REALISM

Critical Realism is the methodological framework for this research. In this capacity, CR delineates a specific role for the study’s theoretical frameworks, feminist political economy and democratic theory. In CR, the role of theory is to define the object of study (Danermark et al. 2002). Researchers approach their study with a theory, which is used to determine which facts must be examined. These theories, or what Sayer called “mind objects” (1992:29), do not necessarily reflect reality accurately, and some theories may be more correct than others. Indeed, critical realism “insist[s] on the separateness of the world and the knowledge we have of the world. Just because the world is revealed to us
through knowledge and action, this does not mean that this is all there is to it” (Joseph 2002:28).

For this reason, initial theories must be treated as just that: initial theories. The initial theory facilitates a deeper analysis that can confirm, elaborate, or deny that theory, or can help build a new theory that more accurately explains the phenomenon under study. As previously discussed, CR acknowledges that social structures, including knowledge systems, are a necessary condition for human consciousness and knowing. As such, the researcher never approaches the research as a “blank slate”; s/he is always informed by previous knowledge and existing theories. By acknowledging the theories that have already shaped the research(er), CR facilitates a more truthful and productive engagement with those theories.

*Origins of Critical Realism*

Critical Realism emerged in the midst of the “paradigm wars” of the 1980s, in which constructivist and interpretivist research posed a challenge to the previously dominant positivist perspective in research (Denzin and Lincoln 2011). CR draws elements from both major methodological strains: positivism and interpretivism/constructivism. The CR approach was developed primarily through the work of Roy Bhaskar throughout the 1970s and 80s, and was elaborated by critical realists such as Andrew Sayer (1992), Margaret Archer (e.g., 1995), Andrew Collier (e.g., 1994), and Tony Lawson (e.g., 1997).

CR is a philosophy of science (Brown, Fleetwood, and Roberts 2002; Nielsen 2002). Therefore, it acts as a methodological framework for research and is not associated with any particular theoretical perspective or set of methods. However,
because CR offers an ontology (theory of being or reality) and epistemology (theory of knowing), as well as various modes of inference and critique, it has been described as a “full blown” philosophy of science (Brown et al. 2002:3).

The Critical Realist World

One of the most important tenets of critical realism is that ontology (i.e., what is real, the nature of reality) is not reducible to our knowledge of it (i.e., epistemology). In other words, reality runs deeper than what we know about it. Human knowledge captures only a small part of a deeper and vaster reality of the world. In this respect, CR deviates from both positivism and interpretivism. Bhaskar challenged positivism for promoting “the epistemic fallacy” (Bhaskar 1998:27) – that is, the problematic reduction of ontology to epistemology, or the limitation of “reality” to what can be empirically known (e.g., through scientific experiments). However, a similar critique applies to interpretivism, which holds that even the seemingly most “objective” aspects of the world are still mediated through systems of social meaning; as such, material reality is irrevocably theory-laden and reality does not exist outside our conceptions of it. Despite the seeming opposition between the two perspectives, each reduces reality to human knowledge, whether that knowledge acts as lens or container for reality. It is this “reduction of being to thought” that Bhaskar challenged (Archer et al. 1998b:xxi).

In contrast, CR treats the world as theory-laden, but not theory-determined. It does not deny that there is a real world that humans attempt to understand or access (Danermark et al. 2002), but CR acknowledges that some knowledge can be closer to the truth than other knowledge. This view contradicts interpretivism, which is relativistic in treating all viewpoints as equally valid because, for interpretivists, “reality” is in the eye
of the beholder. CR also contradicts positivism because, in CR, our theories about the world cannot be objective, but always stem from a particular vantage point (Maxwell 2012).

In this way, Critical Realists can gain knowledge of reality, but not necessarily an exact image. They can gain knowledge “in terms of theories, which can be more or less truthlike” (Danermark et al. 2002:10). The theories that help us get closer to reality are selected and formed using our own judgemental rationality (Archer et al. 1998b:xii). CR is similar to democratic theory in this way. Just as Caterino and Hansen (2010) argued that the researcher can take a “critical diagnostic perspective” on the world around him or her, CR positions the researcher as a rational analyst who can critically engage and explain an issue or event. The CR analyst tries to find the best explanation or account of reality. In this way, CR acknowledges what most qualitative researchers know: analysis is not just a mechanistic application of methods that produce “truth”; instead, research requires analysis and rational judgement by the researcher.

CR’s two realms of reality, *transitive* and *intransitive*, reflect its division of ontology from epistemology. The intransitive realm is the structured world that exists independently of our knowledge or theories, whereas our knowledge and theories about the world exist in the transitive realm. Unlike positivism, CR treats ideas and knowledge in the transitive world as real and causal: people’s knowledge, reasons or motivations for doing things can have a very real effect on events in the world. CR treats “the ideas and meanings held by individuals – their concepts, beliefs, feelings, intentions, and so on – as equally real to physical objects and processes. Critical realists see these two aspects of
reality not as inherently independent and separate realms, but as interacting in social life and mutually influencing one another’’ (Maxwell 2012:viii).

This makes CR useful for social science. It allows us to consider that the meanings we give to things and the reasoning we use in our decision-making can have causal impacts in the world. Although they can have causal power, however, social objects in the transitive realm do not follow a conception of causal law and the regularity of “constant conjunction” in the words of David Hume. Because the social world consists of open systems, in which any number of occurrences and events can overlap and interact and in which people can learn and change (Danermark et al. 2002), naturalistic prediction is simply not possible. No scientific predictions along the lines of “whenever event x, then event y” can be made in open systems (Brown et al. 2002:5). As such, CR posits the identification of tendencies, not laws (Danermark et al. 2002:70), because there is always the possibility of a tendency being interfered with by events at other levels of reality and thus failing to manifest or manifesting differently than expected. Critical realism’s focus on tendencies, not laws, is related to its understanding of reality as stratified.

*Key Concepts in Critical Realism*

*Stratified reality*

In CR ontology, reality is stratified into three vertical levels. The first and most shallow is the *empirical* level, which is the realm of events as we experience them. At this level, events or objects can be measured empirically and are often explained through “common sense”, but these events are always mediated through the “filter” of human experience and interpretation. This is the realm of positivist inquiry. The middle level consists of the
actual. At this level, there is no “filter” of human experience. Events occur whether we experience them or not, and these true occurrences are often different from what is observed at the empirical level (Danermark et al. 2002:20). Finally, the third and deepest level is the real. It is at this level where we can locate causes, or “generative mechanisms”. These are the inherent properties in an object or structure that act as causal forces to produce events in the world – i.e., those appearing at the empirical level. It is the primary goal of critical realism to uncover these mechanisms, but we cannot do this using analytical reduction; rather, the concept of emergence requires a more complex approach to understanding causation in the social world.

Emergence

Because reality is stratified, there is some methodological danger in reducing a complex phenomenon into increasingly smaller components (Danermark et al. 2002). This type of reduction occurs in atomistic economic approaches such as rational choice theory, for example. In the openness of social systems and the multiple layers of reality, objects can combine to form new entities, which often have powers irreducible to that of their components – these are called “emergent powers”. To some extent, critical realism itself is an analogy for the concept of emergence. Although CR combines particular powers from two distinct methodological traditions, these combined powers produce a new entity with a life of its own: critical realism. Similarly, CR posits that particular objects’ powers can combine to form new entities or phenomena that are irreducible to the originals (Danermark et al. 2002). For this reason, it is necessary to conduct what Sayer (1992) calls “macro-regress” to understand individuals’ behaviour through reference to
the social structures in which they are embedded, as opposed to “micro-regress” that reduces social phenomena to individualized phenomena.

**Structures, powers, liabilities, and tendencies**

In the CR world, objects possess particular features that allow or prevent them from acting in the world, or which cause them to act in particular ways. These are the object’s *causal powers* and *liabilities*. They are “potentialities” inherent in the object that enable or constrain it from acting in certain ways (Psillos 2007). While powers are abilities, “the power to do or become”, liabilities are constraints, “the capacity to suffer or be affected” (Psillos 2007:57). However, just because an object has a particular power, it does not mean that the power always has an observable effect in the world.

Causal powers may be of three types: *possessed, exercised, or actualized* (Brown et al. 2002:5), and each corresponds to a particular level of reality. At the deepest level, all powers are *possessed*; put simply, this means that the power exists in an object and is always within that object – thus, it exists transfactually, or regardless of any circumstances. It is an inherent property of the object, regardless of the circumstances surrounding it. Although powers are always possessed, they may or may not be exercised. When a possessed power is *exercised* at the mid-level of reality, it is triggered to generate an effect (Brown et al. 2002). The exercised power is called a *tendency* (Psillos 2007). However, even an exercised power or tendency does not necessarily result in an observable effect at the empirical realm. Particular circumstances can occur, or other powers from other objects can intervene to prevent an exercised power from manifesting or having an effect on the world (Brown et al. 2002). It is not until a power is *actualized* that it takes effect in an open system and generates its effect constantly –
actualization, then, does not occur transfactually but factually; its efficacy depends on the circumstances surrounding its exercise (Brown et al. 2002).

Generative mechanisms

We have seen that the internal components of a thing include its particular powers or abilities. When exercised, causal powers result in the tendencies of an object, which may or may not be actualized. When the two concepts – powers and tendencies – come together, they constitute a generative mechanism (Psillos 2007). A generative mechanism thus encompasses the entire ensemble of structures, powers, and the relations between them that can lead to their activation at the surface level of reality (Brown et al. 2002:7). To Critical Realists, generative mechanisms are the root of causality; they are the source of events and exist at the deepest level of reality, although their effects can carry upward to the most superficial level in the form of events. Mechanisms are thus the entire complex of structures, powers, tendencies, and relations that come together to produce an effect in the material world – they are causal.

A critical realist analysis of causation must consider structures (including powers and liabilities therein), mechanisms, their interplay, and the various conditions that enable or restrain them (Psillos 2007). A single mechanism – for example, the market – can “sustain or undermine a multiplicity of distinct structures” and similarly, the same structure can be reproduced or transformed by a variety of mechanisms (Psillos 2007:58). Mechanisms and structures interact to cancel and/or exacerbate each other, which means that one statement of causation cannot apply directly to a number of different contexts. This makes CR useful for elaborate analyses of causal tendencies in a particular context; however, as will be discussed further below, the ability to understand
causation (and not just engaging in thick empirical description of a given context) makes it also a useful tool for analyzing other contexts in which the same causal mechanism may be at play.

The Process of Critical Realist Analysis

For critical realists, as for most other researchers, the study begins with the identification of a particular question or problem, which is guided by theory. In keeping with its vision of reality as structured, there is a particular role for empirical data, such as themes derived from qualitative interviews or statistical trends, both of which reveal certain patterns worthy of further analysis. Critical realists call these data patterns “demi-regularities”. These patterns lead to a deeper understanding as the critical realist process moves through the multiple levels of reality, using correspondingly more complex tools of analysis; that is, abstraction, abduction (also known as “theoretical redescription”), and retroduction.

Description and identification of demi-regularities

The first step in CR analysis is a process of description, wherein the researcher must “describe the often complex and composite event or situation we intend to study” at the empirical, or surface, level of reality (Danermark et al. 2002:109). This process uses two types of methods, extensive and intensive: extensive methods use quantitative and numeric data to examine widespread trends, such as statistical trends, while intensive methods use qualitative means to examine more individualistic “interpretations of the persons involved and their way of describing the current situation” – that is, their “common sense” understandings of their circumstances (Danermark et al. 2002:109).
This empirical data will be marked by observable “demi-regularities”. Although “law like” regularities are not observable in open systems, this does not mean that “relatively enduring social structures and mechanisms do not occur” or that they are always undetectable (Lawson 1998:148). Some trends will be identifiable in the empirical data, and these “demi-regularities” can indicate the possible presence of an actualized mechanism – that is, a mechanism that has been exercised and not counteracted by other forces and mechanisms, so that its presence is observable (Lawson 1998:149). Demi-regularities can be used as a type of directional arrow, indicating the need for further and deeper critical realist analysis.

Abstraction

The collected empirical data, along with the guiding theory, form the basis of the next step in critical realist analysis: abstraction. Abstraction is defined as “the outcome of a thought operation whereby a certain aspect of a concrete object is isolated” (Danermark et al. 2002:205). It is the process of theoretically “extracting”, or singling out, the features of the object or event that are of most concern to the researcher. It can also involve situating an event or phenomenon within its context of structural social relations; that is, moving from the concrete to the abstract – hence “abstraction” (Carter and New 2004:8).

Abstraction can occur during the selection of a research question, or during the first stage of coding when the researcher selects the most important themes from the intensive data collected during interviews. The process is always guided by the initial theory and the demi-regularities identified; for example, research guided by a feminist political economy framework and concerned with statistics on farm women’s increasing
labour will abstract, or attend to, the gendered nature of farm work. It will leave aside other considerations that are contingent to this abstraction (i.e., not internally necessary for its existence) – for example, farm women’s religious views or their eating habits. Abstraction is an important tool not only for limiting the parameters of the study, but also for giving us insight into the structures to which these abstractions are linked. This initial step will facilitate the determination of generative mechanisms, which exist within these deep structures, at a later point in the research process. However, it should be noted that although good abstractions will help produce a solid explanation of the phenomenon, better abstractions may emerge once the causal relations have been mapped (Carter and New 2004:9); therefore, abstractions must be viewed as changeable.

Abduction (or “theoretical redescription”)

At this stage, the main components of the research have been identified or “abstracted” and described at the empirical level of reality, and some hints at the possible mechanisms at work have been observed. The next step is the process of abduction or “theoretical redescription”, where the phenomena under study are analysed from a different theoretical perspective than previously used. It has been defined as a process of “inference or thought operation, implying that a particular phenomenon or event is interpreted from a set of general ideas or concepts” (Danermark et al. 2002:205).

Abduction corresponds with the critical realist view that theories can be more or less accurate in describing or reflecting the reality. As such, abduction offers a means to test alternative theories for their utility in understanding the topic at hand. Abduction is useful for exploring the multiplicity of explanations for specific phenomena and ensuring that the most appropriate theory is selected using a process of rational thought.
Retroduction

The final stage of critical realist analysis, retroduction, is also premised on reasoned and rational thought (Brown et al. 2002). Retroduction is the “central mode of inference” in critical realism (Lawson 1998:156); as such, it offers an alternative to both inductive and deductive perspectives. We cannot say that critical realism is either inductive or deductive – it is a retroductive methodology. Put simply, retroduction involves the (thought) process of moving from concrete to abstract, followed by a return to the concrete again. The analysis moves from concrete empirical data at the surface level to more abstract theorizing about structures and mechanisms at the transfactual level. In this study, retroduction will be used to investigate the causal mechanisms affecting farm women’s labour patterns, which will be discussed further in Chapter 5.
CHAPTER 5
METHODOLOGICAL DESIGN

METHODOLOGY

Using Critical Realism from a Feminist Perspective

Critical Realism is not commonly used for feminist research. Although CR principles are at times employed in feminist research, there is very little work in either body of literature that brings the two together in an intentional or explicit way, or which addresses methodological issues faced when doing so. This section will therefore address some pertinent issues in doing feminist, critical realist research. In particular, this section focuses on two key methodological issues: objectivity and reflexivity.

CR and feminism on objectivity

Combining CR and feminist analysis also requires us to consider objectivity, which is an important concept for both perspectives but has been a subject of intense debate in feminist analysis. Objectivity is a relational construct, often seen to exist in opposition to subjectivity. However, in many ways, both CR and feminist analysis have challenged the objectivity/subjectivity dualism.

For several decades, feminists have debated the very possibility of objective reality and objective knowing. Some reject the concepts altogether, arguing that science has privileged the viewpoint of a white masculine knower and has passed off this particular perspective as the “objective truth” when in fact there are multiple realities and multiple ways of knowing. However, in the late 1980s, feminist theorist Donna Haraway (1988), who was not prepared to dismiss the existence of objective reality, posited a feminist version of objectivity.

101
Haraway challenged relativist and “radical constructivist” (i.e., poststructuralist) feminists who reject objectivity. Indeed, she questions any perspective, including conventional scientific objectivity, that is “unlocatable, and so irresponsible” (1988:583). Haraway accuses all three perspectives of “being nowhere while claiming to be everywhere equally” (1988:584); thus, they are marked by a “denial of responsibility and critical inquiry” (1988:584).

For Haraway, there is an objective reality, and it is knowable. It is knowable not through a “god’s eye view” or neutral third-person observer perspective; rather, an objective view of reality can be obtained by embracing our own subjectivity and acknowledging our own position. This notion of objectivity, which she calls “situated knowledges” is about accepting that we can only ever claim a partial view of the world; however, we can expand our view by learning to see from another’s perspective while acknowledging our own, to “see together” with others while not claiming to be in the very same position or circumstances as another (1988:590). It is through this situated but split vision that we can come to rationally understand reality. We can, somewhat ironically, obtain a fuller vision through acknowledging our partial perspective.

In this way, Haraway blurs the boundary between subjectivity and objectivity in a way that is complementary to CR. Epistemologically, an objective view of reality is obtained through embracing, not rejecting or denying, our own subjectivity and values but seeking to understand others’ as well. Although CR epistemology understands our knowledge as fallible and promotes rational judgement as a way to ensure a more accurate view, it provides little concrete guidance on what constitutes “rational judgement” on the researcher’s part. How do we engage in rational judgement?
Haraway’s “situated knowledges” similarly promotes “rational knowledge”, but offers a route to obtain it.

Ontologically, both perspectives view human values as causal; for critical realists, “values inhere in being” and have the ability to shape reality (Hartwig 2007:332); Haraway too sees the “objects” of knowledge as active agents who can shape their world (1988:592). The feminist “situated knowledges” perspective is similar to CR in a number of other ways. For example, both accept an objective reality that (although always changing) can be known through rational thought, and both approach all viewpoints critically, questioning any that suggest they have a “god’s eye view”, while also acknowledging the corrigibility of our own.

The critical realists Morgan and Olsen (2007, 2008) agree with Haraway, arguing that objectivity is a value position that subjects can actively and consciously assume. They argue that, for critical realists, objectivity is a bridging concept that exists at the interface of ontology and epistemology: there is a reality (ontology), and objectivity is the act of referring to it (epistemology) (2007). This act of referring presupposes subjects who can do the referring. However, our references can be more or less reasoned. There must be a way to distinguish between reasoned knowledge from sheer belief or, as Haraway has articulated this problem: “we would like to think our appeals to real worlds are more than…an act of faith like any other cult’s” (Haraway 1988:577).

Objectivity is the act of justifying our knowledge claims and providing reasoning for these claims, illustrating “reasoned consideration” (Morgan and Olsen 2007). In CR, knowledge is always fallible; therefore, Morgan and Olsen also emphasize that our position is not a “prison” and that we can transit between positions as we seek the most
accurate and reasoned understanding of the world (2008:110). This is conducive to Caterino and Hansen’s (2010) argument that we must critique and challenge oppressive structures even as we are located within them, and that an ongoing dialogical critique with these structures (i.e., by transiting between different perspectives within them) is critical to democracy.

Unfortunately, however, Morgan and Olsen offer little concrete advice for researchers wishing to obtain a reasoned, objective perspective on a problem. They describe a potential flaw with critical realism, i.e., if knowledge is always fallible, how do we know which knowledge is closest to reality? (Morgan and Olsen 2008:117). Morgan and Olsen largely fail to answer this question, although hinting at the use of methodological rigour and scientific process as a means to achieving reasoned knowledge. Little insight is offered as to how this analytical rigour is to be achieved.

The importance of reflexivity

Fortunately, Haraway and other feminists have suggested a concrete method for taking account of one’s own position and critically engaging with it, which is one route to achieving the reasoned or rational knowledge promoted by feminists and critical realists. This method is called “reflexivity” or “self-reflexivity”. Self-reflexivity is a well-known concept in feminist studies. It has been defined as “a process whereby researchers recognize, examine, and understand how their social background, location, and assumptions affect their research practice” (Hesse-Biber 2007:17). To be self-reflexive, the researcher pays attention to her/his own beliefs, perspectives, and agendas, all of which might affect the research. It is a way of acknowledging and accounting for our own biases, which is key to producing reliable feminist research.
Reflexivity is linked to structure and agency. Human agents have the ability to be aware of, and reflect on, the social structures that have shaped them. It is this awareness that inspires actors to reshape the social world. The researcher is not an omniscient but disconnected observer in this world; rather, s/he is also a member of society and an actor who has also been structured in particular ways by the world around her or him (Caterino and Hansen 2010). Reflexivity also empowers the reader by providing an understanding of the researcher’s perspective, but it can also lead the researcher him/herself to insights that may not have been acknowledged otherwise. In this section, I take stock of my own background and academic predispositions as well as their potential implications for this research project.

*Reflexive analysis*

As a feminist researcher with an academic background in Women’s and Gender Studies, my goal is to produce research that centres on the experiences and perspectives of women. It is also important that feminist research contributes to positive social change and challenges oppressive power systems. For these interlocking reasons, it can be difficult to engage critically with participants’ perspectives. The participants’ welcomed me into their homes and shared their experiences and opinions with me; who am I to question them? However, without this critical engagement and “reading into” participants’ experiences, there would be no academic analysis; instead, there would simply be a thick description of the findings. As critical realists have pointed out, if our desire is to attribute a certain reality to the world, some perspectives will be closer or further from that truth. Critical engagement with various perspectives is a key part of accessing that reality. Further, as feminist scholars have repeatedly argued, there is no
singular and uniform “women’s experience”. Participants’ views were often diverse and even oppositional. It is my role as researcher and analyst to uncover the generative mechanisms that have structured these experiences and to understand women’s agency in the face of them.

Beyond my identity as researcher, I am a social agent embedded in the social structure. Thus, I have also been engrained with particular (gendered, ideological) views of the world. In their theory of reflexivity, Caterino and Hansen (2010) reject the possibility of detached, “objective” observation, pointing out that the researcher (like the research participants) is embedded in the particular social structures under study. From this insider perspective, the theorist can engage with the experiences of both self and others to diagnose any oppressive structures at play (Caterino and Hansen 2010). This requires that the researcher also interrogate her own feelings of dissonance or discontent as a clue to the broader forces that caused these (Caterino and Hansen 2010).

My reflexive analysis began with my expectations of what the research participants would be like. In her research with farm women, Kubik (2004) documented some dominant stereotypes her participants identified about farm women in general, which included “plain”, “down to earth”, “nurturing”, and “hopefully friendly”. Despite my substantial background in feminist literature that warns against assuming a monolithic “women’s experience”, I discovered that I nonetheless held these stereotypical expectations. My own perceptions became clear to me during my initial telephone contact with Linda, a 40-year-old farm woman who worked both on- and off-farm. During this conversation, Linda made a reference to putting on her heels, dressing up, and going to work off-farm. I was surprised at this comment. My dominant image of
a farm woman did not include high heels and expensive clothes. At the same time, several of the farm women did embody some of my expectations.

To avoid wearing analytical “blinders” when interpreting the data, it was necessary to acknowledge and confront my expectations and to embrace the diversity amongst the participants. My analysis of farm women’s off-farm work provides a concrete example of how reflexive analysis affected the research results. Because of my efforts to recognize and reject engrained stereotypes about farm women, I was able to understand that for many (although by no means all) farm women, working off-farm is desirable and provides satisfaction, even though it can also increase stress and time pressures. Recognizing this helped me to avoid the oversimplified assertion that working off-farm is merely a survival strategy.

In some ways my expectations about farm women’s lives were a product of my own farm upbringing. I was raised on a grain farm in east-central Saskatchewan, and this fact affected my research experience. Although I did not mention my farm background in my posters and other recruitment materials, almost every participant eventually inquired about whether or not I came from a farm. This fact was also mentioned in the Western Producer article about my project. My farm background seemed to add a degree of comfort, both for my participants and myself, perhaps because of the potential for shared understandings. I was familiar with basic farm vocabulary and I understood certain social norms.

This shows that reflexivity is a two-way street. It is not merely about scrutinizing one’s own background and views, but also acknowledging the way our identity is taken up by others in the research process (Pini 2004). In some cases, my identity as a “farm
“girl” may have facilitated my access to participants, as it did for Pini (2004) in her study of Australian farm women. At the same time, I became aware that my background also narrowed my view in some ways. Things that were different from the farm I grew up on often surprised me, exposing and challenging my engrained (and simplistic) perceptions of what a “Saskatchewan farm” is or should be.

Another identity factor that affected my research in both positive and negative ways was my role as a student. In her research on farm women, Pini (2004) found that she was often negatively characterized as “a person from the university”. In contrast, I seemed to be viewed primarily as a student. Many of the participants mentioned that their own children had done a university degree. Some participants’ children had also done fieldwork of some kind and for this reason, it seemed, the women were inclined to support me with my work. In several cases, the women’s daughters had heard about my research and encouraged their mothers to participate.

In a similar vein, it is possible that my age may have either facilitated or hampered my research. At the time of interviewing, I was in my mid-twenties. Since many of the participants had daughters approximately my age, it is possible that some of the women saw me in a similar light and were therefore more inclined to assist me in my work, just as they would do for their own daughters. Conversely, this association may have resulted in less openness about gendered dynamics or personal issues. Participants may be more inclined to share such matters with someone closer to their own age, as opposed to a young researcher closer to the age of their own children. Although it was possible to acknowledge and address my own ideological perspectives and biases, certain
identity factors, such as age, cannot be overcome and must thus be acknowledged as social factors that can inherently shape the research.

**METHOD**

Many Critical Realists have focused on CR’s philosophical elements, which has resulted in a “lack of methodological development” when it comes to the application of CR in empirical research (Yeung 1997:52). Although CR presents a useful framework for research and strategies for analysis, the Critical Realist is left somewhat adrift when it comes to research design and data processing. Similarly, a dearth of literature on the application of CR in feminist research may leave the *feminist* critical realist not merely adrift, but struggling to stay afloat. This section describes the data collection and processing methods used to conduct empirical, critical realist research from a feminist perspective.

*Data Collection Methods*

The process of CR begins with the concrete. Events are observed at the empirical level using two types of data: extensive (i.e., data on widespread trends, such as statistical data) and intensive (i.e., in-depth interpretive data, as obtained through interviews or focus groups). Both help us to identify empirical demi-regularities (i.e., trends or key themes) for further analysis. The extensive data collection process began with Statistics Canada data. It was used to identify trends, such as changes in farm income and size, at the national and provincial levels. Extensive data on historical and contemporary freight and seed costs was also collected through consultation with a provincial farm organization, the Canadian Transportation Agency (CTA), the National Library Archives of Canada, and two academic researchers with expertise on agricultural freight rates.
Freight rate information was also (unsuccessfully) requested from the two national railways, with a response from the Canadian Pacific Railway (CPR) that “rates are treated as private and confidential” (J. Wong, personal communication, 17 August, 2011). In total, the extensive data provided insight into some key macro-level trends that may structure farm women’s experiences.

However, as a feminist research project focused on women’s lives, this project emphasized intensive data more highly. In his critical realist research on transnational corporations, Yeung (1997) similarly found that intensive methods were most useful in uncovering causal mechanisms. Intensive data collection occurred through semi-structured qualitative interviews. The process began with two consultative meetings with two officials from a provincial agricultural organization that frequently conducts research with Saskatchewan farmers (hereafter I call this organization the “informant organization”). The officials suggested some topics most relevant to producers at this time and provided advice on the most effective research methods.

A number of factors shaped the decision to use qualitative methods to collect the intensive data. First, farmers are known to experience survey fatigue, which can lead to very low response rates to surveys (Pennings, Irwin, and Good 2002). This point was confirmed through consultation with the informant organization. Second, an attempt to convert my research topics into survey-style questions proved very difficult, indicating that survey methods were not appropriate for this project. My goal was to ensure geographic diversity amongst the participants; therefore, a focus group was not ideal due to travel distances and funding limitations, and could result in disproportionate
representation from particular areas. As such, the intensive research method chosen was in-person, qualitative semi-structured interviews.

**Evaluating qualitative research**

Qualitative research methods are usually evaluated by different criteria than quantitative methods. Criteria such as reliability, validity, and generalizability originated in quantitative research and are suited for lab settings where third-person objectivity is emphasized. As Auerbach and Silverstein (2003:75) have argued, these criteria rely on the exclusion of “subjectivity, interpretation, and context”. Qualitative research, in contrast, embraces and emphasizes these aspects of research practice as a key part of understanding open (i.e., ever-changing) social systems.

This does not mean that qualitative research is held to less rigorous standards of evaluation. In 1985, Lincoln and Guba proposed the concept of “trustworthiness” to evaluate qualitative research. Trustworthiness could be ensured by checking and confirming results with participants (i.e., “member checks”), by presenting an “audit trail” of decisions made during the research, and by analyzing negative cases or exceptions, amongst several other techniques. In his foundational work on sociological method, Denzin (1970) suggested triangulation, or use of multiple data sources to ensure dependable and accurate data. Triangulation can be achieved in any or all of the following ways: using multiple sources of data (data triangulation), using multiple researchers (investigator triangulation), using more than one theory to interpret the object of study (theoretical triangulation), and using more than one method of collecting data (methodological triangulation) (Denzin 1970). Further, as discussed previously, feminist
researchers have developed a new notion of objectivity that relies on a self-investigation technique called reflexivity.

CR methodology corresponds well with many of these criteria and thus helped to ensure dependability of the data in this study. Data triangulation was achieved through collection of both extensive and intensive data, as presented in chapters 3 and 6. Theoretical triangulation occurred through the process of theoretical redescription (see chapter 7), in which more than one theory was used to interpret the data. In addition, I employed “within-method” methodological triangulation by incorporating several quantitative (i.e., percentage and scale) questions into the interview guide (Denzin 1970). This allowed me to produce numeric averages for several important questions wherein such numbers were useful (see chapter 6).

Trustworthiness, as defined by Lincoln and Guba (1985), was evaluated through negative case analysis; however, I did not employ member checks. As Morse et al. pointed out (2002:16), member checks are ineffective outside of case study and narrative research because “study results have been synthesized, decontextualized, and abstracted from (and across) individual participants, so there is no reason for individuals to be able to recognize themselves or their particular experiences”. Further, CR encourages a critical engagement with the participants’ own views, which renders member checking less relevant because the participants’ words and experiences are not simply presented as thick description.

*Recruitment, sampling, and qualitative interviews*

After ethics approval was received, I began the intensive research by conducting interviews with three representatives of national and provincial agricultural
organizations, which represented different perspectives. One of these participants represented a farm women’s organization specifically, and another represented a women’s committee within a broader agricultural organization. These interviews provided key background information about the issues under study; as such, a separate interview guide was used for the organizational interviews.

The interviews with farm women were conducted between August and December, 2011. The interview guide was primarily semi-structured. With the exception of the quantitative questions, the guide was treated as a flexible and open-ended instrument to allow exploration of other issues of concern to participants. The interview questions covered five main themes: (a) background information about the participant and her farm, (b) work, which included farm work, non-farm work, volunteer work, and household work, as applicable, (c) policy, challenges, and adaptation, (d) environmental challenges and adaptation, (e) rural communities and change. The interview guide was pre-tested with two farm women who were close acquaintances of mine. Although my familiarity with these women facilitated honest and useful feedback on the guide, these pilot interviews were excluded from the final results due to this relationship.

The events affecting farmers’ lives are complex and multifaceted. It can be difficult to pinpoint the effects of one particular policy change, due to the intervening effects of other events. In order to facilitate a focused discussion on the two policies under study, I came to each interview with a set of three charts. The first chart, obtained from the Canadian Transportation Agency, showed the historic increase in average freight rates from 1980 through 2000. This helped to illustrate the overall trend in rates before, during, and after the changes to the Crow Rate and Crow Benefit. The second
chart was obtained from an online program called Freight Rate Manager, which was created by two professors at the University of Saskatchewan. Each participant was given a chart showing freight rate changes in her specific area; most participants found this very interesting. The third chart showed overall trends in seed prices, which helped to facilitate a discussion about the causes and effects of rising seed input prices.
Figure 5.1. Geographic Diversity of Participants

© 2012 Google Maps

[original in colour]
Excluding the pilot interviews, I conducted a total of 30 interviews with farm women from 27 communities across the agricultural area of Saskatchewan (see Figure 5.1). Participants were located using a mix of purposive, snowball, and theoretical sampling. Purposive sampling means selecting participants who are best suited to answer the questions (Maxwell 2012). Because many questions pertained to grain transportation and seed policy, the recruitment materials focused on farm women who produced at least some grain and/or oilseeds, and who had been doing so since at least 1993. This date was selected because it ensured participants had experienced at least two years of farming before the elimination of the Crow Benefit and could therefore identify its effects on their lives. However, these criteria were treated flexibly: three participants had begun farming one year before the Crow was eliminated, while another had begun livestock farming in the early 2000s but had been highly involved on her parents’ grain farm while growing up, and thus understood the policy change very well.

Theoretical sampling is most often used in grounded theory research, but was also employed in my study. It refers to the continual selection of “new participants who are likely to refine your theory”, which is done until saturation is reached (Auerbach and Silverstein 2003:20). The literature review and first 15 interviews revealed significant issues and tensions surrounding farm size; however, the first 15 interviews had been conducted with women from small- to medium-sized farms. It was necessary to ensure diversity of perspective on this issue; therefore, I used theoretical and purposive sampling to seek out participants from larger family farms, whose perspectives on farm size would help to refine my understanding of this issue. This reflects what Morse et al.
(2002) describe as sample appropriateness, and is another strategy for producing reliable research.

According to the Statistics Canada Census of Agriculture (2011), average farm size in Saskatchewan is currently 1,668 acres. When discussing issues relating to farm size I asked participants what they considered a “large” farm to be. Many cited farms between 5,000 and 10,000 acres (or more). As a result of purposive and theoretical sampling, I was able to interview 6 participants with farms over 5,000 acres in size, and two participants with farms of 10,000 acres or more. This helped provide insight into the farm size issue from multiple perspectives. Finally, snowball sampling involved using referrals from participants to locate additional participants, as discussed below.

I used several methods for locating participants: a Facebook page, 50 posters and 150 flyers hung or distributed in 24 communities across the province (i.e., in the northwest, northeast, southeast, southwest, and central areas), an article published in the Western Producer (a regional agricultural newspaper), and word-of-mouth or referrals. When requesting referrals from participants, I asked each participant to name someone they saw as different from them in some way (e.g., in terms of farm size, work and roles, political views, ethnic background, etc.). Snowball sampling thus helped to ensure the diversity of the participant group. Further, using a diverse number of recruitment techniques – such as posters and newspaper articles – meant that the sample was not dominated by participants who knew each other or were connected in some way.
<table>
<thead>
<tr>
<th>Method</th>
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<tbody>
<tr>
<td>1 Posters</td>
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<tr>
<td>2 <em>Western Producer</em> article</td>
<td>4</td>
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<tr>
<td>3 Poster and <em>WP</em> article</td>
<td>2</td>
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<tr>
<td>4 Facebook page</td>
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<td>5 Referrals (participant initiated contact)</td>
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<td>6 Referrals (researcher initiated contact)</td>
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<td><strong>Total</strong></td>
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Overall, there was a high level of interest in the project. While hanging posters in the communities, I was often engaged in conversation by people who wanted to know more about the study, and several gave me the names of women they saw as prominent farm women in their community (interestingly, many wanted to refer me to women with the biggest farms). To facilitate recruitment, participants’ names were entered into a draw for a $200 cash prize, which was distributed several months after the study closed. The cash draw did not seem to be a major incentive for participants; no participants mentioned or asked about the draw at any point. Participation seemed to be motivated primarily by the women’s personal interest and desire to help.

In all but three cases, I travelled to the participant’s community to conduct the interview at a location of her choosing. In most cases I visited the participant’s farm, but occasionally we met at her workplace or another location. Two participants chose to meet at my workplace in Regina, and one participant preferred to conduct the interview in writing due to her extreme shyness but strong desire to participate. Field notes were made throughout the interviewing process. This served several purposes: (a) to record the context of the interviews, (b) to note interesting or relevant points not captured in the transcriptions, (c) to record my own perceptions for the purposes of reflexivity, and (d) to note major methodological changes or decisions made during the process. An example of the latter occurred when, after the eighth interview, I made the decision to eliminate several questions from the interview guide. These questions were not producing particularly useful insights and were causing the interview to become too lengthy. This change provided more flexibility to follow up on other important points that emerged spontaneously.
Data Analysis Methods

A saturation point was reached by the 30th interview, when it became clear that no new data was emerging. The interview recordings were then transcribed verbatim and subjected to a detailed coding process. However, the lack of literature on applied CR poses a challenge for data processing. Even in the empirical literature on CR, there is a tendency to sidestep a detailed discussion of data processing methods such as coding. References to qualitative data processing are vague at best, describing the process in such nondescript terms as: “intensive grounding process in which concepts emerged” (Yeung 1997:69) or “emerging patterns…explored further using progressive focusing in subsequent observation, interview, and analysis of document text” (Hart, New, and Freeman 2004:165). Data processing plays an important role in qualitative research, including CR, for which it provides insight into demi-regularities at the empirical level, determines abstractions, and represents the beginning of retroduction. As such, it is crucial to present a detailed description of the process and justification for the methods chosen.

Although some critical realists employ a grounded theory (GT) approach to data coding (e.g., Maxwell 2012; Yeung 1997), there are several ways in which GT is not conducive to a CR study. Although Yeung (1997) ultimately selected a GT approach for his research on transnational corporations, he pointed out several problems associated with grounded theory in a CR project. First, because grounded theory does not use abstraction to isolate generative mechanisms as CR does, it can result in merely “a complex map of empirical realities grounded in the data” (Yeung 1997:62–63). Second, the processes associated with grounded theory are primarily inductive, whereas CR uses
a retroductive process that is both inductive and deductive. Third, due to its reliance on participant narratives, grounded theory assumes that generative mechanisms will emerge directly from the data (Yeung 1997:69). Nonetheless, Yeung concluded that grounded theory is conducive to CR if it is combined with an iterative process of abstraction; however, this technique still does not account for pre-existing theory, which is an important starting point for CR analysis.

Indeed, Yeung (1997:63) acknowledged that just as “a realist researcher should not simply ‘borrow’ an existing theory and fit it into empirical data, nor should the theory emerge solely from the concrete data”. Furthermore, Gilgun (2005: 2) has argued that “researchers who have theoretical models cannot start anew, or act as if they don’t already know something about their areas of interest”. CR both acknowledges and provides a key role for pre-existing theory in its process of analysis. Theories are used for the purposes of abstraction and theoretical redescription. Critical realists attempt to locate the causes of demi-regularities and to evaluate, elaborate, or refute the theories that currently attempt to describe these demi-regularities. As Allen has pointed out, CR offers “a set of guidelines which outline how to critically analyse and re-work existing conceptions of social processes” (1983:26). This also requires the identification of powers, liabilities and other properties of structures, which is a key part of the analysis process. Rather than disregarding these pieces in favour of an entirely inductive and “open” coding approach, it is sensible to use both pre-existing theories and the components of CR itself as a framework for processing and analyzing data.

For these reasons, the project used a primarily deductive yet flexible coding process featuring negative case analysis. Deductive coding uses codes drawn from an
existing model or theory; however, these codes are not static and may be changed, eliminated, or supplemented with new codes during the process (Gilgun 2011). Similarly, negative case analysis prevents the predetermined codes from acting as “blinders” during the coding process. Negative case analysis involves looking for exceptions to the burgeoning analysis, rather than seeking only information that supports or reinforces it. As Gilgun pointed out, “it is easy to find material that supports the prior codes, but it is just as important in many cases to find material that does not fit into your codes” (2011:2). Deductive codes are treated as a means of reformulating the existing model or theory from which they were drawn (Gilgun 2011). This reformulation, which is key to CR, is not always followed by critical realists: Yeung (1997:69, emphasis added) reported that “interview quotes were also assessed in their contexts and irregular/inconsistent statements were eliminated”. The elimination of outlying statements is problematic from a feminist perspective, as feminist research tries to “ensure that marginal voices are not systematically silenced” by a dominant narrative (Wylie 2007:570).

For this project, I drew codes from the literature review, theoretical framework, and CR methodology. The first coding cycle used provisional coding based on the literature and theoretical framework. Provisional coding is a deductive strategy that uses a predetermined, initial list of codes drawn from the literature review, research questions, and/or experiential data (Saldana 2009:120). I began with 32 provisional codes of two types described by Maxwell (2012): organizational and theoretical. Organizational codes are simply topic-based “bins” into which information is sorted, while theoretical codes are derived from prior theory (Maxwell 2012). However, Saldana warned against a rigid
approach to provisional coding, pointing out that “your preconceptions of what to expect…may distort your objective and even interpretive observations of what is ‘really’ happening there” (2009:122). For this reason, “provisional” codes were treated as such, and codes were added, changed, or deleted as the data warranted. I also used emotive and versus coding to highlight points that were associated with particular emotions or conflicts, respectively (Saldana 2009). Over the course of the coding process, my 32 provisional codes expanded into a total of 198; this reflects the flexibility of my “deductive” coding process.

The second coding cycle was based on the elements of CR. A CR approach involves identifying particular components of reality at various levels. Under particular circumstances, these components act as generative mechanisms, or causes, beneath the events we see at the empirical level. Codes were constructed based on these components of reality. Structure and agency are two examples of such abstractions. A critical realist vision of structure and agency “starts from the ontological claim that structure and agency each possess distinct properties and powers in their own right” (Carter and New 2004:5). Thus, a parent code “structure: ___” was created, and existing organizational or theoretical codes were re-coded into it in order to identify the structures at play. A parent code marked “agency: ____” was similarly used. In addition to this secondary coding, I used NVivo coding queries and tree charts to identify the most dominant codes and connections. In some cases, the queries also provided insight into the generative mechanisms discussed in Chapter 7.

Some researchers (e.g., Maxwell 2012) have warned that coding data into themes, as I did, removes data from its original narrative context and can result in loss of
meaning or even misinterpretation of the data. To avoid this, I employed a second coding strategy using Microsoft Excel. Columns were created to correspond with each question in the interview guide and a row was created for each participant. In addition to being a useful tool for organizing demographic data, this strategy helped maintain a connection between each participant and her answers while simultaneously showing response trends by question. Part II of this thesis presents the findings and analysis of the processed data. Chapter 6 presents the empirical findings and preliminary analysis, while Chapter 7 contains the in-depth CR analysis aided by the coding queries described here.
In critical realist analysis, we try to find causal explanations for events. To do this, the event or phenomenon must be examined at the multiple levels of reality discussed in Chapter 4. The process is known as retroduction. It begins at the empirical (surface) level, where empirical data and people’s perceptions of a phenomenon provide initial insight into key patterns and issues that need explanation. Thus, statistics and interview data are useful at this level because they help us to see patterns, observe people’s experiences and understand how people interpret those experiences. Because human activities and even the meanings people give to events can sometimes be causal, we may even find that some generative mechanisms are visible in empirical data. However, CR analysis does not take these empirical facts or perceptions at face value. Deeper analysis is always required.

Next, we must think at the level of the actual. At this level, events are not filtered through human experience or interpretation. It is important to think about how events may differ from people’s interpretations of them. The researcher must ask her/himself what else might explain this phenomenon. This can help us uncover “generative mechanisms” (i.e., causal mechanisms), which exist at the third and deepest level of reality – the real – and which ultimately cause events to occur. These may not be directly observable in the empirical data; they may only be arrived at by analysis by the researcher. This means thinking beyond the empirical (surface) level of reality and thinking through a number of possible explanations to arrive at the best one. Theory and prior literature are useful here but should not limit or determine the analytical process;
for this reason, critical realists think both with and against existing theory using a process called theoretical redescription.

The following two chapters present and analyse the research results using CR. Each chapter broadly corresponds with a part of the CR process. Chapter 6 presents the empirical findings that are visible at the surface level of reality. This includes findings from the interview data (“intensive” data, in the CR lexicon) and some statistics on the broader agricultural context (“extensive” data). These are key to understanding the phenomenon being studied. Chapter 7 provides a deeper analysis at the level of the actual. Generative mechanisms are identified, which leads to a fuller explanation of the phenomenon. However, even at this level of analysis, reference is continually made to the empirical data to justify the explanation and to illustrate how I have employed Bhaskar’s notion of “rational judgement” in arriving at my explanation. As discussed in Chapter 4, this movement between empirical data and theoretical analysis is a key part of retroduction. At all levels the interplay of structure and agency, which I conceptualize using both democratic theory and critical realism, is demonstrated. We begin at the surface level of events and experiences.
ABSTRACTIONS

In order to discover the generative mechanisms that cause events, we must first identify the most pertinent issues and events at play. Some researchers call these the “objects of analysis”. Critical realists call these “abstractions” because they are “abstracted” or plucked from a larger context, that is, from the vast and open social systems that are the focus of sociological inquiry. The choice of abstractions can be guided by pre-existing theory and/or empirical data. Put simply, abstraction is the act of choosing certain items or phenomena to focus on.

For this project, I abstracted farm women’s work as a key focus. This abstraction was guided both by pre-existing theory and extensive empirical data. As discussed in Chapter 2, previous research about farm women has identified the importance of their work to the farm and community, but this research also found that their work is often devalued or invisible. At the same time, statistical trends show that farm women’s on-farm work and off-farm employment is increasing in quantity (Martz 2006). Taken together, these patterns or “demi-regularities” are worthy of further analysis and explanation. What is causing the increase in farm women’s work, both on- and off-farm, and is it still devalued?

Two other notable trends were abstracted for analysis. In recent years, several major changes in Canadian agricultural policy have occurred. Two of the most pertinent include the 1995 elimination of the Western Grain Transportation Act (known to most as the “Crow Benefit”), a transport support program, and the onset of Plant Breeders’
Rights (PBR) legislation, a form of intellectual property right for seed breeders. A second abstraction is related to climate change, which, as discussed in Chapter 3, manifests as increasingly extreme occurrences of flood and drought on the Canadian prairies. Both policy and climate are systemic, structural forces that can have tangible effects on farmers’ livelihoods now and in the future. They were thus abstracted as important contextual events that provide further insight into the connection between macro-level change and farm women’s work. Do major changes, such as changes to agricultural policy and extreme climate events, affect farm women’s work in specific ways? If so, how? Is adaptation to these changes gendered?

Participant Demographics

In total, 30 Saskatchewan farm women and three leaders of agricultural organizations participated in the interviews. The organizational participants were not asked for demographic data since these interviews were mainly intended for background information about the issues. As such, this section focuses on the demographics of the 30 farm women and not the organizational leaders.

The interviews were completed between August and December of 2011. The average age of the participants was 53.8 years. The fact that I specifically recruited participants who had been farming before 1995 may have skewed the age distribution to be somewhat older than it may have been otherwise; however, the average age of participants was nonetheless slightly younger than the provincial average for farmers which was 54.2 years based on the 2011 Census\(^1\). The youngest participant was 31 and

\(^1\) However, this provincial statistic is not specific to farm women, but includes all farm operators. With only one exception (i.e., the number of farm operators that are either female or male), the 2011 Census of
the oldest was 72. The majority of participants were between the ages of 51 and 60. On average, participants had been farming for 30 years (min=11; max=52).

All but one of the participants had children, and six had children currently living with them. Most of the participants were married at the time of the interview and all of those were married to men; one participant identified as a widow and another was single. All participants identified their ethnic background as European; three were French-Canadian and one participant specifically identified a Mennonite background. One participant described herself as a physically disabled farmer and another reported mental health issues that had affected her ability to work. Although most of the farm women had worked off the farm at some point in their lives, 18 were currently working in off-farm (or non-farm) waged employment at the time of the interview, four had retired from it, and the remainder did not work off-farm. Of those working off-farm, seven worked part-time, six worked casual hours, and five worked full time. The women’s off-farm work (or that from which they had retired) was diverse: six worked in the medical/dental sector, five were employed in jobs related to education, three were in finance, two were paid caregivers, two worked in social services, two were employed in retail, and one had a job related to art and culture.

Agriculture did not provide sex-disaggregated data. For this reason, the average age of farm women specifically may in fact be younger than the provincial average for all farmers.
Table 6.1. Age Groupings of Participants

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 to 40</td>
<td>3</td>
</tr>
<tr>
<td>41 to 50</td>
<td>5</td>
</tr>
<tr>
<td>51 to 60</td>
<td>17</td>
</tr>
<tr>
<td>61 to 70</td>
<td>4</td>
</tr>
<tr>
<td>71 to 80</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
The majority of participants (n=16) were from mixed farms, which produced both livestock and crops, while 12 produced crops only. Two participants produced only livestock. Although my participant selection criteria had targeted farm women who had been producing grain since at least 1993, three exceptions were made. The two livestock producers were included because both had been grain farming prior to the Crow elimination and had changed their farms largely because of it. Both were eager to discuss the issues being studied and were therefore included. A third exception was made for one producer who had begun farming in 1995; she was included in the study because she offered an important perspective on off-farm work that I felt should be included.

Participants’ farms were diverse in ownership structure. Of the 30 farms, 11 were family corporations, eight were spousal partnerships, seven were family partnerships (e.g., including parents, siblings, or children), three were sole partnerships with ownership in the man’s name, and one was an alternative family partnership in which land was individually owned but expenses shared. The average farm size was 3,657 acres, with a minimum size of 800 acres and a maximum size of 12,000 acres. In terms of net annual household income, most households fell in the $50,000 to $99,000 category (see Table 6.2).
Table 6.2. Participant Income Demographics

<table>
<thead>
<tr>
<th>Income Category</th>
<th># of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under $10,000 to $49,999</td>
<td>3</td>
</tr>
<tr>
<td>$50,000 to $99,999</td>
<td>13</td>
</tr>
<tr>
<td>$100,000 to $249,999</td>
<td>5</td>
</tr>
<tr>
<td>$250,000 to $499,999</td>
<td>3</td>
</tr>
<tr>
<td>$500,000 to $999,999</td>
<td>2</td>
</tr>
<tr>
<td>$1,000,000 to $2,499,999</td>
<td>1</td>
</tr>
<tr>
<td>$2,500,000 and over</td>
<td>0</td>
</tr>
<tr>
<td>Declined / too variable to report</td>
<td>3</td>
</tr>
</tbody>
</table>

11 Adapted from Statistics Canada classifications (Sparling, Laughland, and Mitura 2008).
UNDERSTANDING FARM WOMEN’S WORK

In order to understand if and how farm women’s work is affected by changes in policy and climate, it was necessary to understand the nature and extent of this work. The interview participants were asked a series of questions about their work in a variety of areas, including off-farm work, on-farm work, household or caregiving work, and volunteer work. Several of the questions were the same as, or similar to, those used by Kubik (2004) in her 2001-2002 research with Saskatchewan farm women. This facilitated comparison and helped identify some significant changes that have occurred over the past decade.

First, all participants were asked to provide one or more titles to describe their profession or work-related identity. A list of examples was given, which included the following: farmer, woman farmer, farm wife, farm woman, farm worker, farm homemaker, mainly employed in a non-farm sector, retired, on disability or other leave from waged employment, and “other”. Participants could select as many titles as they desired and were also invited to provide different titles that they felt were more appropriate. The results of this question are presented in Table 6.3.
Table 6.3. Participants’ Job Titles

<table>
<thead>
<tr>
<th>Title</th>
<th>Total Number of Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer</td>
<td>14</td>
</tr>
<tr>
<td>Mainly employed in a non-farm sector</td>
<td>10</td>
</tr>
<tr>
<td>Farm wife</td>
<td>10</td>
</tr>
<tr>
<td>Farm woman</td>
<td>9</td>
</tr>
<tr>
<td>Farm worker</td>
<td>8</td>
</tr>
<tr>
<td>Farm homemaker</td>
<td>7</td>
</tr>
<tr>
<td>Woman farmer</td>
<td>6</td>
</tr>
<tr>
<td>Retired</td>
<td>3</td>
</tr>
<tr>
<td>On disability or other leave from waged employment</td>
<td>1</td>
</tr>
<tr>
<td>Other (wife of farmer x2; “slave”; “domestic farmer”, i.e., cooking for farm operation; home worker; disabled farmer)</td>
<td>6</td>
</tr>
</tbody>
</table>
While some previous research (e.g., Faye 2006) found that farm women were hesitant to define themselves as a “farmer” in their own right, farm women in other studies (e.g., Young 1997) accepted the title. Almost half of the participants in my study used the title “farmer”, making it the most commonly selected title overall. Relatively few women identified as a “farm homemaker”. This contrasts with Kubik’s (2004) study, in which “homemaker” was the most commonly selected descriptor.

Beyond this, the women also commonly identified themselves as “mainly employed in a non-farm sector” and as a “farm wife”. Importantly, of the 14 women who self-defined as a “farmer”, nine of these currently held off-farm work. This number does not include those who had retired from off-farm work; if these were counted, the number of women self-defining as both farmer and non-farm professional would likely have been even higher. This shows that even while working off the farm, women do not stop counting themselves in as farmers.

“I Am the Hired Man”: Farm Reproduction and the Diversity of Farm Women’s Work

With one exception, all of the women interviewed were currently engaged in some type of farm work. Two women were the main or sole farmers in their household. The remainder either worked side-by-side with their husbands on the farm or did some combination of farm, off-farm, and domestic or caregiving work. Of these, three participants emphasized their complete and equal partnership in the farm’s ownership or operation. Some identified mostly with an off-farm job but, as discussed previously, still identified at least partially with the farm. It was very common for participants to identify their husbands as the “primary” or “main” farmer who was most involved with the farm operation:
A lot of times the men take all of the responsibility for the financial planning and dealings and that type of thing and other times the women are doing it, but it’s still not really their decision at the end of the day.

This was a dominant theme throughout the interviews.

Accordingly, a high number of participants described their work as “helping out” on the farm. Although the participants regularly performed a wide variety of farm tasks, the most commonly named role (mentioned by 20 of the 29 participants who did farm work), was some variant of “helping”, “filling in”, acting as a “hired hand” or “hired man”, a “go for”, or “assistant”. The next most commonly mentioned tasks (n=15) included some type of farm management or accounting work, including marketing and research. Indeed, many of the participants were the main or sole bookkeeper on their farm operation. Almost half of the farm women (n=14) were also engaged in hauling grain and other driving tasks, such as moving vehicles, machinery, and farm workers to and from the field. In terms of fieldwork (e.g., seeding, haying, and harvesting) and livestock production (e.g., feeding, calving, and milking), 12 of the 29 farm women did at least some of this work on their operation.
Table 6.4. Farm Tasks Performed by Participants

<table>
<thead>
<tr>
<th>Farm Task</th>
<th>Number of Participants Performing Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping, filling in, “employee”, “hired hand / hired man”, “go for”, assistant</td>
<td>20</td>
</tr>
<tr>
<td>Bookkeeping and accounting</td>
<td>15</td>
</tr>
<tr>
<td>Marketing, administration, research, and business management</td>
<td>15</td>
</tr>
<tr>
<td>Hauling, driving</td>
<td>14</td>
</tr>
<tr>
<td>Operating field machinery (seeding, combining, harrowing, baling etc.)</td>
<td>12</td>
</tr>
<tr>
<td>Livestock chores (e.g., milking, calving)</td>
<td>12</td>
</tr>
<tr>
<td>Grain bins: shovelling, building</td>
<td>9</td>
</tr>
<tr>
<td>Machinery maintenance, filling, loading</td>
<td>8</td>
</tr>
<tr>
<td>Meals for farm workers</td>
<td>6</td>
</tr>
<tr>
<td>Quality control, inspection, and supervision</td>
<td>6</td>
</tr>
<tr>
<td>Janitorial, cleaning farm buildings</td>
<td>4</td>
</tr>
<tr>
<td>Building maintenance and repair</td>
<td>2</td>
</tr>
<tr>
<td>Processing</td>
<td>1</td>
</tr>
<tr>
<td>Manual fieldwork (e.g., rouging)</td>
<td>1</td>
</tr>
<tr>
<td>Yard work*</td>
<td>1</td>
</tr>
</tbody>
</table>

*Note: this chart contains the participants’ responses to the question about farm tasks they perform. Although most of the women discussed their yard work at other points in the interview, only one listed this specifically as “farm work”. I have placed this response here in order to preserve the women’s own categorizations of their work.
The presence or absence of hired farm workers affected women’s work patterns. Many farm women linked their “helping” role to a lack of hired farm workers. Although in some cases hiring a worker was not financially possible, many farm women described the difficulty of finding knowledgeable helpers. In some areas, this is attributable to depopulation, while in other areas resource industries, such as oil and mining, offer more competitive salaries and benefits. When hired work was not possible, farm women became “hired men” (and often referred to themselves as such). When hired work was available, women’s role shifted toward feeding these workers: 6 participants listed meal preparation for farm workers as part of their farm work. It is particularly notable that they listed this as “farm work” and not domestic work, a point that reinforces the complexity of categorizing farm women’s work into categories such as “farm work” or “domestic work”.

These data clearly show the diversity of farm women’s work. Although 18 of the farm women held an off-farm job, all but one of these women still performed farm work in addition to the off-farm work. Furthermore, farm women continue to do an overwhelming majority of domestic and caregiving work in their households, with 88.7 percent of this work being performed by the participants and the remainder done by their husbands and/or children. Farm women also performed the majority (75.5 percent) of yard work, such as gardening and lawn care, for a combined total of 82.1 percent of all domestic and yard work. As such, the proportion of this work performed by farm women is almost 20 percent higher than the national average for women: according to Statistics Canada (Milan et al. 2011), Canadian women performed 1.7 times more domestic and yard work than Canadian men, or approximately 62.6 percent of the total, in 2011.
Almost all of the farm women did volunteer work in their communities. Although many were unable to estimate the amount of volunteer work they performed, the average amount done by those who felt able to estimate was 2.4 hours per week. However, it should be noted that over half of the participants were unable to provide such an estimate because their volunteer work was diverse and varied throughout the year. Many of the participants’ husbands were also heavily involved in volunteer work. Both farm men and women volunteered on boards of various organizations, ranging from local clubs to national farm/commodity organizations. Whereas men were more likely to participate in commodity groups or local government, such as rural municipality (RM) councils, women often performed volunteer accounting and secretary work for community organizations and clubs (particularly while children were enrolled in these clubs) and provided food for local events. These gendered trends support Kubik’s (2004) findings, which found that volunteer work is gendered along similar lines. Both men and women were commonly involved with local church boards and religious activities, and many volunteered at community sporting events.

Farm women’s labour is stretched in a number of directions and between a number of diverse tasks. Almost all participants agreed that this “dispersion” of labour adds additional stress and, furthermore, farm women’s tasks often require a large amount of travel between various locations. On average, participants working off-farm commuted a round trip of 50 kilometres to and from work. The longest was a daily commute of 200 kilometres, round trip. Two participants performed their off-farm jobs from home and therefore did not need to commute. However, today’s farm work also requires its own form of “internal commuting”. Due to the growing size of farms and
increasing dispersion of acreage, participants frequently spoke about the great distances travelled to bring meals out to farm workers in the field, as well as the amount of work involved in moving vehicles to and from the fields – all of which was commonly performed by farm women. One woman regularly drove 80 minutes, round trip, to bring meals to the field.

Many researchers have argued that the well-documented historical invisibility and marginalization of farm women’s contributions (both on and off the farm) is at least partially due to the patriarchal structure of farming, which positions men as the central farmers and women’s work as peripheral to the farm’s functioning and productivity (e.g., Alston 1995, 1998; Kubik 2005; Pini 2005; Sachs 1983; Whatmore 1991). Indeed, it is apparent that a rather rigid gendered division of labour exists, particularly in terms of domestic and caregiving labour. It is also apparent that women’s work on the farm often involves “assisting” men.
Figure 6.1. The gendered division of labour – near Paynton, Saskatchewan.

[original in colour]
From a feminist perspective, it is tempting to attribute these trends solely to a singular cause – namely, patriarchal gender relations that disadvantage women. However, it must also be acknowledged that the material conditions of farm work play an important role in this division of labour. Farm work is not a “9 to 5” job. For grain producers, seeding and harvest require long hours of work. It is not uncommon for farmers to work from four or five o’clock a.m. until midnight during these seasons. Childcare services are limited in rural areas, and are certainly unavailable for these types of hours. As such, the concrete conditions of farming create a system in which a dual caregiver model is less common. This is another key reason why farm women perform significantly more domestic work than their urban counterparts. In almost all cases, the farm women interviewed were (or had been) the primary provider of childcare in their families. Farm women’s work is thus structured by the confluence of both ideological and material factors. There remains a strong gender ideology that positions women as “natural” caregivers and domestic workers, as well as an historically engrained gender ideology that marks farming as a masculine endeavour. Combined with the “nonstandard” schedule of farming, a system is created in which farm women are primarily responsible for social reproduction.

This combination of factors shapes and determines women’s farm work. Because their time is consumed by care of children and often elderly parents and relatives as well, farm women are more likely to engage in “assisting” roles on the farm. Indeed, previous research has documented farm women’s work as inherently “interruptible” (Faye 2006) and found that farm women are often “on-call” (Alston 1998), which tends to (re)produce the invisibility of their contributions. This trend is apparent in many
participants’ descriptions of their farm work, in which they position themselves as employees or hired hands. One participant stated:

I’m the one that gets told, “just go harrow that field”. I don’t have to do the maintenance or fuel the tractor or, you know, I don’t have to do any of that prep work… I get out there it’s all greased and it’s… I just get in. I know it’s fuelled; I don’t have to do any of that. So I feel like I’m, you know, the employee or I don’t know how else to put it. I don’t have to do any of the thinking.

The FPE concept of social reproduction (as discussed in Chapter 4) is useful to understand farm women’s work, but only to a certain extent. Feminist political economists both posited and questioned the devaluation of (women’s) unwaged work in a capitalist system that valued waged (i.e., “productive”) work above all else. Various theorists noted the role of both gender ideology and material relations in creating this gendered division of labour. As I have argued, the dual gendered ideology that positions agricultural “production” as men’s work and social “reproduction” as women’s work is not easily challenged due to the material conditions of an industry like farming, with its long hours and lack of childcare services. It is for this reason, too, that the concept of social reproduction only goes so far in this particular context.

Feminist political economists highlighted the dichotomization of work into “productive work”, which is valued in capitalist society because it produces a product for sale, versus “reproductive work”, which is less valued because it does not result directly in commodity production. However, these ideas were based on waged and unwaged labour (i.e., productive work=waged=valued; reproductive work=unwaged=devalued). Income is often structured differently on family farms, where (with the exception of hired workers) work is rarely “waged” or “unwaged”, and where the lines between “domestic” and “farm” work are almost always blurred. However, it can be argued that
certain farm tasks are more directly linked to commodity production (e.g., seeding, 
harvesting) and therefore tend to be disproportionately valued over work that is more 
distanced from the actual commodity (e.g., feeding workers or washing coveralls), even 
though neither is waged in the traditional sense.

It is necessary to alter and expand current FPE theory on gender and work in 
order to fully understand the complexity of farm women’s work. Although many farm 
women now work off the farm for a wage, this does not mean they cease being farmers. 
This is clearly seen in the titles they use to describe their work. Farm women continue to 
work in a number of areas, both waged and unwaged. Their work defies categorization. 
However, as I have argued, the multifaceted and dispersed nature of their work means 
that they often find themselves acting as “assistants” or “go-fors” on the farm as opposed 
to the central (usually male) farmer whose position is relatively stable and whose time is 
spent primarily at tasks associated directly with the farm commodity. Therefore, the 
notion of “social reproduction” should be expanded in the case of farm women. Their 
work should be seen as a combination of social reproduction and “farm reproduction”.

Just as social reproduction refers to “all the activities that ensure day to day and 
generational survival of people: having babies, raising children, provisioning household 
members by cooking, cleaning, maintaining the home and caring for those who are ill or 
elderly” (Luxton 2007:132), “farm reproduction” can refer to a variety of tasks essential 
for the day to day and generational survival of the farm. These tasks include going for 
tractor parts, moving vehicles and people to and from the field, delivering meals in the 
field to family and/or hired workers, teaching children about farm safety, and mowing 
the grass around the farm bins to prevent rodents from eating the grain. Most of these are
not conventionally “productive” (in the sense of directly removing a commodity from the field and selling it) but which are very important to the continual existence, profitability, and even intergenerational continuance of the farm.

Farm reproduction does not refer only to specific gendered work tasks. More broadly, it is work that ensures the continuation of the family farm as a specific “form of production”, to borrow a term from Friedmann (1978). Indeed, family farming remains the dominant form of production on the Canadian prairies. This makes the concept of farm reproduction different from the FPE notion of social reproduction, upon which I have based it. Social reproduction refers to the reproduction of particular household gender relations and, by connection, the continuation of broader systems of production (e.g., capitalism), but it does not acknowledge particular forms of production at the meso level (e.g., family farms). Farm reproduction blurs the lines between conventional notions of “productive” and “reproductive” labour. It is crucial work often performed by farm women and, like social reproduction, is often not recognized for its importance to the farm as a whole.

*Structure, Agency, and Farm Women’s Work*

From a critical realist perspective, the gender ideology of farming-as-masculine can be seen as a liability for farm women. Combined with the gendered ideologies of women as “natural” caregivers, it contributes to the marginalization of their role in farm reproduction. However, in certain circumstances this liability is actualized as a power. At times, it allowed the women to more easily resist the addition of undesirable work to their already extensive workload.

This was particularly apparent in statements about driving the semi to haul grain.
– a practice that, due to the policy changes discussed below, has increased dramatically in recent decades. Some women reported a hesitancy and nervousness toward operating such large and expensive machinery (a statement that returns to the common notion of men as the central farmers and therefore the ones to whom anyone operating machinery – hired workers, farm women, and farm children – are accountable). Many, however, were engaging in a form of resistance. They refused to obtain the 1A license required to operate a semi because they knew this would result in additional farm work being “assigned” to them; indeed, this is likely in a system where farm women were often positioned as “employees” or “hired men”. As one woman put it, “I don’t want to be out there with a big semi behind me… no, I don’t want any of that”. When asked why she did not pursue her 1A license, another woman clearly stated: “I could see that it would increase my workload and give me more responsibilities that if I could avoid, I would avoid, so I chose not to get my license to drive the semi”. When women rejected these tasks, they became the job of the “primary” farmer by default (i.e., the farm man). As discussed below in relation to climate change, this has had specific effects on farm men and results in a particularly gendered experience of farm crisis.

In this way, farm women’s work is shaped by the interaction of structure and agency. Although gender ideologies can be limiting, in some cases they can also facilitate agency and resistance to other broader trends. Depending on the conditions, liabilities can be actualized as powers. This became even clearer when I examined the participants’ motivations for off-farm work. In light of the scholarly literature on farm crisis and the growing financial precariousness of family farms (e.g., Diaz, Jaffe, and Stirling 2003; Epp and Whitson 2001b; Lind 1995), I expected that farm women’s off-
farm work would be motivated primarily by financial need. After all, why would women who define themselves by referencing the farm – i.e., as “farmers”, “farm women”, and “farm wives” – voluntarily engage in off-farm work, which adds more work and stress to their lives (Kubik 2004)? Indeed, two of the most recent studies on Canadian farm women (Heather et al. 2005; Kubik 2004) found that farm women’s off-farm work was, in many cases, necessary for farm survival.

I asked the participants to rate a series of possible reasons for taking off-farm employment. Using a scale of zero to six (with zero being “not at all a factor” and six being “the most significant factor”), participants rated the following reasons for doing off-farm work: (1) to earn money to support the farm operation, (2) to earn money for household needs, (3) to earn extra money for “wants” or luxury items, (4) for personal goals, fulfillment, or “something new”. Only one participant mentioned that her main reason fell outside of those listed. She had begun a home-based childcare as a favour to friends in the community and strongly rejected defining this as “work” at all because of her strong enjoyment of it. All other results are shown in Table 6.5 and Figure 6.2, below.
Table 6.5. Farm Women’s Reasons for Taking Off-Farm Work, Average Scores

<table>
<thead>
<tr>
<th>Reason for Taking Off-Farm Work</th>
<th>Average Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal goals, fulfillment, or “something new”</td>
<td>4.13</td>
</tr>
<tr>
<td>Earn money for household needs</td>
<td>4.08</td>
</tr>
<tr>
<td>Earn extra money for “wants” or luxury items</td>
<td>3.42</td>
</tr>
<tr>
<td>Earn money to support the farm operation</td>
<td>2.05</td>
</tr>
</tbody>
</table>
Figure 6.2. Farm Women’s Reasons for Taking Off-Farm Work, Distribution of Scores

Rankings: 0-Not a factor; 6-Most significant factor

- $ for farm
- $ for household
- Extra $ for "wants"
- Personal goals/fulfillment

[original in colour]
To my surprise, earning money to support the farm was, on average, the least important factor motivating farm women’s off-farm work. The most important factor was personal goals and fulfillment. Only three of the farm women working off-farm rated “personal goals, fulfillment, or something new” with zero; that is, it was not a factor in their decision to work off the farm. One woman rated it a 0.5 and another a three; however, 13 of the 18 women working off-farm rated personal fulfillment as a 4 or higher. Earning money to support the household was the second most significant reason for farm women’s off-farm work. To ensure accuracy of my conclusions on this topic, I had asked the farm women another question: if money was not an issue, what would their ideal work arrangements be like? Of the 19 participants who answered this question, the majority of participants would choose to keep working off the farm as they currently were. Four additional participants would choose to keep their off-farm job but with a reduction in the hours worked. Very few (n=2) would want to quit their off-farm work to work on the farm instead.
Table 6.6. Ideal Work Arrangements

<table>
<thead>
<tr>
<th>Ideal Work Arrangements</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue to work at off-farm job</td>
<td>10</td>
</tr>
<tr>
<td>Reduce hours at your off-farm job</td>
<td>4</td>
</tr>
<tr>
<td>Quit off-farm job and work on the farm</td>
<td>2</td>
</tr>
<tr>
<td>Quit off-farm job and focus on domestic/homemaking work</td>
<td>2</td>
</tr>
<tr>
<td>Quit or reduce amount of farm work</td>
<td>1</td>
</tr>
<tr>
<td>Work at a different off-farm job</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
</tr>
</tbody>
</table>

n=20*

(*note: this question was asked of participants currently working off-farm as well as those who had recently retired; the latter were asked to respond as they would have responded while still working off-farm)
Off-farm work clearly provides many farm women with a source of self-fulfillment and pursuit of personal goals. It is not only a survival or adaptive strategy for the farm. However, for many, the extra income was also important for household purchases such as repairs, furniture, and children’s education. When asked if the farm would continue to operate without their off-farm wages, eleven women (55 percent) said that it would. Three (15 percent) reported that the farm would not survive without their off-farm work. Six (30 percent) said that it would survive, but with difficulty or with negative effects on household and family budgets. This corresponds with the high importance placed on “earning money for household needs” as another motivation for off-farm work. In some cases, the farm is not sufficient to support the needs of an entire household and women’s off-farm work helps to fill this gap. However, despite the interconnection between farm and household, the farm women clearly viewed their income as supporting the household specifically, and not the farm. As farms grow larger and costs escalate, a single off-farm salary may simply be, as one farm woman put it, “a drop in the bucket” for the farm. For this reason, it is possible that women see their off-farm salaries as making a larger impact in the household than on the farm.

In part, this reflects the gendered spatialization between house and farm, and the gendered division of labour that positions home as a feminine space and farm as a masculine one. In some cases, it may also be due to the increasing number of incorporated family farms, which formalizes the financial separation between the household and farm, or it can be simply an accounting preference to keep home finances separate from farm finances. This finding also supports previous work on Saskatchewan farm women. Kubik (2004) found that household and family expenses were the number
one reason for farm women’s off-farm employment at 31.7 percent, which was followed by money for family leisure activities (16.4 percent). Interestingly, however, only 7.1 percent of Kubik’s participants were motivated by personal reasons, such as building their own career or getting away from the farm. These were the most important reasons cited by participants in my study.

Furthermore, the farms in Kubik’s study were more financially dependent on participants’ off-farm income than those in my study. Amongst Kubik’s participants, only 25 percent reported that the farm could continue without their off-farm income (compared to 55 percent of my participants), 29 percent reported that the farm could not survive without their off-farm work (compared with my 15 percent), and 38 percent said it would continue, but with difficulty (compared to my 30 percent). The response proportions from farm women regarding the necessity of off-farm work were statistically significantly different\textsuperscript{12} between Kubik’s sample and my own; specifically, it appears that the number of farm women who believe the farm could definitely succeed without support from off-farm work appears to have shifted from 27 percent\textsuperscript{13} in the 2002 study to 55 percent in 2011. One possible explanation for this difference is the dramatic decline in small and low-income farms that has occurred over the past decade, and which is discussed below. If Kubik’s farms were more dependent on off-farm income for survival, it is possible that some of her participants’ farms (along with others like them) were unable to continue and have since retired or left the industry.

\begin{itemize}
\item \textsuperscript{12} $\chi^2(2)=7.35$, $p < .05$, $V < .01$
\item \textsuperscript{13} Adjusted from the previously cited 25 percent to account for the nonresponsive 8 percent of Kubik’s sample.
\end{itemize}
Public policy, as discussed in Chapter 3, can act both as structure and as a source of agency. This was reflected in the participants’ views on policy and the role of government. Participants were asked to discuss their views on, and experiences with, the two policy changes under study. They were also asked to discuss the ideal role for government in the agricultural sector and to suggest any changes they would like to see. This section describes these responses and illustrates the role of gender in adaptation to policy change.

*Gendering the Crow*

In her research on Saskatchewan farm women, Kubik (2004) found that transportation issues and costs were a key theme affecting the lives of farm women. As one of the most significant policy events in the history of prairie agricultural transportation, the Crow offers an important window into the interconnection of policy change and gender.

Although I had been warned that participants might not recall details of an event that occurred 17 years ago, almost all of the farm women interviewed could identify ways that the Crow elimination had directly affected their lives and livelihoods. Using open-ended questioning, I asked participants to discuss what they remembered of the Crow change, if it had affected them and, if so, how.

The three most common responses to the open-ended questions were that the elimination of the Crow caused changes to farm practice (mentioned by 12 participants), that it had contributed to the interconnected trends of increased farm size, loss of small farms, and rural depopulation (mentioned by 9 participants), and that it had dramatic financial consequences on their farm’s bottom line (mentioned by 8 participants). Of the
30 participants, only two could not identify any effect of the Crow change on their lives. In one of these two cases, the participant attributed this to the fact that she and her husband had successfully avoided farm debt. In fact, several participants speculated that farms with high levels of debt were likely most affected by the Crow change.

As discussed in Chapter 3, many of the same policy events that determined the Crow outcome also sealed the fate of branch rail lines on the prairies. Both the Crow elimination and branch line abandonment were part of a broader shift toward railroad deregulation and privatization, which was facilitated by such events as the MacPherson Royal Commission on Transportation (1959-61), the National Transportation Act of 1967 and the Hall Commission of Inquiry (1975-77). The elimination of the Crow Benefit in 1995 meant that grain transport could become a lucrative business for railway companies and the CNR was privatized that same year. Many participants discussed the Crow elimination in the context of this broader shift. They discussed the loss of local branch lines and country elevators, which had caused many farmers to purchase a semi truck to haul their own grain. This had given them more control over the timing and cost of hauling grain, but added labour, cost, and time involved in trucking grain further to terminals. They also acknowledged the negative impact of this increased trucking on local roads and highways. One participant described the situation in her area, stating that “there isn’t an elevator less than an hour away and so it’s taking more time. You’re driving your grain two, three hours away and then sitting in a line-up to dump it”. Some linked the loss of local elevators with decreased competition in the grain-handling sector, which had affected their receipts.
The financial impacts of the Crow elimination led to changes on almost all of the farms. At the time of the Crow change, analysts predicted it would result in more production of domestically processed crops, feed grain production, and cattle production on the prairies (Doan et al. 2003). “Diversification” was the word of the day. In agriculture, diversification refers to “a number of changes, including engaging in off-farm employment, performing non-agricultural activities on the farm, specializing in a different commodity, and adding a new commodity to the existing farm operation” (Ramsey and Everitt 2001:7). Defined this way, some farm-level diversification did result directly from the Crow change.

The most common adaptive strategy amongst my participants was to change the commodities produced on the farm in order to reduce grain transportation as much as possible. Three of the participants had eliminated grain production altogether by switching to livestock production, while three more had increased their current level of livestock production. This corresponds with the statistical data, which showed a 10 percent increase in livestock production in the prairies between 1995 and 2002\(^\text{14}\) (Doan et al. 2003). One participant had begun a certified seed growing operation and another had begun producing organic grain, which is collected directly from the farm by the purchaser. Two had started an on-farm butcher shop that sells meat products directly to customers, and two were involved with producer-run rail car companies. Some of these strategies can be considered “value-added” activities, which usually involves additional steps or processing to add financial value to the commodity produced.

\(^{14}\) Unfortunately, Crow-related shifts to cattle production were closely followed by the onset of dramatic price declines in the cattle industry due to bovine spongiform encephalopathy (BSE) in the early 2000s. Cattle markets have only recently begun to recover.
Cost-cutting was another important adaptive strategy. Some participants tried to minimize both farm and household expenses to compensate for the increased transport costs caused by the Crow change. This particular adaptive strategy clearly revealed the gendered dimensions of change adaptation, which corresponds with the gendered division of labour. On-farm cutbacks included the repair of older machinery instead of purchasing new machinery. Men performed the majority of this repair work. In contrast, women were chiefly responsible for household cutbacks, which for some participants meant repairing worn or torn clothing instead of purchasing new clothing, growing and preserving one’s own food instead of purchasing it, and reducing family leisure or extracurricular activities. One participant had begun raising hogs for her own family’s meat consumption. A particularly poignant example of such cutbacks was a story told by one participant, a small-scale farmer, who had young children at the time of the Crow elimination. For her, keeping the Crow benefit “might have meant having a full size vehicle. We had a…[19]82 S10 [small truck] and two little children. And, you know, and that meant…having a young child on your lap, which is very dangerous, very dangerous”.

For women, adaptive strategies were often performed simultaneously with domestic and caregiving labour. After the Crow elimination, one participant had begun a new farm practice involving difficult manual fieldwork. She performed this work with her young baby strapped to her back. These experiences support Kubik’s (2004) finding that farm women’s work often defies categorization, blurring the lines between “farm” and “domestic” labour. This particular example also shows that, although diversification through value-added activities is often touted as a solution for rural sustainability (as it
was during the Crow controversy), diversification strategies are not gender-neutral. Although policymakers have acknowledged some limits to diversification such as additional workload, specialized skills and machinery, or natural land characteristics, the gendered effects of these strategies are rarely mentioned (e.g., Doan et al. 2003). The additional work involved in diversification often calls for increased contributions from the entire farm family; therefore, this work must be balanced with social reproduction, which is still disproportionately the responsibility of farm women. Policies encouraging diversification must be accompanied by attention to social reproduction and gendered divisions of labour.

Moreover, it cannot be assumed that diversification is a panacea for rural sustainability. During the 1990s, commentators extolled the diversification that would result from the Crow elimination. As several participants pointed out, such glowing statements about diversification are much more complicated in practice:

I spent a lot of time going to a lot of meetings…and one of the things we talked about was, yes, diversify into cattle. When you don’t have a proper well, and you don’t have any dug-outs, and you don’t have a fence, and you don’t have any cattle…Since then you hear you about people who, yes, diversify and they’ve diversified right off the farm because it hasn’t made any money.

Another participant described how this affected entire communities:

The biggest thing that [the Crow] did, I mean, it affected us on the farm, but it affected our whole community…All the things that were lost, all the businesses, you know... it did not diversify in that way, because then, because people didn’t have the money.

For the most part, value-added diversification was not a common adaptive response to the Crow change, at least not at the farm level. This was shown most clearly through a quantitative question. Although the women had already mentioned many adaptive strategies in the open-ended discussion, I also asked a quantitative question to
provide a measureable account of the most and least common adaptive responses to the policy change. This also ensured participants had not forgotten to mention any strategies. The quantitative question was strategically positioned after the open-ended questioning so as not to “lead” or shape the previous discussion. Participants were given a list of possible adaptive strategies used in response to the Crow change, which had been drawn from both academic and grey literature on the Crow. The list included eleven different adaptive strategies as well as an open category. The women selected which strategies (if any) had been implemented on their farms in response to the change. This question was applicable for 24 of the participants, and their answers are presented in Table 6.7.
Table 6.7. Adaptive Strategies in Response to Crow Change

<table>
<thead>
<tr>
<th>Adaptive Strategy</th>
<th>Number of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Started producing more oilseeds/pulses</td>
<td>16</td>
</tr>
<tr>
<td>Increased acreage</td>
<td>13</td>
</tr>
<tr>
<td>Spouse increased farm work</td>
<td>11</td>
</tr>
<tr>
<td>Participant increased farm work</td>
<td>9</td>
</tr>
<tr>
<td>Relied more on participant’s off-farm income</td>
<td>7</td>
</tr>
<tr>
<td>Increased livestock production</td>
<td>6</td>
</tr>
<tr>
<td>Increased hay/feed grain production</td>
<td>5</td>
</tr>
<tr>
<td>Relied more on spouse’s off-farm income</td>
<td>5</td>
</tr>
<tr>
<td>Began a value-added or processing venture</td>
<td>4</td>
</tr>
<tr>
<td>Began livestock production</td>
<td>3</td>
</tr>
<tr>
<td>No changes made because of Crow</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>1 (cutting household and farm expenses)*</td>
</tr>
</tbody>
</table>

n=24

*cost-cutting was a commonly mentioned strategy, but only one participant noted it again as part of the quantitative exercise. Again, I have included it here to represent the participants’ responses as closely as possible.
Only four participants indicated that they had begun a value-added venture as a response to the Crow change. Crop selection\textsuperscript{15} (i.e., changing which crops are seeded), was a much more common method of adaptation at the farm level. The most common adaptive strategy, chosen by 16 of the 24, was to begin or increase production of oilseed and pulse crops, which can be processed domestically or collected by the purchaser and therefore allowed participants to avoid the increased cost of transporting grain to port.

The elimination of the Crow Benefit was, therefore, one of several factors that changed the face of crop production in Saskatchewan throughout the 1990s. In 1991, spring wheat covered the most acreage in Saskatchewan at 17,253,151 acres; canola was the fourth at 3,359,032 acres (Statistics Canada 1996). By 2011, canola had become the top crop in Saskatchewan at over 9.8 million acres compared to spring wheat’s 8.0 million acres (Statistics Canada 2011). By 2011 Saskatchewan had also become the top lentil producer in the country, producing 96 percent of all Canadian lentils (Statistics Canada 2011). Figures 6.3 and 6.4 illustrate the changing crop production patterns in the prairie region from 1995 to 2010 using grain delivery data. In addition to the increased deliveries of both canola and peas, the figures also show the dramatic reduction in grain delivery points, which is due primarily to the loss of branch lines and country elevators.

\textsuperscript{15} I have intentionally used the term “crop selection” instead of “crop diversification” because there is little data on whether crop cover in Saskatchewan has actually diversified, or if newly dominant crops have simply replaced formerly dominant crops. During the Crow debates of the 1980s and 90s, it was argued that the Crow elimination would result in increased crop diversification across the prairies. Although the increased production of canola and pulse crops (in combination with barley, wheat and durum) appears to support this assertion, there has been little research on this phenomenon more recently than the early 2000s (e.g., Kulshreshtha and Klein 1999; Seaborne 2001). Further, statistics positing crop diversification can be supported or refuted depending on the metrics used (e.g., Bradshaw 2004). A comprehensive review of crop production statistics is beyond the scope of this dissertation; as such, I refrain from asserting truth to the diversification theory. Further research is needed on this topic, particularly to determine whether crops have truly diversified or if oilseeds and pulses are simply replacing crops such as wheat and barley as dominant prairie crops.
It should be noted that, in most cases, increased production of oilseed and pulse crops was a consequence of more factors than the policy change to the Crow. Some of these crops, such as canola, currently fetch high market prices due to increasing global demand for edible oil low in saturated fat (now commonly used in the fast-food industry) and for biofuel\textsuperscript{16}. It should also be noted that the majority of canola grown in Saskatchewan is genetically modified, which can lead to high input costs. Similarly, pulse crops such as lentils and peas are appealing due to high market prices and their usefulness for crop rotation, which has become increasingly important as the majority of farmers embrace continuous cropping instead of summer fallow. However, despite the other causal factors in play, almost all the participants could confidently attribute at least part of this crop production decision to the Crow elimination.

\textsuperscript{16} According to the consulting firm SoyaTech (n.d.), industry goals for 2015 include the production of 14 million tons of Canadian canola (up from the current 8 million tons). Of this, approximately half will be exported to other countries for seed. Of the remaining half, 5 million tons will be used for food and 2 million for biofuel.
Figure 6.3. Grain, Oilseed, and Pulse Crop Deliveries in Western Canada, 1995

Data source: Canadian Grain Commission. Image courtesy of Exceed Analysis.

[Map showing grain, oilseed, and pulse crop deliveries in Western Canada, 1995]

Figure 6.4. Grain, Oilseed, and Pulse Crop Deliveries in Western Canada, 2010

Data source: Canadian Grain Commission. Image courtesy of Exceed Analysis.

[Map showing grain, oilseed, and pulse crop deliveries in Western Canada, 2010]

[originals in colour]
Another common adaptive strategy, cited by 13 of the 24 who answered the question, was to increase the size of the farm. Many women discussed how the financial impact of the Crow pushed them to increase acreage and production to keep the farm sustainable. The Census of Agriculture shows that farms are indeed growing. The average size of Saskatchewan farms rose from 1,152 acres in 1996 to 1,668 acres in 2011 (Statistics Canada 1996, 2011). Many participants saw the trend of steadily increasing farm size in Saskatchewan as a direct result of the Crow. One participant summarized this link, stating:

I think that the freight rate now is probably anywhere from 25 to 30 percent of the expenses of your operation. But what used to be the average farm, eight-quarter kind of guys, when they took away the Crow, I think that just killed them because they couldn’t afford that extra cost. The cost was so prohibitive for them.

Other participants pointed out that the Crow created not just financial, but also logistical and practical barriers for small farms. One mixed farmer noted that it became increasingly difficult to sell the grain left over after feeding her cattle:

We used to just take a ton truckload into the elevator and sell a little bit of extra grain. But now you really have to have a semi-load and send it further. So it’s kind of made it impossible for a small farmer to sell grain.

Although the Crow is certainly not the only factor that has affected farm demographics in Saskatchewan over the past two decades, the total number of farms in Saskatchewan has declined rapidly since the Crow elimination. Farms are now larger and fewer. The 1996 Census of Agriculture reported 56,979 farms in the province (Statistics Canada 1996). By 2011, the number had decreased to 36,952 (Statistics Canada 2011). This is mostly due to the loss of lower income and/or smaller farms: between the 2006
and 2011 Censuses, the number of Saskatchewan farms with less than $500,000 in farm receipts dropped by 21.6 percent (Statistics Canada 2011). In contrast, larger and/or higher-income farms (i.e., over $500,000) increased in number by 44.9 percent (Statistics Canada 2011). Although farms in the $500,000-and-over category represent just under 13 percent of all farms in the province, they brought in exactly 60 percent of total farm income in 2012 (Statistics Canada 2011). It is important to note that many large and even million-dollar farms in Saskatchewan are family owned. Of the 36,952 farms in Saskatchewan, only 542 are classified as “non-family corporations”; the remainder are sole proprietorships, partnerships, or family corporations (Statistics Canada 2011). This has led to a particular form of inter-farmer conflict over land ownership, which will be discussed below.

Crow-related increases in farm size led to increased farm work for both men and women, but with a slightly higher level amongst men (n=11) than women (n=9). This is likely attributable to men’s higher involvement in, and control over, farming activities. In critical realist terms, increased control over the farm represents a particular “power” held by men in the still-patriarchal social structure of farming. Under certain conditions, however, this power can actually be a liability. As previously discussed, farming is marked by a masculine gender ideology wherein tasks such as fieldwork and machinery operation are marked masculine and are valued as “productive” work (Saugeres 2002).

Further analysis is prevented by lack of data. For example, Statistics Canada reports conflate farm income and farm size by considering “large” farms to be those with over $500,000 in receipts. It does not draw correlations between actual acreage (size) and income. Further, data on farm receipts does not account for inputs and expenses and is therefore not an accurate indicator of overall financial wellbeing. Statistics Canada also does not provide correlations between farm size and ownership patterns so, unfortunately, it is not possible to analyze whether non-family corporations are the highest grossing farms.
This ideology has contributed to the devaluation or invisibility of farm women’s contributions (Alston 1998; Kubik 2004; Phillips 1998; Saugeres 2002). However, men’s “closeness” to the daily operation of the farm and emphasis on its productivity can also render them particularly susceptible to farm crises and financial insecurity. If masculine identity is intertwined with the ability of the farm to provide for the farm family (Phillips 1998), threats to farm stability could be psychologically devastating for men.

Participants spoke about the effects of the Crow elimination on men specifically. One farm organization leader observed that, at the time of the policy change, “a lot of people were dropping over with heart attacks. Oh yes, I’ve seen quite a lot of that, young men too, like they were worried about feeding their families”. Several women described the additional farm work done by men because of Crow-related financial pressure. Their added work was primarily associated with farm size increases, but some men also began performing custom work, especially custom grain hauling, for other farmers. For women, increased farm size translated into increased bookkeeping and paperwork, more field work, cooking large meals for hired farm works, more errands, more driving, and many more “go for” tasks.

In contrast to the gender dynamics of farm work, slightly more families began to rely on off-farm income generated by farm women (n=7) than by men (n=5). As discussed previously, finances are not the only factor motivating women’s off-farm work; it is motivated by a variety of interconnected factors ranging from personal fulfilment to financial need. However, it is clear that financial issues associated with the Crow elimination did play a role for some families. After considering the cost of freight rates since the policy change, one farm woman said:
Put it this way. If, say, the freight rate was only $8.33, honestly I wouldn’t be here [at her off-farm job] right now. Oh definitely… I wouldn’t be worried about my pension. I wouldn’t be worried about my investments… I would only have one job to do rather than two and you know what, the same thing is too, I wouldn’t have to take my daughter when she was little to a child care provider, I wouldn’t have to drive her into the city at 7:00 in the morning and drop her off at a stranger’s house. How f---- normal is that?

Some participants worked off-farm in full-time, permanent jobs with benefits and pensions. Almost half of those working off-farm (n=8) worked in positions matching their educational or professional qualifications. Other participants had part-time employment, self-employment, or full-time but temporary employment. Feminist political economists (e.g., Vosko 2006) have labelled this type of work “precarious employment” because it often lacks benefits and other forms of security. Further, as Vosko (2006) argued, it is important to understand the relationship between precarious work and social reproduction. For some of the farm women, taking “precarious work” allowed them to balance farm, family, and off-farm responsibilities. In fact, it is a well-known phenomenon in feminist studies that women have historically assumed part-time or temporary work at a higher rate than men in order to balance waged work with caregiving and domestic responsibilities19. However, by viewing labour and caregiving through the lens of farm adaptation, a less obvious connection between waged work and social reproduction emerges. For some farm women in my study, employment was also intertwined with their emotional labour in the home and family. Off-farm work was a way of providing financial and emotional support in times of farm stress or crisis.

19 Although more recent analyses point out that “feminization” of men’s labour has become increasingly common as globalization and neoliberal policy erode the “standard” (i.e., full-time, permanent) employment relationship and more men also accept part-time, temporary work (e.g., Armstrong and Armstrong 2004).
Precarious work was, ironically, a means of coping with the increasing precariousness of the farm. One farm woman articulated this connection in the context of the Crow change:

His stress level increased and living with a cranky farmer is never fun. And the sad thing of it is, the farm wife is the one who has the least control over any of it but she’s the one who wears it, because you try to find ways to do with less to stretch the dollar to bring something in…I would pick up odd jobs. I worked census, I worked remuneration. I worked election days. I did telemarketing. All things I could do when I wasn’t helping on the farm…and a lot of the farm wives I know [who] are small farm wives did the same thing. We were always looking for ways to help to take the pressure off the husband to make the home a safer place mentally for everybody.

For almost all participants, the Crow elimination represented a government-facilitated extraction of market power from farmers. Although a few women noted the increased power and profit it provided to the railway companies, blame was generally directed at government. As mentioned in Chapter 3, there was strong collective resistance by farm groups at the time of the Crow decision; however, with the notable and important exception of producer-run shortline railways\(^2\), most participants’ adaptive strategies were implemented at the individual farm level. The two most common strategies were changes to crop production and the extension of both men’s and women’s labour capacity on and off the farm. However, adaptation to major change takes gendered forms. Adaptive strategies such as value-added activities, off-farm work, and cost-cutting interact with women’s caregiving and domestic labour. Since farm women’s work is influenced by their strong role in social reproduction, the extension of labour as an adaptive strategy can only extend so far without balanced support for social reproduction.

\(^{20}\) Producer-run rail companies offer some competition to the major grain handlers and transporters. As one participant noted, this competition may have forced the major handlers to offer trucking premiums in order to compete with producer-run rail companies.
Although its effects occurred in combination with other factors, most participants saw the elimination of the Crow Benefit as a dramatic change that fundamentally affected life in rural Saskatchewan. As one participant put it:

That loss from the demise of the Crow Rate…it affected our little town…that’s not hard to see if you drive around Saskatchewan, you know. I mean, maybe some of these places would have gone anyway, who’s to say, but really, a lot of it had to do with that, just the grain transportation.

Driving into a small town in east central Saskatchewan, hundreds of kilometres from the nearest city, I could easily understand the phenomenon she described. Rutted highways half-converted to gravel, former storefronts now boarded up, and a railway overgrown with tall prairie grass are all evidence of the changes that have occurred. More than one participant used the word “outback” to describe a potential future for prairie agricultural regions.

I had been warned that participants might not recall details of an event that occurred 17 years ago. They remembered. As one woman put it, “I think of it this way. The farm crisis is sort of like a tree, okay? But I think that Crow really is right down by the roots”.

*Plant Breeders’ Rights*

In contrast to the Crow policy change, participants had a more difficult time speaking about the effects of plant breeders’ rights legislation on their everyday lives. As discussed in Chapter 3, PBR is a form of intellectual property right mandated by the World Trade Organization (WTO) through its agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). Broadly construed, PBR includes patents, which apply to gene sequences found in genetically modified (GM) products, as well as *sui generis* legal protections for plant varieties developed without genetic modification. In
Canada, the Plant Breeders Rights Act of 1990 provides the latter form of protection. Many countries’ sui generis systems, including Canada’s, comply with the international UPOV convention discussed in Chapter 3.

Although my research focused primarily on Canada’s sui generis PBR policy and therefore on non-GM seed varieties, conversations about PBR often turned into conversations about GM seeds. At times, participants conflated the two forms or intentionally spoke about both as part of a broader shift in the seed sector. Nonetheless, several key themes were identified regarding PBR specifically. Participants were provided with some basic background on the Act and its provisions and were asked to share their views on the legislation and any effects it had on their lives.

Of all participants, 28 answered the question about their general views of PBR. Of these, a strong majority (n=24) expressed at least one concern about the existence of PBR protection on seeds. Although many participants (n=9) observed the rising cost of seed due to royalties, almost as many (n=8) acknowledged the positive traits and benefits associated with new varieties of seed. While six participants objected to both PBR and GM on the basis of principles and values, the number one theme emerging from this discussion was a general loss of control. A total of ten participants perceived decreasing control over the means of agricultural production. Although this was felt more strongly in relation to GM seeds than PBR seeds, many participants saw the two as “the same ball of wax in the end” and as part of a general shift toward “the ownership of life”.

There is a lack of data on the royalties farmers pay for protected seed varieties, which hinders a quantitative analysis of the rise in royalty rates since the introduction of PBR legislation. Royalties are charged when seed growers (who are farmers, not
breeders) purchase seed for reproduction from plant breeders, who can be based in private corporations (e.g., Syngenta), government (e.g., Agriculture Canada), or universities (e.g., University of Saskatchewan’s Crop Development Centre). The two seed growers I interviewed spoke about the high cost of PBR royalties they paid when reproducing breeder seed. One stated:

I feel that the seed producers are bearing the brunt of that, Plant Breeders’ Rights. The amount that they’re charging, I would say 50 percent of it is going back to the production, reproduction of the seed itself and 50 percent of it is going to the company.

Although part of these costs can be passed down to the farmer in the price of certified seed, the growers paid a high amount of royalties in order to produce new varieties *en masse* for sale. Overall, most participants, growers or not, reported that their seed prices had risen due to PBR. However, many also acknowledged that seed breeders deserve compensation for their work. One seed grower described her view of royalties this way:

Aggressive... Excessive? I guess I have mixed feelings. I think, because I know it’s expensive to do crop development and variety, you know, research and I think we should share in that expense if we are interested in... higher yielding... more disease resistance, those kind of qualities. I think we should be willing to pay for that research. Whether it’s a fair amount, you know, it could be high.

Participants who were not seed growers also supported this view, and some emphasized the moral argument about seed ownership and profit:

[Seeds] should belong to the farmers and the people that use it. I mean, if somebody develops it, I guess they should get something, but they shouldn’t get as much as they are getting.

However, most also noted that the price of patented GM seed was much more marked than on PBR-protected certified varieties. Only one participant mentioned a concern about pairing of seeds with specific chemicals, which also limits farmers’ choice of
inputs: “the bigger companies are developing varieties of wheat that you have to only use a certain variety of their chemical. So you don’t have options”.

Overall, PBR-protected seeds were viewed as a mixed blessing. Most participants did observe higher yield and increased disease resistance from PBR seeds. At the same time, many saw the price of these seeds as excessive and as another way of extracting profit “on the backs of farmers”, as one participant put it. Participants were asked if they thought the benefits of PBR seed outweighed the added cost. The results are listed in Table 6.8. Of the 19 participants who responded to this question, six felt that the benefits of PBR seeds did in fact outweigh the costs. Four took the opposite opinion. Five said that intervening factors such as weather conditions, marketing issues, and the particular conditions of a certain region affected the cost-benefit ratio. Four were unsure.
Table 6.8. Cost/benefit Opinion of Plant Breeders Rights

<table>
<thead>
<tr>
<th>Response</th>
<th># of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, benefits outweigh costs</td>
<td>6</td>
</tr>
<tr>
<td>Depends on weather, market, soil/geographic</td>
<td>5</td>
</tr>
<tr>
<td>conditions</td>
<td></td>
</tr>
<tr>
<td>No, benefits do not outweigh costs</td>
<td>4</td>
</tr>
<tr>
<td>Unsure</td>
<td>4</td>
</tr>
</tbody>
</table>

n=19
An important difference between the two policy case studies is found in the participants’ attribution of responsibility, benefit, and blame. In the case of the Crow, the majority of blame was placed on government, which was seen as responsible for the consequences of the change. There was little mention of the railway companies’ role in the change. In contrast, participants often identified the role of large agricultural corporations in the changing seed sector, especially when speaking of GM seeds. Many observed the extraction of farmers’ power by corporations through high royalty rates on seed inputs, but also through the increasing limitations on what they can do with their seeds (again, this was particularly emphasized in reference to GM seeds). One participant said that, “I am concerned that it is corporations and not farmers driving the future as to which characteristics they want in the plants”. Another, who pointed out that she was “very much ‘old school’” in her preference to reuse her own seeds, felt she was “getting pushed more and more…to buy new seed every year”. Yet another participant summed up the feelings of many on the matter, stating that the system is “just taking the power and control away from farmers so much it gets to the point where you’ve got them backed into a corner”.

The farm women did identify some avenues for agency in the increasingly restrictive seed sector. Two participants commented on the importance of public seed breeding. One suggested that PBR royalties should facilitate non-profit breeding programs centered in universities. A senior farm woman recalled that, in the past, “you had all these people, you know, trying to develop new rust resistant seeds, for instance, they were doing it for the good of the people and [then] everything change[d]”. Others pointed out that farmers in their community had found another way to assert agency and
control through a practice called “brown bagging”, wherein farmers sell cleaned PBR-protected varieties to other farmers using a generic variety name that only hints at the actual variety contained in the bag. However, a seed grower pointed out that this practice undercuts her labour as a seed grower.

Generally, participants were more interested in discussing GM seeds than the varieties protected by the PBR Act. This is likely due to two interconnected reasons. First, GM seeds are a dramatic new development. The first GM seeds emerged on the market only in the mid-1990s and have since come to dominate the seed market for several crops, especially canola. Today, 90 percent of canola grown in Canada has been genetically modified for herbicide resistance (Beckie et al. 2011). Herbicide tolerant GM seeds are commonly used in continuous cropping, which has become almost standard practice across the Canadian prairies and thus makes GM a highly relevant issue. In contrast, although the PBR Act brought about a new regime of intellectual property rights on seed, the act of creating new plant varieties through selective breeding is not a new phenomenon. As discussed in Chapter 3, plant breeding has occurred on the prairies since the days of settlement. Although PBR legislation has increased the cost of seeds for producers, it is, in the words of one participant, simply “a nuisance and another bill to pay” while the underlying concept of plant breeding itself is unchanged. Genetically modified seed is less familiar and less certain, as one participant expressed, “maybe the genetically modified thing is more fearful to us because we don’t know what it’s doing to our bodies”.

A second reason is that, for now, PBR-protected seed can still be re-used by the farmer. Farmers thus retain a certain degree of control over this seed as compared to GM
seed. One farm leader identified this difference between the two, saying that, “PBR is an issue. It does increase the cost to farmers, grain producers, no doubt about it. But its impact, I think, is less of a concern, or it has less impact than...GM seeds do”. Indeed, one participant emphasized that, at the heart of the matter, “the point is that once we...have seed that we cannot be re-cleaning...that’s one of the only other ways we can make extra money is to reuse our seed over and over again”. As discussed in Chapter 3, the push toward ratification of UPOV ’91 may lead to changes in the farmer’s privilege and, if ratified, UPOV ’91 will require future study to identify its effects in the rear view mirror.

**Structure, Agency, and the Role of Government**

Participants were asked what they felt was an appropriate role for government in agriculture. They were asked to discuss what the government should do, or not do, for farmers. This was a particularly relevant and pertinent question because, at the time of the interviews (August to December 2011), the federal government of Canada had tabled legislation to eliminate the single-desk buying capacity of the Canadian Wheat Board (CWB). The legislation passed in December 2011 amidst strong contestation, and despite farmer plebiscites (administered by organizations such as the NFU) that showed majority support for the CWB.

The discourse surrounding the CWB controversy was strikingly reminiscent of that surrounding the Crow elimination, with both market ideology and international trade playing a part. After its election as a minority government in 2006, the Conservative government led by Prime Minister Steven Harper promoted the elimination of the CWB
single desk\textsuperscript{21}, using the neoliberal rhetoric of “marketing freedom” to describe the future of grain marketing. International negotiations on the Doha round of the WTO had just occurred in 2005, and there was an awareness of the agreement’s potential to “discipline” state trading enterprises like the CWB (World Trade Organization 2013). After winning a majority of seats in the 2011 election, the government cited its parliamentary majority and strong electoral support in the prairie region as justification for the change. It passed a bill to eliminate the CWB’s single desk buying capacity in December 2011. The government argued that the prairie region would see benefits in the form of increased investment, innovation, and value-added jobs (Ritz 2011). Without being prompted or asked, 23 participants raised the CWB issue in their interviews. Of those who spoke to the issue, the majority (n=14) were in favour of maintaining the CWB single desk. Six participants favoured eliminating it, while three stayed neutral and stated that the effects would remain to be seen.

At the heart of the CWB issue was control. Participants in favour of the CWB argued that it provided farmers with control over prices, especially smaller farmers and those without the time, knowledge, or technology to follow markets for the best prices. Some speculated that a change to the CWB would ultimately lead to the loss of more small farms and depopulation in rural areas. Many, including one participant who stayed neutral on the issue in general, perceived the government’s process as undemocratic and unfair. On the other side of the issue, some participants felt that the CWB diminished their ability to seek better prices on their own. Some took issue with the CWB’s practice

\textsuperscript{21} In 2006, for example, Conservative MP Gerry Ritz tabled a private member’s bill (C-300) that would allow producers to sell their grain directly to processors, allowing them to bypass the CWB.
of calling for grain shipments and felt it diminished their control over when to haul grain.

Some did not appreciate the delayed payment they received on grain marketed through the CWB, and one participant felt that the system created barriers for local direct marketing systems.
Figure 6.5. Privately owned elevator with a banner for Farmers For Justice, an anti-CWB organization – Kenaston, Saskatchewan.

Figure 6.6. Pro-CWB sign on bales – along Highway 11, Saskatchewan.

[originals in colour]
Some participants perceived a stronger anti-CWB perspective among both larger and younger farmers in their communities. In my research, views on the matter did not neatly correspond with a particular age grouping or farm size. Some of the larger farmers were in favour of maintaining the CWB while some smaller farmers felt it should be eliminated. Opinion was also divided amongst the younger participants. Views on the CWB provide an important window into political and social topography of rural communities. Further research should use a large sample of farmers to examine potential correlations between farm size, age, and political perspective using the CWB as a case study. In addition, future research should explore any gendered effects that result from the CWB change. One participant predicted that the change would increase farm women’s workload, since women often perform the marketing for the farm operation. She speculated that farm women “will have to spend the time on the computer, because in lots of cases they’re more computer literate [than their husbands]”.

Several other important themes emerged on the topic of government involvement. The most striking theme was the level of desire for government involvement itself. Although participants were asked to discuss what governments should and should not do in the sector, the majority of responses focused on what government should do. The significance of this trend is surprising in light of many participants’ criticism of government and its programs. One problem in particular was almost always attributed to government: 25 participants mentioned the ever-increasing amount and complexity of farm paperwork. They associated this paperwork with government programs and monitoring, and not as much with agricultural corporations or other entities. One large farmer expressed her frustration with program-related
paperwork, saying that “a lot of days, I just throw my hands up and say if they’d just pay us for what we do and forget all the hand-outs and the help-outs and the bail-outs and everything else; I don’t need that stuff because it’s just paperwork and hassle…when you’re running an operation this size”.

Participants often expressed this desire to be “paid for what we do”. Accordingly, the most desirable type of government involvement was intervention to promote market fairness. Most of the women preferred market intervention to assistance programs; however, one exception was assistance programs related to environmental disaster. Participants recognized and appreciated the importance of programs such as flooded acre payments, despite some problems with the administration of these programs. Overall, however, they sought fairness in both production and marketing, and felt the government had a role to play in this regard. One farm woman called for fairness in commodity prices, stating that:

It would be nice if somehow we could be assured of price, grain prices and that type of thing. And farmers with meat, or with cattle or whatever they breed get fair prices for what they raise - you know, fairness.

Similar comments were made in reference to input prices:

I think that they [government] need to put some regulations, as far as the seed prices and stuff, because…and again with the freight, you know. They seem to help…they seem to want to help businesses, but…for whatever reason, they don’t see farmers as businesses or something.

The interviews were pervaded by this sense of abandonment by government, as well as misunderstanding by society. Although participants felt burdened by the paperwork associated with government programs, they simultaneously felt abandoned by government. The Canadian government was often compared to government in other countries such as the United States, which participants felt was more supportive of its
farmers. A participant expressed her dissatisfaction with the “cheap food” system which, as MacRae (2011) argued, is “cheap” mostly at the farm gate, because of low prices received by farmers. Referring to both government and the broader society, the participant stated that, “in Canada I think the farmers are treated the worst in the whole world…I mean they don’t appreciate our efforts”. Indeed, participants cited many examples wherein farmers were misunderstood or underappreciated in Canadian society generally. The farm women expressed frustration that urban dwellers do not understand the insecurity and precariousness of farming. They were wary of being seen as recipients of government programs.

Overall, the farm women tended to perceive government involvement in agriculture as a mixed blessing. Many were frustrated by the current suite of programs on offer (e.g., AgriStability, AgriInvest), but most preferred a different direction for public policy as opposed to an entirely “hands off” approach by government. The coexistence of negative and positive perceptions of government indicates the interplay of structure and agency. In some ways, participants saw public policy as a cumbersome structure or source of control (for example, government programs as imposing unnecessary paperwork); in other ways, they saw it as a potential source of democratic agency (for example, the suggestion that government could and should intervene in agricultural markets). The difference depends not only on the type of policy enacted at the systemic level but also the social circumstances of the individual agent.

Beyond the domestic level, the research also explored international trade agreements, which act as an important form of structure for domestic policy regimes. As Archer (1995) pointed out, structures exist in relation to each other. A given level of
reality can be simultaneously “macro” to one level of reality and “micro” to another (Archer 1995). Such is the case with international agreements. These agreements act as a macro-level structuring force on domestic policy, which itself acts as a macro-level structuring force for individual agents. As discussed in Chapter 3, international agreements such as NAFTA and UPOV were crucial in pushing forward both the Crow elimination and PBR legislation. Such agreements remain prominent on the policy agency, as evidenced by recent governmental efforts to expand trade relations through, for example, the Comprehensive Trade and Economic Agreement (CETA) between Canada and the European Union. In order to understand the agential response to very high-level structures, farm women were asked to comment on their views of, and experiences with, free trade in general.

Some participants admitted that they did not fully understand the concept of free trade and its implications. Of the 21 women who commented on the issue, 18 expressed negative views, with the most common reason being the perception that it disproportionately benefited the United States. Many pointed out that “free” trade is not truly “free” and felt that the American government supports its farmers more strongly than Canada. The interpretations of these rural producers support Epp and Whitson’s (2001a:xvii) assertion that successive Canadian federal governments have “played ‘boy scout’ with Western grain, implementing WTO rules against subsidies ahead of schedule, while our major competitors in the US and Europe drag their feet”. In contrast, three participants felt that free trade was beneficial because it relieves government control over farmers. However, in all three cases, this was beneficial only for those producers living near the border, allowing them to more easily market their goods in the
United States. Few participants spoke of free trade with countries other than the United States. Overall, these findings indicate that free trade agreements are a rather obtuse structure that is largely inaccessible and even incomprehensible to individual agents.

The farm women were asked to provide their recommendations for future government policy and programs. This question served two important purposes. First, from an academic perspective, it provides insight into what agricultural actors see as key sites of policy agency. Second, the recommendations have been (and will continue to be) crucial for knowledge mobilization (KM) of this project, which is discussed in Chapter 8.

Participants provided a number of recommendations for policy change, which are presented in Table 6.9. Beyond the aforementioned policies for market fairness, a dominant theme was the need for policy that facilitates and encourages small-scale, family farming. Some women provided detailed examples of how this could be implemented. These included setting maximum “ceilings” on the amount of money received from a program (to prevent disproportionate benefit for large producers) and offering a guaranteed market price on a predetermined amount of product, such as the first 10,000 bushels shipped, with any excess being subject to free market prices.

The policy suggestions also highlight farm women’s desire for reliable information on farm issues and policy. This suggests that information is key to exercising their political agency. Further, two of the most frequently mentioned suggestions were related to democratic concerns and principles. Participants wanted to see increased consultation with farmers (including farm women) on agricultural policy and, concomitantly, a decrease in corporate influence over policy.
In this way, participation in the policy process is recognized as key to enhancing agency. Fewer ideas emerged when participants were asked to suggest programs that would benefit farm women specifically. However, some important suggestions in this regard included increased support for caregivers, domestic violence programs, and initiatives to enhance social networks amongst farm women. One participant noted a concrete example of gender bias in agricultural policy: although she owned a minivan (due to its functionality in transporting children) and used the vehicle for running farm errands, she was unable to licence her vehicle as a farm vehicle because only trucks are licensable under this category.
<table>
<thead>
<tr>
<th>Information Needs</th>
<th>Policy and Programs</th>
<th>Democratic Principles</th>
<th>Price and Payment Issues</th>
<th>Transportation</th>
<th>Health and Social Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to impartial marketing and policy information (x2) (e.g., from universities)</td>
<td>Policies to encourage small-scale farming (x6) (e.g., program payment “ceilings”; guaranteed price for first 10,000 bushels)</td>
<td>“Farmer-driven” policy, based on consultations with farmers (x4)</td>
<td>Decreased PBR fees</td>
<td>Increased use of railways, reduction of semi-truck traffic on rural highways (x2)</td>
<td>Rural childcare and elder care services (x4)</td>
</tr>
<tr>
<td>More effective communication about government programs and benefits of these</td>
<td>Simplified program paperwork; ensure program payments within same tax year as claim</td>
<td>Decreased influence of corporations in government policy (x2)</td>
<td>Create a check-off system for returning PBR fees to breeders</td>
<td></td>
<td>Support for stay-at-home parents (x2)</td>
</tr>
<tr>
<td>Written guidelines on paying wages to self (business model)</td>
<td>Raise the allowable claim under crop insurance to better reflect cost of inputs</td>
<td>Increased involvement of women in agricultural policy consultation</td>
<td></td>
<td></td>
<td>Access to rural mental health support services (x2)</td>
</tr>
<tr>
<td>Financial and informational support for hiring farm workers</td>
<td>Encourage domestic / local processing (e.g., abattoirs)</td>
<td>Government purchase of excess grains to donate as global aid</td>
<td></td>
<td></td>
<td>Support for women’s groups and activities</td>
</tr>
<tr>
<td>More research on potential effects of GMOs</td>
<td>Increase monitoring for misuse of farm programs</td>
<td></td>
<td></td>
<td></td>
<td>Increased domestic violence shelters and supports</td>
</tr>
<tr>
<td>Online education courses (e.g., farm and finance topics)</td>
<td>Allow farm license plates on minivans (not only trucks)</td>
<td></td>
<td></td>
<td></td>
<td>Social validation of farm women’s contributions</td>
</tr>
<tr>
<td></td>
<td>Tax incentives for farm skills training for women (e.g., welding, 1A)</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Items mentioned by more than one participant are shown in bold with number of participants mentioning; shaded items were mentioned specifically as benefiting farm women.
GENDERING CLIMATE CHANGE

Uncertainty about weather conditions is a key challenge for farmers in Saskatchewan. As discussed previously, Saskatchewan has one of the most variable climates in the country (Sauchyn 2010), and the entire southwest quadrant of the province is part of the semi-arid region known as the Palliser Triangle. Nonetheless, the province contains 40 percent of Canadian farmland, provides over half the global supply of lentils, peas, and flaxseed, and is the second-largest cattle producing province in Canada (Government of Saskatchewan 2012a). In Saskatchewan alone, there are 49,475 farm operators (Statistics Canada 2011); however, this statistic does not include those who are employed on a farm but are not the main operator. Overall, the province’s role in food production is critically important both domestically and internationally.

The importance of Saskatchewan agriculture means that adaptation to future climate extremes will be imperative for both economic and social reasons. As discussed in Chapter 3, climatological scenarios predict an increased risk of extremes, such as flood and drought, as well as rapid fluctuation between them. To understand current vulnerability, as well as the primary coping and adaptive strategies of Saskatchewan farms, participants were asked about climate extremes they had experienced in the past.

Questions were designed to collect information about the gendered dimensions of vulnerability and adaptation. As discussed in Chapter 3, a burgeoning body of literature exists on gender and climate change, a significant amount of which is produced by international NGOs focused primarily on the global south (e.g., Kapoor et al. 2011; Kapoor 2011; United Nations Development Programme 2010). With several notable exceptions (e.g., Alston 2006, 2013; Milne 2005; Stehlik et al. 2000), there has been very
little academic analysis of the particularly gendered dimensions of vulnerability and adaptation in the global north. Even fewer researchers have empirically examined the gendered experience of climate events in Canada specifically (for a notable exception, see Dowsley et al. 2010 on Inuit women and climate change).

The very limited literature on gender and climate change in the global North has indicated some general trends. High-level analysis suggests that the combination of gender and poverty may be particularly relevant for vulnerability here (Hemmati 2005; Milne 2005). Women’s disproportionate responsibility for social reproduction also made a difference in some studies. For example, Enarson and Morrow (1997) showed the importance of gender and social reproduction in the aftermath of hurricanes in the United States. Similarly, Boetto and McKinnon (2013) discussed how rural Australian women’s responsibility for household work positioned them as chiefly responsible for implementing household mitigation strategies. This also caused women to be blamed when such individualized “green” strategies failed.

The results presented in this section are structured around three key concepts in the climate change literature: vulnerability, mitigation and awareness, and coping or adaptation. The findings illustrate that climate change vulnerability and adaptation are gendered, and that extreme weather events can both challenge and exacerbate existing forms of gender differentiation on the family farm.

Vulnerability and the Farm

Weather is one of the most impactful yet least controllable factors in farmers’ lives. Farm livelihoods are directly dependent on weather conditions. This means that farm families are one of the populations most exposed to, and potentially most vulnerable to,
extreme climate events. As one participant put it, “I really wonder what it would be like to have a life where your life just carried on no matter what. In agriculture you’re always watching the sky”. The uncontrollability of weather was a very common theme in the interviews. As one participant said, “It’s just such a huge factor and it’s so out of your control. I mean, to even say it’s out of your control is making it simplified. It’s so complex”.

The complexity of extreme weather events is compounded by other factors. Finances emerged as a key determinant of vulnerability for participants; in particular, participants identified debt and high input costs as having “make or break” power during times of environmental crisis:

If you’ve put it all in your land and you don’t get a profit back, every year that you lose is a year that you don’t get back. It takes you longer to regain what you’ve lost. So, I know those years of drought, yes, that’s a farm crisis: when you have nothing to sell but your bills are still coming in.

When it’s a drought, of course your income’s down but your expenses still stay the same: the price of fuel, the price of repairs, the price of everything.

At times, efforts to decrease vulnerability can, paradoxically, leave farmers more vulnerable. Although many participants relied on institutional support such as hail and crop insurance to reduce their vulnerability, these programs occasionally exacerbated their problems. Several participants noted that, in order to claim benefits, the crop insurance program had required them to harvest a crop that barely existed. This resulted in additional expenditures of time and fuel, machinery wear and tear, and stress:

Most of it still had to be harvested, even though there was nothing…coming into the hopper, so the expensive harvest was still there, even though there was nothing going into the bin, it was still, you know, an exercise in futility.

Furthermore, one participant expressed concern about the future affordability of
insurance programs in light of climate change scenarios:

I think that crop insurance is possibly going to get more expensive. It may, it just may not, but I also think it will get more expensive just because of the increased variability in weather. It’s an insurance program and if your weather gets weird it’s going to get more expensive.

Seeds, too, can contribute to both vulnerability and adaptation. New seed varieties can strengthen resilience against drought, infestation, and crop diseases caused by too much or too little precipitation. However, when farmers spend more money on GM or PBR-protected varieties of seed, the financial risk associated with crop loss is greater.

For cattle producers, very dry years significantly increased the farm workload as participants were forced to pump or haul water for cattle. Extreme drought and precipitation tended to have the reverse effect on grain producers, who often found themselves unable to access their fields in very wet years or without any crop to harvest in the dry years. Very few participants discussed specific strategies employed during these years because, in many cases, there was simply nothing to be done. Although my questions focused on the relationship between climate events and work, it became apparent that stress and mental health were often more significant issues.

For many, the most dramatic consequences of climate-related stress were felt internally. In fact, stress was the most commonly mentioned theme on this topic. Participants spoke about the helplessness and worry they had felt during times of drought or extreme precipitation. One said, “It was very sombre around here, you know, everyday you’d look for rain and nothing, and it was so hot you couldn’t, and you just kind of watched your crops burn up”. Many lost sleep or “laid there all night, worried sick”. Several spoke of the link between stress and physical health: “The stress level is
phenomenal…and stress causes many other problems. It causes health issues like hypertension, ulcers, not that we’ve had them all, but it is a by-product of the mess”. A participant who was the main farmer in her family had relied on pharmaceuticals to cope:

    I think there were two or three years in there, probably three years there, where I was on anti-depressants. I was on medication every year from August through to about December. Like it was just too stressful to not have the harvest to cover off the inputs. It just was too financially difficult and that is my big stressor.

The combination of financial instability and emotional stress is a key determinant of vulnerability for farm families in Saskatchewan. Gender issues become clear in the analysis of how farm families cope and adapt to this vulnerability.

“I Felt Like a Counsellor”: Coping, Adaptation, and Gender

Three participants felt that the response to weather-related stress depends mostly on individual personality and is not gendered. However, the remainder felt that farm women and men tend to play different roles during times of weather stress or crisis. These different roles reflect the broader gendered division of roles on the farm. When environmental crisis hits, both vulnerability and adaptation take specifically gendered forms.

    Some participants described how farm men’s closeness to the crops and their control over production can make them more susceptible to the psychological effects of climate extremes. One participant explained, “I’m not in contact with it 24/7 like they [her husband and sons] are. It affects their appetite. It affects their outlook for the next day. They don’t rest properly, you know. It’s just, it’s a battle”. In this way, many farm women’s relative distance from the details of production may buffer them from the stress of climate extremes, but the analysis cannot stop there. Further consideration of gender ideology is necessary.
Material relations of production are further complicated by ideologies of masculinity, which have historically positioned men as inexpressive, unemotional “providers” for the family. This ideology perseveres on the farm, where independence and stoicism are an historical trademark of farm masculinity. This combination of ideological and material factors can take its toll on men during times of climate crisis. Several participants discussed how climate extremes threaten some men’s identity as a “provider”. One said, “I think when you’re the man of the household, ultimately it’s your responsibility no matter how much you’re supported by your wife and how much she helps, ultimately…it sits on your shoulders”. Another felt that, as crops die and the farm falters, men “take it as a personal affront on their ability” to farm. Hegemonic forms of masculinity make it difficult for men to communicate or share their concerns. One participant stated that, “I think women generally…find it easier to communicate, you know and they’re not afraid to say…I’m having a bad day’ or ‘this is really scary’. And men tend to hold…those feelings in”.

This may result in a disproportionate rate of negative coping strategies amongst men. Participants had observed incidents of suicide, violence, and alcoholism amongst male farmers. One stated, “Although it probably happens in both sexes…men probably tend to become alcoholics faster than women and the farm community has a lot of alcoholics, I’ll tell you that”. One participant, who had previously worked with the Farm Stress Line, said, “When hardships were on the farm, we saw a lot of violence, lots of things going on and marital problems and some suicide attempts. Some of the pictures we got were not pretty; our numbers would rise according to the agricultural mood”. There is very little up-to-date research on family violence and alcoholism that is specific
to agricultural producers, and even less that is focused on Canada. Nursing literature, however, has identified issues of isolation, lack of services, and concerns about confidentiality as unique challenges for women experiencing violence in rural areas (e.g., Evanson 2006). Research is strongly needed to explore the interconnection between rural gendered violence, agricultural stressors, and climate extremes.

Gender ideologies are relational and dualistic. If hegemonic farmer-masculinity is that of the stoic, inexpressive provider, the hegemonic role for farm women is that of supporter and nurturer. This is a deeply rooted ideology that deepens in times of weather-related stress. A key theme in the interviews was the expectation that farm women would act as supporters for the farm family during weather crises. This supports Kubik’s findings, in which research participants had described the stereotype of the “ideal farm wife” and the pressure to be “a shoulder for everybody”.

Similarly, one of my participants said, “I’m sure that most women have to play the role of nurturer and you know, a person who tries to kind of build up the other partner”. Words like “nurturer”, “buffer”, “mediator”, and “counsellor” were commonly used to describe women’s response to climate events. The usual recipient of such nurturing and counselling was the farm man; as such, these roles are linked again to the ideology of farming as masculine, of men as the primary farmers. Women’s emotional labour took many forms, including simply being unobtrusive, as one participant noted, “the woman’s got to watch out, because the man is in a bad mood every day. You’ve got to tip toe around a little more when things aren’t going well”. Although farm men may experience the direct psychological impacts of weather extremes, farm women’s distance
from control over the farm may leave them without any feelings of agency over what to
do about dying crops or suffering livestock.

For some farm women, farm reproduction roles were also intensified and
extended during extreme climate events. Although many stated that there was little they
could do in response to such events, several found their current roles stretched even
further. One participant clearly described the extension of the “go for” or “hired man”
role during an extreme event:

I certainly know my husband comes in and when he’s in a state, it’s - the first
thing he says is, “you’re gonna have to”. “Because I’ve gotta go here, and there’s
a problem here, so you’re gonna have to”. If his time is consumed extra, then he’s
looking around for who’s going to catch us up.

Another described her farm reproduction in this way, illustrating again the geographic
dispersion of farm women’s work compared to men’s:

When we get hail, I’m in charge of all the insurance claims and I have to take the
frickin’ truck into auto clearing, then I have to get rides from my girlfriends to
leave the truck there. Because he’s just farming. I’m in charge of screwing
around with SGI and all the hail claims and…like for the house, like when we
have hail damages to the house but not to the farm, so…I don’t do anything with
the grain or anything like that, but I have to do everything else in regards to the
house. So I guess that would be part of my role, to organize that.

Farm women also faced the challenges of ensuring their family’s social
reproduction, which often meant coping with either excess or insufficient water. Excess
precipitation affected farm homes as well as fields, and women found themselves
pumping basements or cleaning up flooded homes while farm men focused on the fields.
In contrast, drought brought the responsibility of ensuring sufficient water supplies for
the household by whatever means necessary. One participant described the difficulties of
raising a small child during drought:
I had to get a water tank and haul water from the city to fill up my well so I could bathe and do laundry. It was terrible. About once every three days I had to haul water from the city. One load of water would take me about two hours…at the time I had a child who was in diapers. Then you’re trying to entertain her and I’d bring along games, tic-tac-toe.

Another adaptive strategy for farm families was to accept off-farm employment, especially when dealing with debts that must be regularly paid. While passing by the interview, one participant’s husband added that, “Some younger families that went into those high interest rate debts…the ladies…they got a job in town. But you know, they were driving 35 miles to work and so they needed a vehicle and vehicles aren’t cheap and fuel isn’t cheap”.

This finding is consistent with Alston’s (2006) research on Australian women’s experiences of drought. Alston’s participants reinforced traditional notions of farm women as “supporters” while simultaneously challenging these notions by accepting a breadwinner role. In the Canadian context, however, off-farm work was not only about survival. Although it has disadvantages, off-farm work and distance from the farm allowed farm women to escape some of the stress associated with farm crisis. One woman explained, “We [women] have other things that we can do with our lives and if your thing to do with your life is simply farming…I think you can weigh yourself down more”.

Mitigation and Environmental Awareness

When asked about their views on climate change, a strong majority of participants believed that the global climate is indeed changing. Of the 27 women who answered this question, three felt certain that climate change is not occurring, one was unsure, and 23 believed it is occurring. Of these 23, eight felt certain that humans cause climate change,
at least partially. Three of the 23 attributed climate change to natural cycles, and 12 were uncertain about the cause or did not express a definitive view on the cause. Many participants had personally noticed changes in the seasons or an increased number of extreme weather events in recent years, which reinforced beliefs in the reality of climate change.

Many participants noted a division in the farm community on issues of the environment. Whereas some had begun to engage with environmental practices ranging from recycling chemical cans to implementing an Environmental Farm Plan (EFP), others rejected such practices. Some participants were dismayed that farmers had begun removing tree shelterbelts to accommodate ever-larger farm equipment.

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22 The EFP program is funded by the federal and provincial governments. It is a voluntary program that helps producers identify, plan, and implement environmentally beneficial farm practices that can reduce their vulnerability to climate extremes.
Figure 6.7. Farmer’s homemade sign – near Paradise Hill, Saskatchewan.

[original in colour]
Participants were asked if they perceived a gender difference in environmental awareness. Their answers were almost evenly divided, with 13 participants stating that farm women are more environmentally aware than farm men and 14 participants stating that environmental awareness tends to vary by family, not by individual. One participant was uncertain. However, it is notable that none of the participants felt that farm men were more environmentally aware than farm women.

Of the participants who felt that farm women were more environmentally aware, reasons varied dramatically. Some held essentialist\(^{23}\) views of women as more intuitive, caring, and conscientious. Two participants felt that women might be more cautious about chemical use due to the prevalence of breast cancer. Many linked women’s increased awareness to their roles in social reproduction, arguing that women may be more concerned about healthy food, about their children’s future, or might have learned about environmental issues from their children. This point is supported by recent research from Australia, in which participants linked rural women’s increased environmental awareness to their household roles (Boetto and McKinnon 2013). In a related way, four of my participants explained that farm men are more attuned to issues of farm productivity and finances, which makes the men more likely to emphasize production over the environment. This implies that women are thus more focused on environmental issues because of their relative disconnection from the productivity motive.

\(^{23}\) “Essentialism” refers to the belief that beings or things have a set of traits that are necessary in order for them to be what they are. For example, in gender studies, “biological essentialism” refers to the belief that there are inherent qualities to men and to women, such as the notion that women are naturally (i.e., biologically) nurturing.
Indeed, productivity was seen as a barrier to environmental farm practices. At the end of the day, farmers needed to focus on the bottom line and farm survival, and this often precluded environmental practices due to the limitations of time and money. One participant expressed this view, saying, “I think most [farmers] are very [environmentally] concerned but they can’t afford to be. The ground now needs the fertiliser, it needs the sprays or all it’ll grow is wild oats. Without the spray, you get nothing”. In her research on Australian farmers, Phillips (1998:261) described the phenomenon of “forced productivism”, wherein farmers must continually produce more and more to stay competitive in the agricultural economy. Several of my participants also identified a productivist ideology of “good farming” similar to that identified by Phillips (1998), wherein a key indicator of “good farming” was a chemically treated field without any trace of weeds. Many mentioned that these social standards (amongst other barriers related to certification) had made it difficult to consider organic farming, despite their interest in it.

In spite of the strong productivist ideology that currently dominates agriculture in Saskatchewan, farm women were critical of the amount of chemicals being used. Some were cautious about increasing dependence on high-priced chemical inputs while others were concerned with environmental impact. Some questioned the environmental implications of productivism as “good farming”:

If your crops aren’t as nice as the neighbour’s sometimes and so you...maybe people will say well he’s not a very good farmer because he’s got weeds in his crop, those kind of things. You drive down the highway and you see this beautiful crop, there’s not one wild oat in it. But the average person doesn’t realise what that cost to the environment, for one thing.

It is possible that many farm women’s relative detachment from production allows them
to take a more critical stance on farm practices. Further research is necessary to explore farm men’s understandings of chemical inputs and productivist farm practice.

CONCLUSION

The empirical data presented in this chapter reveal several key themes. First, gender relations on the farm remain structured by several interconnected gender ideologies. This finding both supports and extends previous research on farm women in Canada, the United States, and Australia, which has documented the ideology of farming as a masculine pursuit and the resulting invisibility of farm women’s contributions (e.g., Alston 1995, 1998; Kubik 2004, 2005; Whatmore 1991). By bringing an FPE analysis to farm women’s work, it becomes clear that farm men as seen as closer to the “core” of agricultural production; that is, the activities directly associated with agricultural commodities. Farm women tend to perform tasks that are equally important to the farm’s functioning, yet their contributions are often construed, even by themselves, as “helping”.

The interaction of material and ideological structures also positions women as primarily responsible for social reproduction of the farm household and family, which reinforces their distance from farm production. Based on the FPE concept of social reproduction, I have argued that much of women’s farm work constitutes “farm reproduction”. The concept helps bring visibility and recognition to these tasks, just as the FPE concept of “social reproduction” did for women’s unwaged domestic work.

Second, broad ideological structures interact with political, economic, and climatic conditions to create gendered experiences of changes in policy and climate. Depending on the conditions, farm men’s control over farm production acts as either a
power or a liability. It offers them greater control over production yet, when combined
with hegemonic masculinity, renders them vulnerable to the psychological consequences
of farm crisis. In contrast, farm women’s relative distance from production, combined
with their responsibility for social and farm reproduction, positions them as supporters
and caregivers in times of environmental stress. Although this may buffer women from
the psychological stress experienced by the “primary farmer”, it may also cause them to
feel decreased agency over concrete coping strategies or adaptive practices. The
importance of their role must not be understated, as stress and mental health are a key
area of vulnerability for farmers experiencing extreme climate events.

Similarly, as an adaptive response to the Crow elimination, farm women
extended their current roles in both social and farm reproduction and therefore faced
challenges in balancing the many disparate arenas of their lives. Men, in contrast,
focused on their area of primary control: farm production. Farm-level adaptation fuelled
the productivist paradigm of farming by increasing farm size and use of GM crops. Some
farm women increased their off-farm work as an adaptive response to the Crow change.
Although off-farm work is an additional time requirement and often extends the
geographical scope of women’s work further, it simultaneously acts as a source of self-
fulfillment and a buffer against farm stress for women. It acts as both a liability and a
power, and must be further analyzed from a CR perspective.

Another important finding is the overarching lack of (and loss of) control
reported by participants. This theme pervaded discussions about the Crow elimination,
PBR and GM seeds, climate events, and farm economics. Although government was
often seen as a source of unnecessary restrictions and additional work, it was
simultaneously viewed as a potential source of agency, particularly as a potential regulator of market forces. In this vein, the issue of control was at the heart of the CWB issue, with participants on both sides of the debate emphasizing the need for control by farmers. Loss of control is an important demi-regularity that will be explored through deeper CR analysis in Chapter 7.
The CR research process began with a set of abstractions. After observing trends in the existing data on farm women’s work, I wanted to further understand this work in relation to major changes in agricultural policy and climate. The intensive interview data revealed that farm women’s work, at times, constitutes an adaptive mechanism in the face of interconnected political, economic, and climatic stressors. Facing the significant financial consequences of the Crow policy change, farmers changed commodities and increased the size of their operations to stay competitive. This caused both farm women and men to increase their farm work. However, this increase did not result in a renegotiation of social reproduction tasks. Farm women continue to fulfil the majority of domestic and caregiving roles, which they balance with increased farm contributions that I have called “farm reproduction”. In some cases farm women also relied on off-farm waged employment as an adaptive strategy but, for many, this work was primarily a source of self-fulfilment.

Critical realists try to find the best explanation for a phenomenon. Theoretical redescription is a CR tool used to determine the best explanation. Although adaptation is clearly an important factor shaping farm women’s work, it does not entirely explain the data, particularly women’s off-farm work. Sixty percent of the women interviewed were currently employed off-farm, and several others had recently retired from off-farm careers. Some were financially dependent on this income, especially for household expenses that farm income could not fully cover. However, personal goals, fulfilment, or a desire for “something new” were the main reasons women worked off-farm. Yet, at the
same time, many farm women reported a heavy workload and high stress levels, especially since many were balancing several different types of work which were often geographically dispersed. Why take on more work?

THEORETICAL REDESCRIPTION OF OFF-FARM WORK

Several theories can potentially explain farm women’s increasing participation in off-farm employment. First, from a liberal feminist perspective, off-farm work would be attributed to individual choice. Although liberalism is multifaceted and historically diverse, most liberals emphasize certain key principles, such as the notion that humans are inherently rational, free-thinking individuals who seek autonomy and self-fulfilment (Tong 2009). For liberal feminists, the ideal society is one that maximizes opportunities for self-fulfilment and extends these equally to all people, thus eliminating gender inequality. Liberal feminists usually espouse the “welfare liberal” variant which, unlike classic liberalism, promotes some government intervention in the market in order to ensure equal access to opportunities (Tong 2009).

Liberal feminism’s individualist perspective is closely aligned with the methodological individualist view of society, which views society as a collection of individual actors performing individual acts that come together to form a social phenomenon. In this view, society is simply the sum of its parts and can be understood by disaggregating it into these discrete parts. An individual behaviour or behavioural interaction is taken from its larger context and used as insight into that context, because the context is never more complex than its constituent parts. In this view, farm women’s decisions to work off-farm can be seen as individual, rational choices to enhance their own self-fulfilment and to find autonomy outside the farm. At the social level, the
culmination of individual choices result in an increased statistical trend toward off-farm work. From a feminist perspective, we might argue that women’s decisions to work off-farm are a product of the fact that farming is a male-dominated profession; in Saskatchewan, only 22.9 percent of self-reported farm operators are women (Statistics Canada 2011). As such, liberal feminists might promote initiatives for inclusion of women in farming, such as farm education programs for women and girls. They might encourage governments to create quality off-farm jobs in rural areas or to provide support for rural women entrepreneurs.

If this explanation is indeed accurate, then we should expect to see a higher rate of off-farm employment among farm women as opposed to farm men. However, statistics indicate that farm men work off-farm at nearly the same rate as farm women. The 2006 Census of Agriculture reported a 47.6 percent off-farm employment rate for farm men and 50.4 percent for farm women (Statistics Canada 2006). For this reason, the liberal feminist explanation is inadequate. There is likely another causal mechanism that is shaping this particular phenomenon.

A poststructuralist feminist perspective offers another possible theory to explain farm women’s work. Poststructuralist feminism rejects sociological notions of structure and agency. For poststructuralists, there are no stable social structures and there is no conscious agency; our subjectivity is continuously constructed and re-constructed through discourse. As participants in the broader society, human subjects act out gendered “scripts”, for example, scripts about how to be (and who should be)

24 The most recent Census of Agriculture, taken in 2011, does not provide sex-disaggregated data on off-farm work. It reports only that 46.9 percent of all farm operators (male and female) worked off-farm in 2010.
“appropriately” feminine or masculine (Butler 1990). Certain scripts become dominant and normative through this repetition and, in combination with power differentials, are used to define which subjects are behaving in a socially acceptable way and which are ostracized for not fitting in. Through their performance as social actors, humans reinforce or challenge these gendered scripts. However, in the dominant poststructuralist view, such reinforcement or challenge is not intentional, because most poststructuralist theory denies the existence of a stable, free-thinking agent who can consciously challenge social discourse.

Feminist poststructuralists might explain women’s increased off-farm work through reference to gendered discourse. In her study of female sugar cane farmers in Australia, Barbara Pini (2005) provided a poststructuralist analysis of gendered discourse on the farm. She concluded that when women actively performed field work, they used several strategies to negotiate their position as “feminine” women doing “masculine” work. These strategies range from verbally minimizing the true extent of their farm contributions to ensuring that they dress femininely in public to “compensate” for their masculine job (Pini 2005). It is notable that Pini’s poststructuralist analysis does posit a free-thinking agent who can consciously negotiate her subjectivity; this particular use of poststructuralism is not common in the theory’s major foundational works (e.g., Butler 1990; Foucault 1988; Scott 1988).

Nonetheless, from a poststructuralist perspective we could argue that the discourse of farming-as-masculine has become hegemonic; accordingly, farm women repeat more appropriately “feminine” scripts through work as nurses, teachers, and retail workers. However, like liberal feminism, this explanation also falls short in explaining
the high levels of off-farm work amongst farm men. It also fails to explain the 
prevalence of the off-farm work script. Why this script and not another? If farm 
women’s lives are structured by gendered discourses that force them (unconsciously) 
into appropriately “feminine” work, why is this manifested in off-farm work instead of 
the historically dominant model of unwaged domestic work? In other words, if 
historically “feminine” scripts are at play, why are these women teachers or bank tellers 
or implement dealers and not strictly homemakers? Why do some discourses become 
dominant over others? The feminist poststructuralist perspective generally does not allow 
us to trace the origins of these discourses because that would assert some type of 
permanence or materiality to such discourses (e.g., Butler 1990). Overall, post-
structuralism’s shortcomings lie not only in its tendency to position subjects as hapless 
victims of discourse, but also in its failure to explain causal factors at a deeper level than 
discourse.

Both feminist perspectives fail to access a deeper level of reality. Liberal 
feminism stops at the level of individual human intention or “choice”, while feminist 
poststructuralism denies human agency and intention, positioning us as “dupes” of 
discourses that originate from nowhere. From a CR perspective, however, we can view 
farm women’s work as a more complex phenomenon that is interconnected with broader 
political, economic, and social trends in Canadian agriculture. The following section 
identifies the two key generative mechanisms identified through critical realist analysis: 
corporatization and control. Both can ultimately be used to fully explain farm women’s 
work patterns.
CORPORATIZATION, CONTROL, AND CANADIAN AGRICULTURE

My research began by abstracting two policy changes: the elimination of the longstanding Crow transportation policies between 1983 and 1995 and the introduction of Plant Breeders’ Rights legislation in 1990. These abstractions formed the lens through which to view the broader interaction of gender, work, and policy in an agricultural context. As discussed in Chapter 3, historical analysis revealed the growing role of agricultural corporations acting as policy entrepreneurs in both case studies. Throughout the many events that ultimately led to the Crow outcome, railway companies and commodity groups were a powerful voice from the policy subsystem but remained (at least ostensibly) outside the institutions of policymaking. By the 1980s, however, these entrepreneurs were active inside the formal policy institutions. Corporate interests were extensively and explicitly involved in the establishment of PBR in Canada and they continue to ensure its presence on the agricultural policy agenda today.

The primary beneficiaries of the Crow elimination have been railway companies and agricultural corporations. Railway transport of grain is now a lucrative industry. The Canadian National Railway reported record profits in 2012 with a net income of $664 million in the third quarter (Canadian National 2012). In the same period, the Canadian Pacific Railway saw profits of $224 million, which was an increase of 20 percent over the previous year (Canadian Pacific 2012). The majority of CP’s freight profits are from grain transportation (Canadian Pacific 2012), whereas CN finds most of its profit in transporting other commodities, such as petroleum (Canadian National 2012).

Agriculture and Agri-Food Canada has linked the elimination of the Crow to increased value-added commodity production on the Canadian prairies, particularly beef
production in Alberta, pork in Manitoba, and oilseed crushing in Saskatchewan (Doan et al. 2003). Overall, manufactured food exports from the prairies increased by 56 percent between 1990 and 1999 (Doan et al. 2003). Such domestic manufacturing can have a positive effect on regional economies and can prevent excessive overseas transport of live animals or bulky unprocessed goods. However, this industry is controlled not by producers or local businesses, but by large multinational agri-food corporations. Although small abattoirs and family-owned processing facilities do exist, two Cargill facilities and the Lakeside meat processing plant at Brooks, Alberta (now managed by JBS Food Canada, a subsidiary of Brazil-based JBS S.A., the largest meat company in the world) almost entirely dominate beef processing in Canada. Together, these companies process approximately 95 percent of Canadian beef: 40 percent by Lakeside / JBS and 55 percent by Cargill (Cargill Meat Solutions 2013; Graveland 2013). Many of the same large, multinational corporations have vertically integrated into the production (e.g., feedlot), grain handling, and exporting sectors, thus expanding their control over the commodity chain and allowing them to evade the “cost-price squeeze” felt by producers.

A similar phenomenon has occurred in Manitoba, where post-Crow growth in the hog sector became dominated by corporate-run “mega barns”, or intensive livestock operations (ILOs) (Qualman 2001). This change, too, was facilitated by policy. The 1996 elimination of the single-desk selling agent for hogs spurred direct sales between producers and processors; however, as Ramsey and Everitt (2001) pointed out, this shift squeezed out smaller hog producers because processors set requirements for a minimum
number of hogs per delivery\textsuperscript{25}. Similarly, increased oilseed production in Saskatchewan (which was driven, at least in part, by the Crow change) has created a ripe opportunity for canola crushers. Just as the Crow was being eliminated in the mid-1990s, Cargill established the largest oilseed plant on the continent near Clavet, Saskatchewan. In 2010, the major agricultural corporations Richardson International and Louis Dreyfus Mitsui Foods opened two additional crushing plants near Yorkton. The other provincial crushing plants are run by Archer Daniels Midland (ADM) and Bunge (Canola Council of Canada 2013). All are major, multinational corporations. ADM is a Fortune 500 corporation and Cargill earned a record $2.69 billion in 2011 (Cargill 2012). Richardson International is a privately held multinational corporation with operations in the oil, gas, and financial sectors as well as grain handling and food processing.

Even production itself is increasingly in the hands of large corporations. When farmers produce canola to avoid transportation costs and reap its high prices, they purchase seeds from a market dominated by patent-protected GM seeds, which constitute 90 percent of canola seeds grown in Canada (Beckie et al. 2011). When non-GM, PBR-protected canola seeds are used, it is primarily the Clearfield herbicide-tolerant variety produced by the BASF corporation. The company requires producers to sign a “Clearfield Stewardship Agreement” indicating that they will purchase new certified seeds every year.

Participants identified a direct link between the Crow elimination and the growing size of farms. Across the prairies, a relatively small number of high-income

\textsuperscript{25} Even more hog producers have since been squeezed out by the dramatic rise in grain prices due to ethanol production as well as American country of origin labeling (COOL) laws, both of which have negatively affected the Canadian hog industry in recent years.
farms now bring in the majority of farm income and smaller, low-income farms are dropping out (Sparling, Laughland, and Mitura 2008). Many participants had increased the size of their own farms as a combined result of the Crow change and the need to stay competitive in this increasingly corporate, industrialized agricultural environment. Larger farms required larger machinery. This, in turn, benefited the agricultural implement manufacturers. In February 2013, the John Deere company announced record first-quarter profits of $650 million (John Deere 2013). Smaller scale companies have also seen the benefits. Brandt, a Regina-based implements manufacturer, recently celebrated its achievement of $1 billion in annual sales with a public “Thanks a Billion” campaign.

Throughout the 1980s and 90s, anti-Crow policy entrepreneurs argued that a Crow-free economy would benefit farmers, markets, and local industry. After 17 years, it is clear that many of the benefits have accrued to a handful of large agribusinesses. Few participants could identify an increase in farm-based value-added activity. One said, “I also remember the government saying that it would...there would be additional value-added. There was hope of that, which I don’t think really happened”. Another spoke colorfully about the lack of diversification that resulted:

So Ralph Goodale, the biggest ass on earth, was the ag[riculture] minister at the time, and he fed everybody this big line of crap about how it’s going to help and it was going to make diversification and it’s going to, you know, there’re just so many benefits. Unless he saw the diversification of agriculture in Saskatchewan as the death of the family farm and more people moving to the urban centres, he lied.

Farmers simply had to adapt. Adaptation occurred primarily at the farm level; the most common strategies were increasing farm size, changing commodities, or relying on off-farm work. Only a few engaged in value-added diversification, which is now
carried out mostly by vertically integrated multinational corporations. Even farmers’ adaptive practices have fuelled the corporate presence. Efforts to stay competitive have fed implement markets for bigger and more efficient machinery as farms grow larger. The shift in commodities has secured a steady supply of cattle and canola inputs for processors, who reap the benefits of a buyer’s market with strong supply. Zero-till production has become almost standard practice in the prairies and, although it has environmental benefits by reducing soil erosion, the practice requires large amounts of chemical inputs. This translates into increased cost for producers and more chemicals on the land.

Finally, the quest for increased productivity and competitiveness at the farm level has driven demand for higher yielding seeds that are resistant to disease, herbicides, and weather-related problems. GM and PBR varieties are a way to increase adaptive capacity in the face of weather uncertainties. At the same time, seed use is subject to increased monitoring and legislative control. Despite their benefits, the high price of some seeds has put them out of reach for some producers. Patent law has made GM seeds a profitable investment for corporations because GM seeds are protected by contract and re-use is forbidden. There is now a strong push to expand PBR even further, and farmer advocates are concerned about the implications this could have for farmers’ ability to re-use PBR-protected varieties.

CORPORATIZATION, CONTROL, AND EVERYDAY FARM LIFE

One of the most dominant themes in the empirical data was the overarching perception of a lack or loss of control. When this lack of control is situated in the context of corporatization, the empirical data clearly speaks to the links between the two. Lack of
loss of control was mentioned a total of 152 times by 26 of the participants. Many spoke about the uncontrollability of weather and markets, the cost-price squeeze, and the overall uncertainty farmers face in their livelihoods compared to the reliability of a regular paycheque. These problems have existed, to some extent, throughout the history of prairie agriculture.

Today, however, the issue of control has taken on new dimensions. Many participants saw the Crow as the starting point of a decline in rural Saskatchewan. Many also saw the current loss of the CWB single-desk as another symptom of their decreasing control. Participants identified the increasing extraction of their control through production and marketing contracts:

The contracts are difficult, because they’re binding you to sell something you don’t even have yet, you know, and that’s a good deal of stress.

They want everything contracted so that they have control over what’s there and then they know what’s there and they can control the prices, because they know if there’s going to be an extra large number of canola seeded this year, we can drive the price down because the guys [sic] are going to have to sell it to pay their bills.

The ubiquitous “they” referred to agricultural corporations and agents involved in production or marketing. The use of coding stripes and compound coding queries revealed that a piece of data coded to the “lack of control” node was most often co-coded to one (or more) of three additional nodes: “corporations” (35 overlapping references), “PBR” (19 overlapping), and “GM” (15 overlapping references). This overlap clearly shows the interaction of the “lack of control” theme with these three issues. As an example, one participant described how GM seed involves monitoring of farmers’ practices:

But what they [the company producing GM seed] do is they can go to the seed
company, like Viterra, and say, because Viterra has to send in that TUA [technical use agreement] at the end of the day, “we sold this many bags of seed to so and so, and this is how many acres he [sic] may or may not have planted”. Then they can go to Crop Insurance and say, “how many acres of canola did they report that they’ve seeded?” Well, if you’ve got more acres recorded than what you’ve actually purchased seed for, then they can come to you and say, “how come?”

Many participants felt tied to the use of GM seeds as a way to increase production, even though it placed limits on their agency. As one put it:

I guess evil is, kind of, too strong a word. You can see that this is the future in agriculture. That this is, if you want to be progressive, this is where you need to go and why you need to do it, although it’s a bitter pill that you really don’t want to support genetic modification for the profit of a company rather than for increased food production or some other characteristic that you’d want, that would ultimately benefit humanity.

Another said:

I feel a bit like a hypocrite because I’m so anti chemical companies, but I still keep marching along with them, you know. And we often sit and toss around going organic. You know, it’s something we debate likely every spring, every spray season. But it’s also when you see the weeds out there, it’s just so scary. Well, not scary, but…

This issue reflects Bhaskar’s CR notion of structure and agency. The structural power of corporations (i.e., to extract control from farmers) both limits farmers’ agency and is an outcome of their agency. In other words, the pressure to produce ever more has resulted in a dependence upon GM and chemical inputs that ultimately reinforces the companies’ structural power. Farm women were conscious of this but felt little agency to change it.

Interview data about the Crow issue was also commonly coded to the “lack of control” theme, albeit less frequently than the aforementioned three, with 13 overlapping references. Nonetheless, many identified the Crow as one causal factor behind their lack of control. Throughout the debates of the 1990s, anti-Crow policy entrepreneurs had argued that the elimination would give farmers greater control over their grain.
transportation, for example, farmers would see better timing of shipments due to increased efficiency. None of the participants had noted these benefits. One participant described her experience with the current scenario:

…So the railcars didn’t come in. This is a huge problem in freight, in grain transportation, is the railcars and so they didn’t get in their huge amount of railcars that they need to push out all this grain. Because, at one time there used to be five elevators a time, but now there’s just the terminal right? So they’re waiting on that and so we...maybe next week we’ll be able to ship. So it’s... so what we thought would be definite, that we’d maybe plan that. Now if we were hiring someone to ship that for us, then we’d have to say, “well, sorry, you’re on hold and that’s how it goes”. And so that’s a real big challenge.

For others, the connected issue of local elevator loss had decreased their agency in relation to grain handling corporations:

We’re sort of dictated to what we need to plant because, for us to sell our flax and canary, the elevators around us don’t sell that, so we deal with a broker. So if you want to sell to your local elevators you have to seed what they will take.

Figure 7.1 illustrates all nodes encompassed under the broad thematic topic “Agricultural Issues”. This NVivo visualization reveals the three most commonly coded (i.e., dominant) themes on the topic of agriculture that emerged from the interview data: Corporations, Farm Size, and Lack of Control.
Darkest green indicates most commonly coded (i.e., dominant) themes; darkest red the least commonly coded. Small boxes set inside large boxes are sub-themes of the larger one.

[original in colour]
Participants were often asked if they felt they had control over the economics of the farm specifically. Of the 18 women who answered this question, three felt they did have control, nine felt they did not, and six stated that it depends on certain conditions. Four of these six said that they have control over decisions at the micro level, such as which crops to grow, but that they have little control over broader market and weather conditions. Indeed, market factors and weather were key reasons given by those who felt they did not have control. Of the three who did have control, one stated that they felt temporary stability but were concerned about rising land prices and potential drops in commodity prices. Two had gained control over their finances by marketing directly to consumers, and a third attributed her security to the “nest egg” her family had built up over time.

Identifying Challenges

To get a sense of how lack of control manifests, farm women were asked what they saw as the main challenges on their own farms. These challenges are presented in Table 7.1. Weather-related uncertainty emerged as the most commonly cited challenge and, as I have argued, this uncertainty is likely to increase in the future as the effects of climate change become more strongly felt. The next items on the list are telling. Participants cited low commodity prices (as well as the volatility thereof) and high input costs as top challenges with six mentions each. Taken together, these challenges constitute the infamous “cost price squeeze”, which was cited by five participants. Overall, 17 participants in total mentioned these three related problems as their main challenges on the farm. Five others mentioned viability, finances, bottom line, and the challenge of avoiding debt.
Clearly, financial issues constitute a key challenge on the family farm. All of the descriptors point to the issue of farmers as “price takers” on both ends of the commodity chain. In CR, this characteristic constitutes an “internal property” of family farming that has become a liability under the current conditions of corporatization. Large corporations, by contrast, have the capacity to avoid the squeeze through vertical integration. As discussed previously, large corporations have increasing presence and control at every link in the chain, from production to export. A key theme in the interviews was the rising cost of production, including machinery, seeds, chemicals, fuel and transport costs. On the other end, some expressed concern about their susceptibility to the global market fluctuations that affect commodity prices, and many were concerned about the future of marketing in light of current changes to the CWB.
<table>
<thead>
<tr>
<th>Challenge</th>
<th># of Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather uncertainty</td>
<td>8</td>
</tr>
<tr>
<td>Commodity prices (low, volatile)</td>
<td>6</td>
</tr>
<tr>
<td>Input costs</td>
<td>6</td>
</tr>
<tr>
<td>Cost-price squeeze</td>
<td>5</td>
</tr>
<tr>
<td>Depopulation, distance to services, lack of services</td>
<td>5</td>
</tr>
<tr>
<td>Viability, finances, bottom line, avoiding debt</td>
<td>5</td>
</tr>
<tr>
<td>Labour shortage</td>
<td>4</td>
</tr>
<tr>
<td>Land: competition for, price of</td>
<td>4</td>
</tr>
<tr>
<td>Paperwork: amount of, complexity of</td>
<td>4</td>
</tr>
<tr>
<td>Transportation (cost, time, workload)</td>
<td>4</td>
</tr>
<tr>
<td>Workload, lack of time</td>
<td>4</td>
</tr>
<tr>
<td>Marketing (timing, complexity, fluctuation)</td>
<td>3</td>
</tr>
<tr>
<td>Retirement: planning of, possibility of</td>
<td>3</td>
</tr>
<tr>
<td>Uncertainty, loss of control</td>
<td>3</td>
</tr>
<tr>
<td>Keeping up with technology</td>
<td>2</td>
</tr>
<tr>
<td>Learning to market, loss of CWB</td>
<td>2</td>
</tr>
<tr>
<td>Inspection, regulation, frustration with government programs</td>
<td>2</td>
</tr>
<tr>
<td>Being a leader</td>
<td>1</td>
</tr>
<tr>
<td>Cheap food policy</td>
<td>1</td>
</tr>
<tr>
<td>Lack of social recognition</td>
<td>1</td>
</tr>
</tbody>
</table>
Next, participants were asked to describe what they believed were the root causes of their challenges. The top three causes named, as seen in Table 7.2, were related to markets, the role of corporations, and government policy. At this point, the role of corporatization emerged strongly again as the root cause of the challenges, even though it was not always explicitly identified by all participants. Government policy held its share of problems for farm women, including increased program paperwork, delayed payments, and some ineffective programs. However, as discussed previously, further discussion revealed that ultimately, very few wanted the government to withdraw from agriculture entirely. In contrast, the majority of participants believed that government should be involved in stabilizing market factors in both the input and commodity markets. As discussed previously, vertically integrated corporations play a key role in these markets through their presence as exporters and marketers. Below, the participant’s words illustrate that, although government programs are not always effective or appreciated, the core problem is lack of control over the market:

> When they’re setting all these programmes and stuff, we’ve said this for years, instead of buying our wheat for $4 a bushel and then saying you’re going to give us a subsidy later on which we end up paying for anyway, why not just pay us $8 a bushel, quit all those other programmes...there’re some programmes that they put out that they’ve spent millions of dollars on and they haven’t worked.

Although the participant here erroneously attributed government with the power to determine market prices, her point speaks to the overall concern with these prices and those who are truly affecting them. It also exemplifies a common refrain in the research, which was that ultimately, farmers simply want to receive fair prices for their goods.
Table 7.2. Causes of Challenges

<table>
<thead>
<tr>
<th>Cause</th>
<th># of Mentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open market, lack of competition in input/commodity markets</td>
<td>9</td>
</tr>
<tr>
<td>Corporations (inputs, grain handling, rail)</td>
<td>6</td>
</tr>
<tr>
<td>Government policy (loss of Crow, loss of regulation, favours large farms, excessive monitoring and regulation of livestock)</td>
<td>6</td>
</tr>
<tr>
<td>Competition between farmers</td>
<td>3</td>
</tr>
<tr>
<td>CWB (existence of)</td>
<td>2</td>
</tr>
<tr>
<td>Labour shortage</td>
<td>2</td>
</tr>
<tr>
<td>Myths, misunderstanding about farmers</td>
<td>2</td>
</tr>
<tr>
<td>Unions (e.g., shipping delays, drives up cost of equipment)</td>
<td>2</td>
</tr>
<tr>
<td>CWB (loss of)</td>
<td>1</td>
</tr>
<tr>
<td>Freight rates</td>
<td>1</td>
</tr>
<tr>
<td>Marketing</td>
<td>1</td>
</tr>
<tr>
<td>Personal or family issues</td>
<td>1</td>
</tr>
<tr>
<td>Technology, GMOs</td>
<td>1</td>
</tr>
</tbody>
</table>
Although participants did not always link the role of corporations to their lack of market power, corporations were mentioned so often in the interviews that it was one of the three most common codes overall, with 208 references from 31 participants (the other two were “social reproduction” and “Crow”, both of which were primarily organizational nodes). Taken together, the empirical evidence supports corporatization as a key generative mechanism causing the events and experiences described. At the farm level, corporatization manifests as a lack of control by farmers over the conditions of production. Democratic theorists (e.g., Caterino and Hansen 2009, 2010; Macpherson 1973) have described such events as an extraction of power. In this case, the extraction of farmers’ power by large corporations now begins with control over seed and inputs and continues through the production and marketing chain.

What is the role of public policy in all this? My initial expectation was that the Crow and PBR would be generative mechanisms affecting the working lives of farmers in Saskatchewan. Both have indeed shaped decision-making at the farm level (in the case of the Crow) or have tied farmers into particular methods of production (as in the case of PBR and especially GM). They are partially responsible for farmers’ general lack of control. However, CR analysis revealed a generative mechanism operating at an even deeper level of reality, of which these changes in policy are merely a symptom, pushing the effects even higher to the surface (empirical) level where lack of control is found. That generative mechanism is the growing presence and power of corporations in Canadian agriculture and policy.
Seeking Control: Corporatization, Livelihood, and Gender

Despite their lack of control in the increasingly corporatized world of Canadian agriculture, farm families are not passive victims. They find agency in the face of these changes. In her early work on the different forms of agricultural production, Harriett Friedmann (1978) distilled the different structural conditions of capitalist farm enterprises (i.e., those in which labour is hired, and the owner of the “means of production” is separate from the waged labourer) versus household-based simple commodity producers (i.e., the “family farm” model wherein the farm owners are also the labourers). While capitalist farms are subject to the exigencies of labour markets and the need to profit, Friedmann argued that family farms can self-exploit their own labour and decrease their leisure as a way to sustain the farm. Unlike the capitalist farm, she argued, the family farm needs only to ensure its “personal consumption” (e.g., food, shelter, and other requirements of life) and its “productive consumption” (e.g., the necessary inputs to sustain a profitable farm) (Friedmann 1978:555). If it becomes impossible to sustain these two “reproductive processes”, transformation will occur and the farm model will change (Friedmann 1978:556).

Today, a transformation is occurring. Family farms remain the most common form of agricultural production in Saskatchewan: only 0.01 percent of all farms in Saskatchewan (i.e., 542 of 36,952) are operated as “non-family corporations” (Statistics Canada 2011). It would be incorrect to say that non-family corporations have overtaken family farm production. However, the lines of difference between family farms are deepening dramatically as farms strive to stay competitive. Some have grown into very large, entirely capitalist family-owned farms. In contrast, some farms use only family
labour and remain “simple commodity producers”. Others fall somewhere in between, using family labour supplemented by seasonal or full-time hired workers.

Regardless the form of production, a shortage of money for “personal consumption” is often compensated with off-farm waged employment. Indeed, “money for household expenses” was the second most significant motivator for women’s off-farm work in my study. Many farms now ensure year-to-year sustainability (or what Friedmann called “productive consumption”) by expanding the farm, investing in large machinery, and using high-yielding seed with expensive chemical inputs. This is often premised on large amounts of debt.

As forms of production continue to fracture and change, I identified several interconnected responses to the current conditions: alternative farm practice, increasing farm size, off-farm work, and associated changes in livelihood. All are part of a broader shift toward an ideology of “farming as a business”. Some findings reveal the gendered dimensions of adaptation to this shifting agricultural paradigm.

*Alternative farm practice*
In response to the corporatization and industrialization of agriculture, three participants had chosen an entirely alternative way of farming. All three women and their families had formerly been grain producers, but had chosen a new path. Two of these producers were family members and farmed together. They had begun to produce grass-fed livestock, which they processed and sold directly to customers. The third participant had begun a different form of livestock production, which allowed her to produce a different commodity and a very unique product that was gaining popularity amongst consumers
oriented to natural health. In all three cases, their decisions were guided by a conscious desire to avoid the industrialized, corporate model of agriculture and to gain economic control. Their strategies are not a rejection of “farming as a business”; rather, they are attempts to gain control over the conditions of production. One described her desire to avoid the productivist paradigm:

I’d like to make our farm sustainable by relying on what grows on there naturally and us keeping things in the best condition as possible to get the most dollars out, as opposed to just mining from year after year and production going down and needing the fertilizer more and more every year. We [farmers in general] have mined our land to nothing; we can’t do without the fertilizer, we’re just [on] a noose with the inputs and the Monsanto approach, it’s just put a noose on farmers so we just want to get out of that.

Another described how her family had seen the “writing on the wall” during the Crow elimination and had decided to transition out of grain production. Her current practices were attentive to future environmental concerns and long-term sustainability of both farm and environment:

I think the environment is going to be what turns the page out here, because we cannot continue to do industrial agriculture and continue to feed people. Industrial agriculture is completely based on cheap oil, and where my grandparents’ farm used to produce more energy than it consumed, the farms now don’t, they consume more energy than they produce. And when you no longer have cheap oil, that's going to have to change, and consequently government policies are going to have to change.

Farm size

Farm women often spoke of the growing tension and competition over land ownership and the high cost of expansion as farms grow ever larger (see Figures 7.2 and 7.3) and more industrialized. A division has grown between those who can afford to become more

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26 The unique nature of this participant’s operation and commodity would make her easily identifiable to readers. After consultation with the participant, I have chosen not to include any further details in order to ensure her confidentiality.
industrialized (or who are willing to accept high levels of debt to do so) and those who are left in the grain dust. What used to be a relatively cohesive farm community – one that drew together in protest against corporate consolidation of the grain handling sector in the early decades of the 1900s – has now fractured. As Ramsey and Everitt argued, “the net result” of these changes “is that farming, and even the ‘family farm’ is now commonly described as a business rather than a way of life” (Ramsey and Everitt 2001:3).
Figure 7.2. Average Saskatchewan Farm Size, 1921-2011

Figure 7.3. Increases in Average Saskatchewan Farm Size, 1921-2011

Source: Statistics Canada Census of Agriculture, historical data tables
There is a growing body of international research on the phenomenon of “land grabbing”, usually focused on the global South. Driven by lucrative biofuel markets and financialization of food, large multinational corporations and wealthy investors have purchased large tracts of land in low-income countries (Bello and Baviera 2010; Jarosz 2009). This has led to mass evictions of local producers, environmental degradation, and concerns for future food security (Holt-Gimenez and Shattuck 2010).

The situation takes a different form in Saskatchewan. Since 1974, the provincial government has limited the amount of Saskatchewan farmland that can be owned by non-residents. This was done first through the Farm Ownership Act, which was later amended and named the Saskatchewan Farm Security Act. Although the legislation previously limited ownership to residents of Saskatchewan only, it was changed in 2002 to allow Canadian ownership but still excludes any company whose shares are publicly traded and is therefore owned by non-Canadians. As a result, Canadian investment in Saskatchewan farmland is now on the rise. For example, the Regina-based firms Agriculture Development Corporation and Assiniboia Farmland Limited Partnership have purchased large tracts of land on behalf of investors.

Land prices have risen and fallen throughout the settlement era, often corresponding with commodity prices. For example, high commodity prices during the 1970s also led to higher land prices. Today’s prices certainly reflect another land boom. The Farm Credit Corporation reported an increase of 9.7 percent in Saskatchewan farmland values during the latter half of 2012, which followed a 9.1 percent increase in the first half of that year (Farm Credit Corporation 2013). These increases are part of a broader upward trend that began in 2002 (Farm Credit Corporation 2013). A key
difference between past and present land booms, however, is that current trends are
driven at least in part by the presence of non-agricultural, corporate investment firms.

At the same time, rapid farm expansion has meant that much competition over
land still occurs between farmers themselves. Participants expressed strongly that this
inter-farmer competition is growing. Women from small- and medium-sized farms
perceived a distinct disadvantage in the competition for land, pointing out that large
farmers are often given priority or “first dibs” in land sales, due to the perception that
large operators can afford to pay more for land.

This competition between farmers is also part of the larger corporatization trend.
As inputs become more expensive and productivity is the name of the game, farmers
increase their land base either for their own profitability or for their family’s future. Out
of 28 participants who answered a question about farm size, 20 had increased the size of
their farm in approximately the past 15 years. Four more had increased their production-
to-land ratio by increasing cattle numbers or intensifying grain production while
maintaining the same land base. Three had remained the same size, and only one
participant had decreased the size of her farm.

When asked about their motivations for increasing the farm size, three
interconnected reasons emerged. One commonly mentioned reason (n=14) was related to
family or opportunity. Many wanted to build the farm for their children’s future, had
received a family inheritance of land, or had received an offer to buy land from a
neighbour. These decisions were usually interconnected with financial reasons, such as
long-term planning or the need to stay sustainable or profitable (n=13). Several
participants also mentioned that the size of new machinery had pushed them to increase their land base, since new machinery was large enough to handle the added work.
Figure 7.4. Farm machinery advertisement: “You’re Going to Want a Bigger Farm” – near Davidson, Saskatchewan.

[original in colour]
The interaction of structure and agency becomes visible in the current situation of family farms. In the corporatized context, farmers are pressured to “get big or get out”. This is clear from the empirical data, in which farm size was the second-most commonly mentioned theme (after corporatization) and represents a common adaptive strategy for many farmers. Overall, this shows that in Saskatchewan, the presence of large-scale multinational corporations is not the sole manifestation of corporatization. As critical realist Margaret Archer (1995) reminds us, the features of a social reality cannot always be neatly organized into “macro” or “micro” levels according to the phenomenon’s “size” (e.g., the number of people or dollars involved). Events do not necessarily map neatly into one stratum of reality (Archer 1995). The corporatization phenomenon is an example of this. Although some local corporations such as One Earth Farms are beginning to purchase large amounts of land in the province, many large corporate-style farms are still family owned and operated. Thus, Archer’s notion of structure and agency (i.e., as not corresponding neatly to macro/micro) is applicable. Corporatization in the input/marketing sectors pushes corporatization at the farm level, where we see a fragmenting farm population and a growing fissure between small and large farmers.

Gender, Work, and the Farm Lifestyle

As farms grow larger, many farm women are called upon to increase their role in “farm reproduction”, as discussed previously. Because farming continues to be seen as a

27 Originally coined by former U.S. Secretary of Agriculture Earl Butz in the 1970s, this term has become a mantra for proponents of industrialized, productivist agriculture and was mentioned by several participants.

28 Some participants noted that the gendered dimensions of farming might be different in extremely large, highly corporatized family farms that employ a number of farm workers. In these cases, participants speculated that farm women are likely not called upon to act as “hired men”, simply because the farm can
masculine profession, the well-documented invisibility of farm women’s on-farm contributions remains. In an industry marked by loss of control over production, farm women are further distanced from the centre of farm control; they are, after all, the “hired men”. At the intersection of corporatization and gender ideology, many farm women experience what we may call a “double detachment” from the control of farm reproduction.

The data on women’s off-farm work can now be explained within this broader context. As previously discussed, both liberal feminist and poststructuralist feminist explanations of farm women’s work are insufficient. Both fail to access a deeper level of reality beyond the ideal or discursive. In contrast, CR analysis allows us to consider material circumstances in addition to cultural ones (Porpora 1998). Corporatization acts as a generative mechanism to influence control, agency, and farm practice; similarly, gender ideology acts as a generative mechanism that shapes farm women’s work in gendered ways. Combined, these two generative mechanisms create a context of “double detachment” of farm women over farm production.

However, we must not view farm women as “victims” of these conditions. Democratic theory here offers a useful conceptualization of agency. As Caterino and Hansen have argued, the agent is capable of “choosing new alternative forms of attachment and identity, which create greater freedom” (2010:24). Paid labour (or what
Macpherson may have called the commoditization of labour) is a source of financial stability, identity, and control for farm women. The interview data show that farm women enjoy their off-farm work and the fulfilment it brings. Few, in fact, would choose to work full-time on the farm. Farm women find new forms of attachment, identity, and freedom in off-farm work, although this quest for freedom must simultaneously be seen as the product of material and structural conditions that marginalize women in agriculture. Critical realism illustrates that women’s work patterns are an emergent product of the combination of financial adaptation, gender ideology, and agential desire for personal fulfilment. They result from the interplay of generative mechanisms with human intention, the interaction of structure with agency.

This explanation goes against much of the existing research on farm women’s work, which has rather eagerly (and perhaps, at times, inaccurately) presented the women’s key motivation as financial hardship and/or oppressive gender ideologies. For example, in their early article on American farm women’s work, Gallagher and Delworth (1993) stated that financial need was the “major reason” for women’s off-farm work. To support this point, the authors cite several studies. However, in each of the studies cited, financial support for the farm was the main reason in only 25 percent, 35 percent, and 41 percent of the studies, respectively (Gallagher and Delworth 1993). The only exception was a 1982 U.S. national survey (Anon 1982; cited in Gallagher and Delworth 1993) that had showed 57 percent of farm women working off-farm for both farm and household needs which, as I shall discuss below, were treated quite separately by the farm women in my study.
Similarly, in their research with farm women working off-farm in the healthcare field, Heather et al. (2005:90–91) concluded that “farm women are not working [off-farm] for themselves, but for the farm and the family” and that farm women’s “responses to restructuring are conditioned by their gendered identities and by the subjectivities embedded in rural discourses and practices of gender”. Although Heather et al. (2005) quote women who clearly enjoyed off-farm work and, as healthcare workers, have undergone significant training to do their off-farm jobs, little attention is given to this dimension. The authors conclude that “women are the invisible victims of economic structures and political decisions that were also destroying family farms and rural communities in Alberta” (2005:95). This trend continues in recent work on farm women. In their article about rural Australian women experiencing climate change, Boetto and McKinnon (2013:236) glossed over the complexities of farm women’s work and agency, stating that “women on farms are increasingly pursuing off-farm work to supplement farm incomes”.

Similarly, there is a common (and somewhat romanticized) ideology that has portrayed farm families as small commodity producers who will self-exploit with little hope of reward or respite, recognizing the inherent value in “hard work”. In some contexts, parts of all these discourses are accurate. Many economic and political decisions have negatively affected family farming in the prairies. Farming is still a masculine pursuit, and many farm women do work off-farm to support the farm operation. Farmers continue to work long and tiring hours. Some farm families exploit their own labour to ensure farm viability. Nonetheless, we should look critically upon research that portrays farm families uniformly as exploited “drudges” and as only
victims of broader political and economic events. This would mean focusing only on structure and not at all on agency. Some participants even found agency in the new “farm as business” model and were learning to pay themselves wages in order to strike a balance between farm finances and home or leisure.

Further, farm women reported using their off-farm wages for leisure activities, luxuries, or “wants”. Although certainly representing what feminist political economists have described as a penetration of capitalism into everyday life (e.g., Braedley and Luxton 2010a) and what Macpherson described as the “market society” permeated by capitalism, winter trips to a Mexican resort or summer lake cottages provide some participants with ways to ensure that farming offered them a life, not just a livelihood. As one participant put it:

This is going to sound terrible, but I think part of the problem is that we expect a fairly high standard of living and that costs quite a bit of money. Farm machinery is very expensive and so, in order to keep…up with farm machinery, farming costs, fertiliser, chemical, seed, they’re all high. I think if we were to strictly focus on the farm and all of the income going back to the farm, it wouldn’t be a problem, but if you want to have a little extra, that’s where the... and most people do. Most farm families, they want to have, you know, not necessarily a swimming pool in the backyard, but a trip every once in a while or... So I think that causes extra stress and strain and so I think a lot of farm wives are working outside the home to kind of make up for that.

Conversely, some participants viewed this pursuit of leisure negatively, pointing to the high levels of debt amongst many farm families and the growing tendency to “keep up with the Joneses”. Some participants chose instead to find their leisure and enjoyment in country life itself.

Many participants in Kubik’s (2004) study expressed resentment but resignation to the fact that, financially and socially, “the farm comes first”. In contrast, few participants in my study expressed this idea, and many actively resisted it. This
significant difference between the two studies may reflect the decade of time that passed between them and the substantial social changes that have occurred in rural Saskatchewan. As illustrated by the comment above, although farm families work extremely long hours, there is awareness and a desire for leisure in the form of holidays, even though the farm dictates these holidays.

At the same time, farm families must balance leisure activities and small luxuries with the increasing cost of farm machinery and inputs. This further explains the high importance of farm women’s off-farm income to the household and family leisure. As farming is permeated by corporatization, careful preservation of leisure is a source of agency for some farm women. However, as one farm leader noted, such leisure has become increasingly permeated by corporatization in its own way:

And as part of this larger world, where there’s all this advertising and this influence about what is the right approach to things in general, and what measures success and so on, we have, without a doubt in my mind, within agriculture, capitalist “wannabes”. We want to be extremely large, and profitable and successful like anybody in other businesses. This [idea of] “me and the Mrs and the kids, and we do okay, and finally we get to go to Vancouver for the winter one year”…this isn’t good enough [anymore].

Another participant associated high levels of consumerism with large, highly capitalist family farms:

The people I’m thinking about, he doesn’t drive a combine. He’s got 15 guys working for him. He’s got five combines and to be honest I don’t know what that woman does. I don’t have a clue what she does. She doesn’t have an off farm job…they like really upscale stuff in their new houses.

Further research is needed to fully understand whether differential notions of leisure and consumerism indeed correspond with different farm sizes and types. In a similar vein, many participants did indicate that purchasing or shopping for new farm machinery represented a form of consumerism enjoyed by farm men, despite the high price tag.
Although past research has explored the interconnection of masculinity and machinery (Brandth 1995; Saugeres 2002), its connection to new modes of consumerism and industrialization represents an interesting area for future study.

It is clear that the relationship between farming, leisure, and consumerism is taking on new and complex forms. Farm people now seek what has, in the past, been a rather (sub)urban notion of leisure. On one hand, this trend reflects the permeation of capitalism into everyday life and leisure, which exists in both urban and rural contexts. Yet, on the other hand, it simultaneously represents a form of agential resistance and control over the conditions of everyday life. It represents the interconnection of structure and agency.

CONCLUSION
This chapter has presented a critical realist analysis of farm women’s work in the current political, economic, and climatic context of Canadian agriculture. Lack and loss of control emerged as a key issue in the findings. I have argued that this lack of control is linked to a particular generative mechanism operating at a deep level of reality: corporatization. Although dramatic changes in climate, transport policy, and seed policy have caused particularly gendered forms of adaptation, these changes are ultimately symptoms of the corporatization phenomenon. For farm women, the gendered lack of control over farm production at the micro level combines with the broader agricultural loss of control to produce a situation I have called the “double detachment”. These structural conditions have led farm women to pursue what democratic theorists have called “new alternative forms of attachment and identity” in the form of off-farm work (Caterino and Hansen 2010:24). Existing research on farm women has failed to consider
the desirability of off-farm work as a form of agency, portraying it instead as further exploitation of their labour. Whereas a liberal feminist account fails to consider these material conditions and focuses singularly on agential “choice”, a poststructuralist account leaves no room for agency or the material, focusing only on discourse and ideology. Ultimately, a CR perspective allows us to see this work as an emergent product of material and ideological structures as well as human agency, that is, as an agential response to structural conditions of farm women’s “double detachment”, which are themselves the product of corporatization and farmers’ loss of control.

This study also revealed a new theme that has not yet been discussed in research on farm women. In contrast to past studies, some of the farm women emphasized the importance of leisure, despite the demands of the farm. Trips to Mexico and small household luxuries certainly illustrate the permeation of capitalism into everyday rural life (as it does in urban life), yet they simultaneously constitute a source of agency and even resistance against the colonization of leisure and exploitation under the current economic conditions that dominate Canadian agriculture.
CHAPTER 8
CONCLUSIONS, POLICY IMPLICATIONS, AND FUTURE DIRECTIONS

Summary and Conclusions

Major changes in public policy and climate can have dramatic effects on the everyday lives of family farmers in Canada. It is important to understand how such macro-level events structure and interact with other forms of structure and agency at the social level. The purpose of this research project was to draw these connections. The overall objective was to contribute to the understanding of gendered vulnerability and adaptation to major political and climatic changes and to suggest implications for future public policy.

The project began with the hypothesis that Saskatchewan farm women’s work is uniquely affected by major changes in agricultural policy and climate, and that adaptation takes gendered forms. The Canadian prairie province of Saskatchewan was strategically chosen as the study area. Saskatchewan is the country’s largest producer of crops, yet it has a landlocked geography far from the nearest shipping port. For both reasons, the province was highly affected by two of the most dramatic changes in agricultural policy over the past two decades: the elimination of the historic “Crow” transportation programs and the introduction of Plant Breeders’ Rights (PBR) legislation. The southern part of the province also has one of the most variable climates in the world and contains a large portion of the infamous semi-arid region known as the Palliser Triangle. In the past four years, vast agricultural areas of the province experienced severe drought followed by unprecedented flooding. For these reasons, Saskatchewan is an important location in which to examine how major policy and climate changes affect agricultural producers.
The hypothesis was based on the existing literature about farm women, which has consistently demonstrated the on-going invisibility of farm women’s work despite its importance to both farm and household. Much of the existing literature on farm women’s work has used a socialist feminist or standpoint feminist perspective (e.g., Faye 2006; Kubik 2004; Whatmore 1991). To evaluate and expand this literature, I used a feminist political economy (FPE) perspective combined with insights from democratic theory. Although the FPE concept of “social reproduction” has been key to understanding and valuing women’s unwaged domestic and caregiving work in a capitalist system, I argue that existing FPE theory is insufficient for analyzing women’s work in an agricultural context where most work is technically unwaged, and where the work of social reproduction is often combined with tasks essential to the farm. I have therefore posited the term “farm reproduction” to encompass the many and diverse contributions of farm women on the family farm. These tasks are often referred to as “helping”, which only reinforces their marginality or invisibility. Just as FPE scholars emphasize the interconnection and inseparability of “production” and “social reproduction”, the concept of “farm reproduction” blurs the lines between conventionally “productive” farm work and the historically marginalized (yet highly valuable) tasks of reproducing the farm family. This helps to account for the work farm women do, which itself often blurs the lines between “farm” and “domestic”. FPE, like much of political economy, has also tended to focus almost exclusively on structure. I have therefore drawn upon democratic theory for its useful conceptualization of human agency. I use this concept to challenge past research on farm women’s off-farm work and to suggest a new understanding of this work that considers
individuals’ agency and their desire to gain some control over the circumstances that shape their lives, such as economic or political conditions.

Critical realist (CR) methodology was the main methodological framework for this study. Despite its importance as a philosophy of science, there are very few published sources detailing the practical application of CR in empirical research. I present a method and coding strategy for applying CR in feminist research. However, the process of CR analysis does not stop at the empirical data and its surface analysis. I use CR methodology to provide a deeper analysis of the causal mechanisms that affect farm women’s everyday lives and work.

Overall, a recurring theme of lack/loss of control pointed to a causal mechanism operating at a deep level of reality: corporatization. The analysis showed the powerful role of corporatization in shaping the current conditions of agriculture and the lives of producers. Part of my original hypothesis was that policy changes are causal mechanisms that result in gendered forms of adaptation on the farm. Indeed, participants had engaged in specific forms of adaptation to the policy changes, indicating that it does represent a form of structure in their lives. However, the combination of historical document analysis and participant interviews revealed that the policy changes were, in fact, part of a broader shift toward corporatization of agriculture.

This illustrates the “nested” nature of structure and agency described by Archer (1995) and discussed previously in Chapter 7. Archer argued that structure and agency do not necessarily correspond directly (and simplistically) to macro and micro, respectively. In other words, structures that shape our lives can be broad, macro-level forces such as international trade agreements or smaller, micro-level structures such as
household work. Similarly, agency can operate at the macro or micro levels. In this project, I focused on micro-level forms of vulnerability and adaptation to major changes, but existing research has also documented the operation of agency at a more macro level, such as in international peasant organizations (e.g., Desmarais 2007). The “nested” nature of structures is visible in the relationship between corporatization (as a generative mechanism) and policy. Although the policies I studied acted as a macro-level structures that shaped farmers’ lives, the policies in turn were part of an even broader trend that shapes policy paradigms: i.e., the corporatization of agriculture. As I have shown, however, individual agency also played a role in advancing the corporatization phenomenon. Such is the case of the individuals on the 1980 Task Force on Biotechnology, who had a clear interest in advancing PBR.

After the Crow policies were eliminated, farmers engaged in micro-level adaptation by changing their commodities and increasing the size of their farms. This caused more farm work for both men and women. However, this work remained marked by a gendered division of labour, which is rooted in another deep, causal gender ideology that positions farm men as the “central” farmer and farm women as “hired men” or “helpers”. Some farm women and men took waged employment as a way of adapting to the change. Although the elimination of the Crow policies was supposed to increase diversification and value-added activities on prairie farms, these results have been limited to a shift in the selection of crops. The real benefits have been found in the processing sector, which is dominated by large multinational corporations that are now vertically integrated throughout the production chain. These economic pressures and policy changes have pushed farmers further toward a productivist paradigm based on
higher and higher production. Corporatization has also permeated the micro level in this way. It fuels competition between farmers as farms grow ever larger, and competition over land is exacerbated by the new presence of Canadian investment firms in the land market. The pursuit of production ties farmers to purchase expensive but high-yielding seeds, which subsequently tie them to specific chemical inputs, restrictive contracts, and increased monitoring by the corporate “manufacturers” of the seed.

The productivist paradigm has fuelled demand for new varieties of seeds, most of which are protected by patents or PBR legislation. Although these seeds bring benefits such as disease resistance and higher yield, participants were expressly concerned with the higher cost of PBR-protected seeds. However, they were even more concerned by their decreased control over the use of seeds, especially GM seeds, which are protected by contract and cannot be reused. At the heart of this matter is control over production. As Canadian policymakers move closer to implementing the requirements of the international UPOV convention, farmers may be subject to further restrictions on their use of PBR seed.

Due to their additional disease and drought resistance, protected varieties of seeds may prove important for adapting to future climate conditions, but only if they remain accessible for farmers. Because their livelihood depends on the land, farmers are particularly vulnerable to climate extremes such as flood and drought. Climatological scenarios have indicated an increased risk of severe, rapidly fluctuating extremes in the future. I set out to understand how farm women’s work (both on- and off-farm) is affected by climate extremes. I found that, in fact, psychological stress (and the emotion
labour provided mostly by women to address it) is far more significant in times of weather crisis.

As those closest to the “centre” of farm production in many farm families, farm men may be more vulnerable to the psychological effects of climate crisis. This poses some challenge to the currently hegemonic notions of rural masculinity that emphasizes strength, independence, and stoicism. Yet, the very same gender ideology positions farm women as “supporters” and “nurturers” of the farm family in crisis, a point that reinforces their historical positioning as caregivers. Long-held ideologies of gender are, indeed, both challenged and reinforced in times of climate crisis (Alston 2006). Although their distance from control over farm production may help to buffer women somewhat from the effects of climate extremes, it also indicates less agency and control over the concrete practices of adaptation on the farm. Due to their disproportionate responsibility for social reproduction, farm women also faced additional challenges in their household and caregiving work, especially when faced with excesses or shortages of water.

Some farm families used off-farm labour as a source of stability and adaptation to crisis. Indeed, statistics show that many low- to medium-income family farms now rely heavily on off-farm work to stabilize household income. However, the empirical data also showed that many farm women’s primary reason for taking off-farm employment was not farm survival. Past research on farm women has viewed off-farm work solely as a survival strategy. Instead, I use a theory of agency taken from Democratic Theory to argue that farm women’s off-farm work is an agential response to a phenomenon I have called “the double detachment”. In other words, many farm women experience a detachment from everyday farm production, due to gender ideology that positions them
as “helpers” and therefore not in control of everyday farm activities and decisions. Simultaneously, farmers in general, including farm women, find themselves increasingly detached from control over the conditions of production. For many farm women, then, there is a twofold detachment from economic control.

Off-farm work provides a source of fulfilment and a site of control for farm women responding to changes in public policy and more commonly occurring extreme weather events. However, it must be remembered that this agency is always structured by these broader conditions. In addition to their off-farm work, farm women experience growing demands on their time and energy as farm size increases. Labour shortage and lack of money for hired workers causes women to act as “hired men”. Further, many also use their off-farm labour to pay for household expenses that the farm may no longer be able to cover. My analysis of off-farm work as agency attempts to challenge the rather victimizing tone of some past research. However, structure and agency are always linked, and the analysis of off-farm work should always be contextualized within the two generative mechanisms (i.e., corporatization and gender ideology) that shape or drive it.

Some participants found another form of agency in leisure activities. Previous research on farm women found that their lives were dominated by a persistent and pervasive notion that “the farm comes first”. This was not a dominant theme in my research. In contrast, several farm women expressed their desire to preserve holidays and leisure activities, despite the fact that these had to be scheduled around farming. Winter trips to Mexico and other tropical destinations are becoming more common amongst rural dwellers. This indicates the permeation of a (sub)urban consumerist ideology into rural communities and may be linked to the growing ideology of farming as a “business”
as opposed to a lifestyle. At the same time, however, it is a form of agency and resistance to the notion that farm families, unlike other workers and businesses, should continuously self-exploit in order to stay viable as corporatization encroaches on their livelihoods.

The research also showed that, despite flaws in current programs and administration, many participants saw public policy and government as a potential source of agency. Most did not want more income support programs; instead, they sought government intervention in the form of market stabilization and regulation of both input and commodity prices. Many promoted policies that would facilitate family farming over the large, corporate model of production. Ultimately, there was one point upon which all participants agreed. At the end of the (work)day, all the farm women wanted to be valued, both economically and socially, for the important work they do.

Public Policy Implications

The findings have implications for future directions in public policy. These implications are not limited to agricultural policy, but also extend to social and health policy as well as to broader policy paradigms and democracy. As the 1969 Task Force on Agriculture noted, it is not possible to separate economic and agricultural policy from its implications on society, health, and democratic wellbeing. A more holistic and democratic approach to rural and agricultural policy is required.

The neoliberal policy paradigm facilitates the extraction of control from farmers. In Chapter 3, I documented the increasing presence of private industry and multinational corporations in the policy process, particularly their instrumental role in advancing PBR legislation that could eventually eliminate farmers’ ability to reuse their seeds. New
varieties of seed created under PBR regimes have beneficial characteristics, such as
drought and disease resistance, that may benefit farmers in a changing climate. However,
this is only possible if seeds remain affordable and accessible for farmers. Although PBR
legislation has benefited public seed breeders at Agriculture Canada by providing
funding for continued research and development, PBR legislation has dramatically
increased the presence and power of private industry in seed breeding. The current
paradigm, as I have argued, facilitates corporate profit at the expense of the family farm
through a combination of deregulation and regulation.

At the farm level, farm women described their loss of control over the conditions
of production, which extended from seed inputs to marketing. Their control cannot be
regained without government intervention, yet the currently dominant policy paradigm
prioritizes deregulation and reregulation for the benefit of large agribusiness.
Accordingly, many participants viewed existing government programs as burdensome
and not ultimately helpful. The current policy paradigm is a source of structure and
restriction, not democratic agency. It facilitates the extraction of farmers’ power by
corporations. However, many participants were hopeful of a role for government in
creating market fairness.

Participants wanted farmers to be meaningfully consulted on agricultural policy.
In fact, this was the second-most commonly mentioned policy recommendation from
participants. Some of the women expressed concern that the federal government had not
initiated a farmer referendum on the recent change to the Canadian Wheat Board,
indicating their desire to participate in major agricultural policy decisions. Indeed,
although the Crow benefit was ultimately eliminated, farmer consultation and protest
during the change may have been instrumental in ensuring, at minimum, a producer payout as compensation for the elimination of the transportation subsidy. There does not seem to have been similar consultation during the introduction of PBR in Canada; in contrast, corporate and private industry dominated the process.

Consultation processes must be designed with an inherent and explicit recognition of the importance and centrality of farm women’s contributions to farming. Concrete steps must be taken to include women in public consultations; this would involve, for example, providing childcare services at public meetings, explicitly inviting women and women’s organizations, and ensuring that multiple farm operators have the ability to vote on important decisions (such as if the federal government had held a farmer referendum on the CWB change). Further, public policy consultations must be designed to ensure the meaningful representation of grassroots farmers’ organizations representing multiple ideological positions and must be careful to prevent domination by large agribusiness interests.

Furthermore, federal agricultural policy in Canada does not currently undergo a gender-based analysis (GBA) process. In fact, the Farm Women’s Bureau – the former federal GBA mechanism for agricultural policy – was eliminated in 2003 as part of a mandate to “mainstream” gender analysis throughout all federal policy bodies. The GBA capacity has not been returned to agricultural policy. This illustrates Alston’s (2013) point that gender mainstreaming can lose its transformational potential when countries use gender mainstreaming as an excuse to cut women-focused infrastructure. There is a need to engage in meaningful gender mainstreaming, which means placing GBA infrastructure centrally in government policy bodies, and not as an auxiliary office to
departments typically or easily seen as “gendered” (i.e., “feminized” departments such as social services).

The most common recommendation given by farm women was that agricultural policy should facilitate family farming, especially at the small and medium scale. Many felt that current policies favour large farms and that policy was gradually pushing small-to medium-income operations out. This has contributed in part to the rapid depopulation occurring in rural Saskatchewan. Statistics show that small and medium operations are often dependent on off-farm employment to remain sustainable, while very large operations dominate the profit margin. Although my research found that many farm women enjoy their off-farm careers, agricultural policy should not assume a dual-income farm family. If a family farm can provide sufficient household income without supplementation, this will facilitate the involvement of both partners in full-time farming if they so choose. By ensuring that farming is a viable career option, especially for two partners, policymakers can address the current issue of rural depopulation and the question, asked by several participants, of whether the future for the prairies is to become an “outback”.

Several other recommendations stem from this. Family farmers are price-takers in both the input and commodity markets. They bear risk both economically and environmentally. These risks are growing as farmers lose control over inputs, marketing, and as increased climate extremes begin to manifest. Indeed, the primary challenges identified by most of the participants were related to costs, prices, and weather. Ensuring the sustainability of family farms requires government intervention into markets and regulation of prices on both ends of the commodity chain.
At the same time, almost all of the participants mentioned the growing burden of paperwork associated with government programs. Policymakers face a difficult balance in this regard. Affordable public programs require significant documentation to minimize misuse or abuse. This was also a concern for some participants, who had witnessed the misuse of farm support programs. There is a strong need to reduce complexity related to programs while maintaining affordability. Some of the paperwork burden may be due to the offloading of responsibility for food inspection from government onto producers. Several participants involved in livestock or value-added activities noted an increased demand for documentation related to food safety issues, which hampers their ability to achieve the much vaunted “diversification” ideal.

Further, although diversification was supposed to emerge as a positive consequence of the Crow elimination, these benefits have funneled primarily to large corporations in the seed input and processing sectors. Diversification costs time and money for producers. Expectations of diversification must be balanced with support, not relied upon as a panacea for rural “development”. It must also be recognized that value-added and other diversification strategies often involve multiple partners and members of the farm family, and must therefore be balanced with support for social reproduction. The gendered division of labour cannot be challenged without government support for social reproduction. The availability of rural childcare remains an issue for many young farm families. Due to the combination of entrenched gender ideology with the irregular and unstructured hours involved in agriculture, farm women are primarily responsible for social reproduction, which they must balance with increasing demands on- and off-farm. This gendered division of labour does not just affect women. Farm men are less able to
connect and spend time with their children as a result. Although rural childcare poses particular challenges related to the hours of operation, new childcare structures are required to support social reproduction for parents working on- or off-farm.

Farm women’s involvement in (and control over) the farm is limited in many cases by a lack of knowledge about farming. Several women mentioned the need for training opportunities for farm women, which would reframe farming as a viable career option for women or facilitate their involvement. At the same time, even if women’s control over the farm is enhanced, it must not be assumed that all farm women want to be farmers. Rural depopulation and the loss of local career opportunities must be addressed in order to maintain vibrant and economically stable rural economies with job opportunities for both men and women.

Finally, this research showed that stress and mental health constitute a key area of vulnerability to climate extremes. Due to gendered ideologies, farm women tend to support the farm family with their emotional labour; therefore, all members of the farm family would benefit from supports in this regard. Until 2012, Saskatchewan’s well-known Farm Stress Line was staffed by farmers offering peer support. However, in July 2012, its operation was transferred to an urban-based community organization in order to save government expenditures of $100,000 per year (Government of Saskatchewan 2012b). Due in part to human-induced climate change, future climate events will be more severe and frequent. It is crucial that emotional and mental health supports be designed with attention to appropriateness; that is, support services must be provided by individuals with knowledge of, and experience in, agriculture. Farm women could also benefit from gender-specific support services framed by an understanding of women’s
lives at the intersection of farm reproduction, social reproduction, and double
detachment from agricultural control.

Knowledge Mobilization

To date, I have shared the farm women’s policy recommendations at face-to-face
meetings with two provincial Members of the Legislative Assembly (one representing
the government and one the opposition), at an invited roundtable discussion with the
federal Minister Responsible for the Status of Women, and at the United Nations
Commission on the Status of Women. My findings have also been featured in several
newspaper articles, blogs, and on a local television program. Future plans for KM
include the dissemination of findings to the broader rural community through
agricultural media sources and non-profit community organizations. Through this
dissemination, the findings may also assist farm and women’s organizations in collective
action on agricultural policy, climate policy, and intellectual property rights.

Limitations and Future Research Directions

There were several key limitations to this research project, which also suggest important
areas for future research. First, because this project focused specifically on farm
women’s work and roles, no farm men were included as participants. This effectively
isolated the ways that farm women are uniquely affected by major changes. Further,
because feminist research seeks positive social change, I wanted to challenge the
dominant cultural notion that men, as “central” farmers, are most qualified to speak on
farm issues. By asking farm women about their experiences of and recommendations for
policy, I wanted to position farm women as policy experts in their own right.
Although I sought to challenge these gendered ideologies, I found that they have particular consequences for men that must be further examined. Although much research on farming in general is often male-centred, there is far less research on the gendered dimensions of farm men’s experiences. This type of research is important; it illustrates that “gender” does not equate only to “women”. Further research is necessary to explore farm men’s uniquely gendered experiences of major change in policy and climate. As this project has indicated, farm men may be uniquely affected by the psychological consequences of climate stress. There is very little existing research on the relationship between domestic violence, masculinity, and farm stress – issues that could become even more pressing as climate change brings further uncertainty to agriculture. Further, although some research has examined the interconnection of masculinity and farm machinery, my research indicates that the permeation of capitalism into family farming has led to a type of farm machinery “consumerism” amongst men. Future research should explore the potential connections between masculinity and productivism as farms grow larger and more industrialized. Furthermore, just as I have conceptualized women’s off-farm work as a form of agency, future research should explore the motivations for off-farm work amongst farm men, whose centrality to the farm means off-farm work is less likely to be motivated by disconnection and the desire for job fulfilment.

Farm size is a major issue in the current agricultural context. Further research is needed to examine the influx of corporate land ownership in Saskatchewan as well as other Canadian jurisdictions that have not been buffered by legislation like the Saskatchewan Farm Security Act. Competition over land should be analysed for its implications on social capital. Furthermore, future research on farm size should examine
the gender roles on extremely large, highly capitalist family farms with a number of regular employees. When family farm owners become managers and not operators, what roles do women play?

This study found that most adaptive responses to the Crow elimination occurred at the farm level. One exception was the establishment of farmer-owned rail cooperatives. Future research should explore the role of social capital in these cooperatives. Can similar collaboration be harnessed for group environmental initiatives?

The recent changes to the Canadian Wheat Board were top of mind for many participants. The CWB debates were, at times, very reminiscent of the Crow debates during the 1980s and 90s. Plant breeders’ rights is also a key policy issue that will have long-term effects, particularly as Canada moves toward further implementation of UPOV. As I have done with the Crow changes, research over the coming decades should examine the gendered effects of these changes retrospectively.

This research project sought an in-depth, qualitative understanding of major changes in Canadian agriculture. This approach was key to capturing the gendered dimensions of these changes, which manifest mainly at the micro level. However, the relatively small sample size also imposed some constraints. Although several participants indicated a connection between farm size, age, and political views on the CWB, I was unable to reach conclusions on this topic due to sample size. Future research should explore a possible correlation using the CWB as a political case study.

The sample was also marked by a lack of cultural and racial diversity. Although the majority of farmers in Saskatchewan are of Euro-Canadian ancestry, there is a dearth of research on Aboriginal and immigrant farmers. Moreover, as Hutterian communities
continue to expand their presence in prairie agriculture, future research must consider the 
unique gendered dimensions on these highly industrialized communal farms. 
Furthermore, research on “whiteness” amongst prairie family farmers, conducted 
through the lens of critical race theory, would provide a highly beneficial examination of 
racial privilege and racism in rural Canada. An examination of these intersections of 
gender, race, and culture was beyond the scope of this dissertation but represents an 
important area for future research.
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APPENDIX A: ETHICS APPROVAL LETTER, UNIVERSITY OF REGINA

OFFICE OF RESEARCH SERVICES
MEMORANDUM

DATE: August 9, 2011

TO: Amber J. Fletcher
Johnson-Shoyama Graduate School of Public Policy

FROM: Dr. David Senkow
Acting Chair, Research Ethics Board

Re: The View From Here: Agricultural Policy, Climate Change, and the Future of Farm Women in Saskatchewan (File # 09S1112)

Please be advised that the University of Regina Research Ethics Board has reviewed your proposal and found it to be:

☐ 1. APPROVED AS SUBMITTED. Only applicants with this designation have ethical approval to proceed with their research as described in their applications. For research lasting more than one year (Section 1F), ETHICAL APPROVAL MUST BE RENEWED BY SUBMITTING A BRIEF STATUS REPORT EVERY TWELVE MONTHS. Approval will be revoked unless a satisfactory status report is received. Any substantive changes in methodology or instrumentation must also be approved prior to their implementation.

☐ 2. ACCEPTABLE SUBJECT TO MINOR CHANGES AND PRECAUTIONS (SEE ATTACHED). Changes must be submitted to the REB and approved prior to beginning research. Please submit a supplementary memo addressing the concerns to the Chair of the REB. ** Do not submit a new application. Once changes are deemed acceptable, ethical approval will be granted.

☐ 3. ACCEPTABLE SUBJECT TO CHANGES AND PRECAUTIONS (SEE ATTACHED). Changes must be submitted to the REB and approved prior to beginning research. Please submit a supplementary memo addressing the concerns to the Chair of the REB. ** Do not submit a new application. Once changes are deemed acceptable, ethical approval will be granted.

☐ 4. UNACCEPTABLE AS SUBMITTED. The proposal requires substantial additions or redesign. Please contact the Chair of the REB for advice on how the project proposal might be revised.

Dr. David Senkow

cc: Dr. Wendee Kubik – Women’s and Gender Studies
c: Dr. Greg Marchklon – Johnson-Shoyama Graduate School of Public Policy

** supplementary memo should be forwarded to the Chair of the Research Ethics Board at the Office of Research Services (Research and Innovation Centre, Room 109) or by e-mail to research.ethics@uregina.ca

Phone: (306) 585-4775
Fax: (306) 585-4893

290
APPENDIX B: RECRUITMENT POSTER

Are you a farm woman?

Have you been a farm woman since 1993 or earlier?

Your opinion is needed!

I am a PhD student at the University of Regina. For my doctoral research, I am hoping to interview Saskatchewan farm women about the challenges currently facing the family farm.

My goal is to understand some cutting-edge issues, from the perspective of farm women. I am researching how the rising cost of farm inputs (specifically, seed and freight rates) and extreme weather events are affecting farm women’s lives—especially how they affect the work you do.

Because I am studying freight rates and seed prices, this research is mostly focused on grain, oilseed, or mixed farms. However, livestock-only producers are welcome to contact me about the possibility of participating!

This research will be used to create recommendations for policies that are more beneficial to Saskatchewan farm women, because they are based on the actual experiences of Saskatchewan farm women.

As a farm woman, you have valuable knowledge on this topic—whether you work mostly on the farm, off the farm, or both. Your experience is the only knowledge you need to participate.

If you can participate in a one-time, 60- to 90-minute interview anytime between August - December 2011, it would be an honour to speak with you. No travel is required on your part. Your identity and details will be kept confidential.

All interview participants will be entered into a draw for a $200 cash prize.

For more information, or to schedule your interview, please contact me (Amber Fletcher) at:
1-855-522-1361 (toll-free).

Or email amber.fletcher@uregina.ca

Thank you! I look forward to meeting you!

This project has been approved on ethical grounds by the University of Regina Research Ethics Board. Any questions regarding your rights as a participant may be addressed to the committee at [306-585-4775 or research.ethics@uregina.ca]. Out of town participants may call the Ethics Board collect. This project is funded by the Social Sciences and Humanities Research Council of Canada (SSHRC). If you have any concerns or questions about this research, you may contact the supervisors, whose contact information is listed below.

Dr. Wendee Kubik, Women's and Gender Studies Program, University of Regina
(306) 585-4815, or Wendee.Kubik@uregina.ca

Dr. Greg Marchildon, Johnson-Shoyama Graduate School of Public Policy, University of Regina
(306) 585-5464, or Greg.Marchildon@uregina.ca
Consent Form for Participation in Research Project

Tentatively titled: “The View From Here: Agricultural Policy, Climate Change, and the Future of Farm Women in Saskatchewan”

Researcher: Amber J. Fletcher, Ph.D. Candidate

The purpose of this research is to examine how changes in the agricultural policy sector have affected farm women in Saskatchewan. The project focuses on two significant agricultural policy changes that occurred in the 1990s: the 1995 elimination of the “Crow Benefit” (Western Grain Transportation Act), and the 1990 onset of Plant Breeders’ Rights legislation and patenting of seed varieties. The research traces how both policy changes have affected family farm finances since their implementation and, in turn, contributed to changes in farm women’s labour patterns. This research will also shed light on several other relevant challenges to farm life in Saskatchewan; namely, extreme weather events and changes in the social fabric of rural communities.

You have agreed to volunteer your participation in this research. You have agreed to participate in a 60- to 90-minute taped interview. This is voluntary, which means that you can:

a) stop participating at any time, without consequence
b) refuse to answer any question, without consequence
c) discuss issues without being forced to talk about private information

Refusal to participate in any portion of the research will not jeopardize future services provided by the University of Regina or any other organization. Signing this form does not waive your right to legal recourse over research-related harm.

The information you share in this interview will be kept confidential within the research team, whose names are below. In the final report, your name will be replaced by a pseudonym. Your name will not be linked to anything you say, and any key identifiers (e.g., your specific location, exact acreage, etc.) will not be revealed. The only limits to this confidentiality are that the researcher is required by law to report illegal activity, such as child abuse, that you might report. Copies of your interview will be stored in a password-protected computer in a locked office at the University of Regina.

The risks of participating in this study are considered minimal. There is a very rare possibility that you could be identified by certain details you provide in your answers (e.g., very distinct stories that other people know about). Your participation is beneficial because your comments can provide insight into how agricultural policy affects the lives of farm women, and will contribute to recommendations for policy that is more beneficial to farm women.

This project was approved by the Research Ethics Boards at the University of Regina. If you have any questions or concerns about your rights or treatment in this study, you may contact the Chair of the Research Ethics Board at 585-4775 or by e-mail: research.ethics@uregina.ca. This research is funded by the Social Sciences and Humanities Research Council of Canada (SSHRC).

I, ________________________________ (print name), agree to all conditions in this consent form. I have received a copy of this consent form.
If you have any questions about this study, such as its goals or procedures, please talk to:
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APPENDIX D: INTERVIEW QUESTIONS (FARM WOMEN)

1. **About You and Your Operation**

1.1. What is your age?

1.2. Ethnic background (where your ancestors came from)?

1.3. How would you describe your profession (choose one or more)?
   ___ Farmer
   ___ Woman farmer
   ___ Farm wife
   ___ Farm woman
   ___ Farm worker
   ___ Farm homemaker
   ___ Mainly employed in a non-farm sector (i.e., finance, health, education, etc.). Please describe______________________________________________
   ___ Retired
   ___ On disability leave, or other leave from waged employment
   ___ Other______________________________________________________

1.4. What year did you begin farming (or, if you do not define yourself as a farmer, what year did you begin living on a farm as an adult)?

1.5. What is your marital status?

1.6. Which term best describes your farm operation?
   ___ Sole proprietorship
   ___ Partnership (between spouses)
   ___ Family partnership
   ___ Family corporation
   ___ Non-family corporation

1.7. What type of operation do you live on?
   ___ Grain/oilseeds/pulses
   ___ Mixed livestock and grain/oilseeds/pulses
   ___ Livestock
   ___ Other

1.8. What size is your farm operation?

1.9. What revenue category does your farm fit into? (Net revenue, including off-farm income and program payments).
   ___ under $10,000 to $49,999
   ___ $50,000 to $99,999

294
1.10. Do you produce any organic products?

1.11. Please name the main commodities you produce on your operation.

2. Work

A. Non-farm Employment

2.1. Are you employed in a job outside of your farm? (If no, skip to section B).

2.2. What type of off-farm job are you employed at?

2.3. Are you employed:
   ___ Full-time
   ___ Part-time
   ___ Casual

2.4. How long have you worked off the farm?

2.5. How far do you travel to your off-farm job?

2.6. On a scale of 0 to 6, please rank the influence of each factor in your decision to work an off-farm job (0=not at all important; 6=very important):

   Earn money to support the farm operation (e.g., buy land, farm loans, etc.)
   0 1 2 3 4 5 6

   Earn money for household needs (e.g., renovations, repairs, education)
   0 1 2 3 4 5 6

   Earn extra money for “wants” or luxury items (e.g., vacations, new vehicles)
   0 1 2 3 4 5 6

   Personal goals / fulfilment / “something new”
   0 1 2 3 4 5 6

2.7. If you did not bring in off-farm income, would your farm be able to keep operating? Yes, no, or with difficulty?
2.8. Does bringing home an income affect your level of participation in farm decision-making? Home decision-making?

2.9. If money was not an issue, would you:
   ___ Continue to work at your off-farm job
   ___ Reduce your hours at your off-farm job
   ___ Work at a different off-farm job
   ___ Quit your off-farm job and work on the farm
   ___ Quit or reduce your amount of farm work
   ___ Quit your off-farm job and focus on domestic/homemaking work
   ___ Other

Volunteer Work

Do you do volunteer work? If so, how many hours per week/month? Does your husband do volunteer work? If so, does one of you do more than the other, or do you do the same amount?

B. Farm Work

2.10. Do you engage in farm work (including book-keeping and farm management)? (If no, skip to 2.16).

2.11. What are the main farm tasks you do? (Include farm management, book-keeping, etc.)

2.12. Since you began farming, has the amount of farm work you do increased, decreased, or stayed the same?

   2.12.1. If it has increased or decreased, what caused this? When did it start to happen?

2.13. Do you feel that doing farm work changes your participation in decision-making on the farm (compared to your participation if you did no farm work)?

2.14. Have you increased the size of your operation in the past fifteen years? (If no, skip to Section C).

   2.14.1. If yes, did you:
   ___ Increase your existing activities (i.e., more acreage)
   ___ Diversify your operation by adding a new activity (i.e., switch grazing land to crops, try a new crop, value-added processing, etc.)

   2.14.2. If yes, what was the primary motivation to increase the size of your operation?
2.14.3. How did the farm size increase affect your work?

C. Household Work

2.15. Do you engage in housework? Childcare? (If no, skip section C).

2.16. Approximately what percentage of indoor household work (i.e., laundry, cooking, cleaning, childcare, indoor repairs) do you do? Who does the rest?

2.17. Approximately what percentage of outdoor household work (i.e., painting, yard work, maintenance of yard buildings) do you do? Who does the rest?

D. Workload and Gendered Division of Labour

2.18. In the past 15 years, do you feel like your overall work level (farm, off-farm, and housework together) has:
   ___ Increased greatly
   ___ Increased somewhat
   ___ Stayed the same
   ___ Decreased slightly
   ___ Decreased greatly

2.18.1. If your workload has increased, what factors have contributed to your increased overall workload? (0=does not contribute to my increased workload; 6=a major cause of my increased workload):

   Increased farm size
   0  1  2  3  4  5  6

   Starting a new farm-related venture (i.e., organics, a new crop, value-added activity)
   0  1  2  3  4  5  6

   Weather problems (i.e., drought, flood, hail)
   0  1  2  3  4  5  6

   Financial problems
   0  1  2  3  4  5  6

   Taking an off-farm job
   0  1  2  3  4  5  6

   Elimination of a government assistance program
   0  1  2  3  4  5  6
2.19. Do you think that splitting your time between a greater number of tasks (i.e., off-farm work, farm work, and housework) is more or less stressful than spending the same amount of time on fewer tasks (i.e., just farm work and housework). Why or why not?

2.20. (If she has a male partner): Do you feel like you and your male partner do approximately the same number of hours of work (include off-farm work, farm work, and household work) per day?

2.21. (If she has a male partner): Who has more leisure time – you, your male partner, or both equally?

2.22. In general, is your work as a farm woman different from your husband’s work, as a farm man? HOW?

2.23. Are you satisfied with the way you and your husband divide work (farm, off-farm, household)?

3. **Policy, Challenges and Adaptation**

3.1. What are the main challenges you face on your farm?

3.2. Who or what is responsible for these challenges (i.e., government policies, corporations, etc.)?

3.3. We often hear about a farm crisis. Do you think there is a farm crisis in Saskatchewan? If so, what is causing it?

3.4. 

3.5. Do you feel like you have control over the economic situation of your farm? Why or why not?

3.6. Do large agricultural corporations affect the family farm? If so, how?

*Now, I would like to ask you about two major policy changes that have affected family farms since 1990.*

A. **Elimination of the Crow Benefit (1995)**
3.7. Do you know about, or remember, when the Crow Benefit (or Western Grain Transportation Act, WGTA) was eliminated in 1995?

<Show chart, explain, and carry on with these questions>.

3.8. What effect have rising freight rates had on your farm’s overall financial situation?

3.9. What strategies did you/your family use to adapt to the rising freight rates after 1995? (Select all that apply).
   ___ Did not make changes to production because of the freight rate changes
   ___ Increased acreage
   ___ Started producing more oilseeds and pulses
   ___ Produced more hay and feed grain production
   ___ Started to produce livestock
   ___ Increased livestock production
   ___ I started doing more farm work
   ___ My partner started doing more farm work
   ___ Rely more on my off-farm employment to help cover costs
   ___ Rely more on my spouse/partner’s off-farm employment to help cover costs
   ___ Began a value-added or other processing venture
   ___ Other?

3.10. Can you tell me about how these changes affected the work you do?

3.11. (For livestock producers or mixed): Did you see a change in feed grain prices as a result of the Crow Benefit elimination?

3.12. (For livestock producers or mixed): Did the Crow Benefit elimination affect livestock production in any other ways?

3.13. Overall, what is your view on the 1995 elimination of the Crow Benefit and rising freight rates for farmers? How has this change affected your life?

B. Plant Breeders’ Rights Legislation / Seed Patenting (1990 and continuing).

3.14. Do you use, or have you ever used, GM seed?

3.15. What is your opinion of GM seed in general?

3.16. What do you think about seed contracts that ask farmers to report any neighbours who may be illegally re-using seed?

3.17. What is your view on Plant Breeders’ Rights legislation in general?
3.18. Since Plant Breeders’ Rights legislation was implemented in the early 1990s, have you noticed a change in the price of your seed inputs?

3.18.1. If there was a decrease, how did that happen?

3.18.2. If there was an increase, what strategies have you used to adapt?
   ___ Did not make any changes
   ___ Increased acreage to produce more, and stay competitive
   ___ Changed type of crops produced
   ___ Started to produce livestock
   ___ Increased livestock production
   ___ I started doing more farm work
   ___ My partner started doing more farm work
   ___ Rely on my off-farm employment to help cover costs
   ___ Rely on my spouse/partner’s off-farm employment to help cover costs
   ___ Began a value-added or other processing venture
   ___ Other?

4. **Environmental Challenges and Adaptation**

4.1. Since you began farming, have you experienced an extreme weather event that caused severe problems on your farm?

4.1.1. If yes, what was it?

4.1.2. If yes, how did you adapt?

4.1.3. Did the event affect your work, whether on the farm, off the farm, or in the home?

4.2. During times of stress or crisis on the farm, do you think farm women’s roles are different from the roles of farm men?

4.3. Do you think farmers in your area have an environmental awareness? Are they interested in using environmentally friendly practices on their farm?

4.4. Do you think there is a gender difference in environmental awareness? Are farm women more or less concerned with environmental preservation than farm men?

4.5. Do you believe that the global climate is changing? Why or why not?

5. **Rural Communities and Change**
5.1. Rural people have been described as both individualistic and as community minded. In your opinion, how would you describe most farm people? Rural people in general? Please explain.

5.2. Have relationships between farmers changed over the past 15 years?

5.3. Are there sources of conflict between farmers? What causes these?

5.4. In your opinion, what is the appropriate role for government in agriculture? What should the government do, or not do, for farmers?

5.4.1. For farm women?

5.5. People have different understandings and opinions about free trade. Can you tell me how free trade impacts you? How has it impacted Saskatchewan farmers in general?

Is there anything else you would like to add about any of these topics, or anything else you think is important?
APPENDIX E: INTERVIEW QUESTIONS (FARM ORGANIZATION LEADERS)

**Topic 1: Agricultural Issues/Stressors and Family Farm Adaptations**

1.1. What are the major stressors facing family farms in Saskatchewan today?

1.2. How do you see family farmers coping with these stressors?

1.3. Have there been changes in the labour patterns of farm families over the past twenty years? If so, what factors have driven these changes?

**Topic 2: Farm Women and Work**

2.1. In your opinion, are farm women’s roles different from farm men’s? If so, how?

2.2. Statistics show that farm women are taking more off-farm employment than ever before, and are also doing more on-farm work than ever. What factors are driving these changes?

2.3. What roles do farm women play in the family during times of difficulty or stress? In their communities?

2.4. Do farm women play a specific role in farming communities in general?

**Topic 3: Policy Changes**

3a) 1995: Elimination of the Western Grain Transportation Act (WGTA), or “Crow Benefit”

3a.1. How were producers affected by the elimination of the Crow Benefit in 1995?
   3a.1.1. Grain and oilseed producers?
   3a.1.2. Livestock producers?

3a.2. How did producers adapt to the increased freight costs?
   3a.2.1. Grain and oilseed producers?
   3a.2.2. Livestock producers?

   3a.2.3. Do you think the increased freight costs have changed farm practices (e.g., caused a change in commodity production or farm size)?

   3a.2.4. Do you think the increased freight costs have changed farmers’ labour market practices (i.e., caused them to accept off-farm employment)?

3b) 1990 onwards: Plant Breeders’ Rights (PBR) Legislation and Patenting
3b.1. Can you please define, and describe the difference between: certified seed, hybrid seed, genetically modified seed, and farm-saved seed? How commonly used is each type?

3b.1.1. What are the benefits and downsides to using these different types of seed?

3b.2. How do seed contracts operate? What challenges and/or benefits does this create for farmers?

3b.3. How has the 1990 implementation of Plant Breeders’ Rights legislation affected family farmers in Saskatchewan thus far?

3b.4. How will Canada’s involvement in CETA (the Canada-European Union trade agreement that is currently under discussion) affect plant breeders’ rights and farmers’ privilege?

3b.5. Has the ability to patent plant DNA sequences affected family farmers in the same way as PBR legislation, or are there differences?

3b.6. How have farmers responded to the changes caused by PBR legislation and patenting?

3b.6.1. Have these changes affected farmers’ production patterns? Labour patterns?

**Topic 4: Environment and Change**

4.1. What strategies are farmers using to adapt to the recent extreme weather events, such as flooding, in Saskatchewan?

4.2. Are Saskatchewan farmers concerned with preserving the environment?

4.2.1. If so, are they implementing any new environmental technologies or strategies?

4.3. What are the challenges for farmers who want to be more environmental in their farm practice? Supports?

**Topic 5: Community, Social Capital, and Difference**

5.1. Do you see farmers as a cohesive group with similar interests, or do differences like farm size or commodity type cause competing interests between farmers?

5.2. Are farmers individualistic, or community-minded, or both?
5.3. Do you think farmers are willing to cooperate on environmental initiatives (i.e., agri-environmental planning)? If not, what are the barriers to cooperation?

5.4. Rural Saskatchewan has a history of agrarian populist politics, wherein farmers strongly supported social democratic parties like the CCF. What do you think of the shift toward support of more conservative parties? What is driving this change?

Is there anything you would like to add about any of these topics, or is there anything else I should be including?