Earth & Atmospheric Sciences

Community, Health and Environment Research Centre

Understanding Industrial Development in Rural, Agricultural Communities

Theresa Garvin and Jeff Masuda
Department of Earth and Atmospheric Sciences
University of Alberta

TABLE OF CONTENTS

1. Research Team

1.1 *Name*   Dr. Theresa Garvin
Director, Community, Health and Environment Research Centre
Assistant Professor, Department of Earth and Atmospheric Sciences
University of Alberta

Jeff Masuda
Department of Earth and Atmospheric Sciences
University of Alberta

1.2 *Address*   ESB 1-26
University of Alberta
Edmonton, AB
T6G 2E3

1.3 *Legal Status, Contacts, GST #*   See attached cover signature page

1.4 *Experience of Research Personnel*

Over the past decade, Dr. Garvin has conducted a number of studies related to industrial development, health and community impacts in rural areas. Most recently, her work has centred on the highly controversial development of sour gas in Alberta and the effect that it has had on communities. In the past, Dr. Garvin has examined the role of scientific information in policy-making and how information is, or is not, used the policy-making process. Dr. Garvin has conducted rural studies on women and health, most notably a project in rural Appalachia (Southwest Virginia), which included an overview of health impacts of rural development in the region. As Director of the Community, Health & Environment Research Centre at the University of Alberta, Dr. Garvin is currently involved in several projects related to rural development and agriculture, including an examination of how satellite and GIS information is used in rural agricultural policies in Costa Rica (funded by the Tinker Foundation in the United States), industrial development in the Northwest Territories (funded, in part, by SSHRC), and community-company relations in rural Ghana. Together, these projects have provided Dr. Garvin with considerable experience working in and with rural, agricultural communities and makes her highly qualified to lead the proposed research.

For the past four years, Jeff Masuda has conducted research in such areas as environmental attitudes in urban transportation planning, low-income people's access to health care, and social support for youth with disabilities. Prior to commencing his current research, he was a project coordinator at the Social Support Research Program under the mentorship of Dr. Miriam Stewart, an Alberta Heritage Foundation for Medical Research Senior Scholar, and CIHR Institute of Gender and Health Scientific Director.. During his tenure at the Social Support Research Program, he gained experience coordinating large-scale, multi-site research projects

involving community-based research. This managerial experience, coupled with background work already conducted in the study community, makes him well-equipped to undertake the fieldwork and data analysis in the proposed project.

2. Detailed description of the proposed activity

2.1 Project Goal and Objectives

The proposed project's main goal is to reduce community breakdown and polarization between citizens and government in agricultural rural communities facing industrial development. To meet this goal, we propose a case study based on the following four objectives:
1. To reconstruct the history of polarization in an agricultural community undergoing industrial development. This will include a review of local policies and decision-making;
2. To identify similarities and differences in how key players see the development process. Key players in the case study will include rural landowners and residents, local government, business, and industrial organizations;
3. To build community capacity in the study community; and
4. To construct a framework for community consultation that may be used to build capacity in agricultural rural communities facing future industrial development, with the intention of strengthening linkages between local development forces and national and global forces impacting agriculture and energy policies.

2.2 Background

The focus of this study is a major industrial development plan known as the "Alberta's Industrial Heartland" (AIH, see Appendix A). Initiated by four municipalities in central Alberta, it was designed to promote heavy industry within a 194km^2 area of primarily agricultural land. The research will examine whether, and how, the interests of agricultural rural communities are adequately represented in decision-making about changing land use. From this work we expect to construct a community consultation framework allowing members of rural, agricultural communities to actively participate in future industrial development decisions in their area. This project will build on the work being conducted by the *Community, Health and Environment Research Centre* (CHE) as part of its ongoing research into the social effects of natural resources development in rural communities in Alberta, the rest of Canada, and the world. We believe that investigations at the local level are important to creating a better understanding of the ways in which larger forces in the political and economic arenas are affecting people in their everyday lives. This includes rural development, environmental, and economic policies that are responding to globalization and the new rural economy.

2.3 Project Activities and Methods

This project will be conducted in six phases (See Figure 1a Timeline in Appendix B).

Phase One (September, 2002 – November, 2003) meets **Objective 1** through three approaches. First, an analysis of local newspaper coverage and public documents will reconstruct the events surrounding the development of the Alberta's Industrial Heartland (AIH), including public

meetings. Second, the media and document analysis will form the starting point for recruiting key contacts and requesting participation in the project. Finally, Phase One includes the establishment of an Advisory Board consisting of between six and ten people including at least one representative each from municipal governments, regional agricultural organizations, the provincial ministry responsible for agricultural issues, and community organizations. The purpose of the Advisory Board is to oversee data collection, to review findings and analysis, and to ensure accountability and information dissemination throughout the life of the project. Together, these three components of Phase One will produce a comprehensive overview of local policies and processes related to the AIH and will provide the support necessary to proceed with primary data collection in Phases Two and Three.

Phases Two and Three meet **Objective 2** through two rounds of face-to-face semi-structured individual interviews (Baxter and Eyles, 1999; Dunn, 2000). ***Phase Two*** (November, 2002 – March, 2003) consists of participant selection and a first round of interviews. Participants will be selected using a combination of snowball and random sampling. Snowball sampling will be conducted through key contacts identified in Phase One and random sampling based on the random selection of community members via regional land ownership maps. Purposive sampling will ensure representation from residents (N=20), government officials (N=5), and industrial planners and representatives (N=5). Interviews in Phase Two will include questions on the participant's background, life history, and personal experiences in the AIH. Included in this interview will be issues relating to sense of community, relationship to the land, and beliefs about technological development in general.

Phase Three (February – June, 2003) includes follow-up interviews with the participants from Phase Two. This second round of interviews will look more closely at values and feelings related to the AIH in particular. Questions will focus on how the participant feels about his or her community, community cohesiveness, meanings associated with place and landscape, and how their feelings about the local landscape might influence views of the AIH. These interviews will also specifically focus on participants' perceptions of the risks and benefits that industry brings to the community and where communication between industry, community, and local government might break down.

Phase Four (May – September, 2003) meets **Objective 3** by bringing together participants from Phases Two and Three to review, analyze, and comment on the project's preliminary findings. We will conduct one to two group interviews (Cameron, 2000; Marshall and Rossman, 1999) (N=4-10 each) with a sample of participants from previous phases representing landowners, government, and industry. Participants will be selected to represent a maximum variation of people who represent multiple perspectives and positions (Krueger, 1988). The group format provides three advantages to the project design. First, it allows participants to respond to a pre-circulated written summary of the study findings to ensure that the emerging analysis remains close to the actual experiences of the participants (Rose, 2001). Second, this technique aids analysis by allowing participants to interact, review, reconsider, and compare experiences with other perspectives (Jarrett, 1993; Madriz, 2000). Providing a balanced and objective review of the AIH may reveal areas where polarization was based on miscommunication, which will aid in the construction of the framework for community consultation. Third, the group interview keeps the project participants in control of the outcomes of the study, which is consistent with

principles of participatory research (Morgan, 1993; Rose, 2001). We will ask participants for their ideas on how project results may be applicable to their own experiences and activities, and how they may be implemented in future development planning in both the AIH and elsewhere.

Throughout Phases Two, Three, and Four interviews will be tape-recorded and transcribed verbatim, allowing ongoing data analysis (***Phase Five***) throughout the data collection stage (Dye, *et al*, 2000; Lincoln and Guba, 1985). Once transcribed, interview text will be entered into a qualitative data analysis program (NVivo^{TM}) for ***Phase Five*** (January – November, 2003) of the study: an evaluation using a constant comparative method. The constant comparative method is an ongoing process that involves analyzing data as soon as it is collected, so that subsequent data collection can be based on trends that emerge early in the research process (Dye, *et al*, 2000; Strauss and Corbin, 1998). As ideas, themes and issues are identified in the data, they are grouped into categories and related to project objectives. In this way project researchers and participants will be able to develop theories and frameworks directly relevant to the AIH (Dye, Schatz, Rosenberg, and Coleman, 2000; Strauss and Corbin, 1993). Because data evaluation will take place concurrently with data collection, Phase Five of the study will overlap with Phases Two, Three and Four. From the ongoing analysis, we will produce two interim reports (one each at the ends of Phases Two and Three) to keep our stakeholders current on the project's progress. These reports will include:
1. Overview of the project activities;
2. Challenges faced during data collection and strategies taken to overcome them;
3. Highlights of significant preliminary results of the project to-date; and
4. Plans for conducting subsequent phases.
In addition, financial reporting will be included in reports submitted to funders.

Phase 6 (November – December, 2003) meets **Objective 4** by, integrating the results of the project into a framework for community consultation that we will provide to the rural community groups, municipalities, and Advisory Board members. The framework provides a tangible product to the community including recommendations for future negotiations. It will be based on the concept that early involvement of all stakeholders in industrial development decision-making is critical to establishing trust (Ali, 1997; Baxter, Eyles, and Elliott, 1999b) and ensuring satisfactory outcomes for all. A basic outline for the framework and may include responses to the questions provided in Table 1.

Table 1. Preliminary outline for the framework for community consultation

1. When planning industrial development, ***who*** are the relevant stakeholders?
   a. What are the benefits of development and who will benefit?
   b. What are the risks involved in development, and who will be at risk?
2. ***What*** issues do these stakeholders bring to the planning/policy arena and what are their ramifications for local development?
3. Once relevant stakeholders are identified, ***how*** will they be included in decision-making?
   a. What obstacles exist that may prevent stakeholder involvement?
      i. Economic
      ii. Geographic
      iii. Political (power)
   b. What means can be established to ensure meaningful participation of stakeholders?
   c. If stakeholders oppose certain aspects of development, how will they be dealt with?
4. What ***mechanisms*** will be incorporated into the consultation process that can ensure satisfactory input from stakeholders?

Responding to these questions provides both development proponents and community groups with a frame of reference that promotes a more trusting environment for negotiations. The framework forms the centrepiece of a final report that will be disseminated at the end of the project. The final report will include:
1. Completed overview of the AIH case history;
2. Summary of project activities by phase
3. Final analysis, including framework for community consultation
4. Linkages of AIH with provincial, national, and international forces and trends in agricultural policy
5. Public documents for dissemination to stakeholders
6. Financial reporting
7. Project evaluation

The final report will be distributed to all of the project stakeholders, including the Heartland Coalition, the Heartland Association, and organizations who provided letters of support to the project. We will also provide copies to relevant municipal and provincial government agencies. The report will provide a means for future development proposals in both the AIH and elsewhere to deal more explicitly and comprehensively with industrial development in agricultural rural communities. This will benefit agricultural rural communities by enabling them to respond more effectively to proposed changes on the agricultural landscape. Planners and companies will

benefit by recognizing and avoiding confrontation with rural landowners, helping to build positive and trusting relationships between all concerned parties. Finally, this strategy may ease some of the pressure that local governments encounter when trying to satisfy constituents' concerns.

2.4 Geographic Context

The geographic region of the AIH includes parts of four municipalities and a total of approximately 250 landowners, around 80 of whom actually live within the Heartland boundaries (see map in Appendix A). Heavy industry has played an increasing role in the economic prosperity in the area over the past 30 years. Local governments in the area view industrial expansion as a necessary contributor to future quality of life in the community. The AIH comprises complementary area restructuring plans for each municipality whose purposes are to provide conditions for effective land-use development over the next 25-50 years. In effect, the plan modifies the zoning of 194 km^2 of agricultural land and undertakes a promotional campaign to attact heavy industry to the area. In its first year, the AIH association claims that the partnership has generated over $11 billion of investments in new industrial facilities (Alberta's Industrial Heartland Association, 2002).

Preliminary fieldwork already conducted in the AIH has shown that the some residents have had a tumultuous co-existence with industry, in contrast to the close relationships industry shares with the municipal governments. While generally accepting of the industrial culture of the AIH, some agricultural rural residents feel that their interests are becoming increasingly threatened by continued development. Rural residents have expressed four main areas of concern: (1) landowners' inability to develop farmland in the future, (2) problems of safe distances associated with future risk management and emergency response planning, (3) potential problems associated with the effects of intensified industrial pollution, and (4) problems of increased noise and traffic associated with increased industrial activity.

2.5 Theoretical Rationale

   2.5.1 Rural Development. This project is based on literature focusing on the new rural economy and rural sustainability (Apedaile, 1994, Bryden, 1994; Flora *et al*, 1992). The new rural economy is characterized by several factors (Apedaile, 1994) including:
  - Increasing influence of tax, social, and regional policies over agricultural policies;
  - Pervasiveness of pluriactivity (off-farm jobs) by both men and women;
  - Contradictions between rural communities and larger economic and environmental objectives (see Epp and Whitson, 2001);
  - Greater influences of changing federal and provincial agricultural policies on farming; and
  - Conflict between loss of rural youth and retention of rural youth through industrial employment (see Flora *et al*, 1992).

Gertler (1994) recognizes that transformative shifts in economic, social, and political systems in Canada are exerting a negative impact on the social reproduction of family farms and rural communities. Gertler's framework provides a useful lens through which we can understand the

concerns expressed by the agricultural rural community in the AIH. Bridging our results at the local level with national and global forces will aid in transferring the results of the project into a larger context.

There is a growing impetus in the rural research community to apply models of community empowerment and sustainability to describe and address these changes to the rural sector (Bryden, 1994; Gertler, 1994). Perhaps the most promising of these models are those that invoke local ownership or control (Krannich and Luloff, 1991). As such, this project emphasizes the *local* as its locus of inquiry. A local understanding of the ways in which the new rural economy plays out in the agricultural rural community will aid us in establishing a model of community consultation that is pertinent to the issues present in the AIH.

2.5.2. Geography. The project links two theoretical approaches in geography. First, since conflict over development is inherently a geographic issue, we use two important geographic concepts of space and place. As historians privilege time in their inquiry, human geographers observe the variation of human action from one location to another (through space), and the meanings that people attach to spaces through social and cultural values and experiences tied to the landscape (in place). Recent traditions in human geography emphasize how space and place are important aspects of people's social experiences of transgression or resistance. People may use ideologies (Cresswell, 1996; Tuan, 1977) related to their spatial knowledge and experiences (e.g. home, farming, rural lifestyle versus growth, productivity, profit) when considering the impacts of technological development. Their experiences of space and place may influence whether they perceive industrial development as a threat or an opportunity. As such, this project privileges spatial knowledge and experiences as salient aspects of the processes and outcomes of technological conflicts.

Second, the study links the geographic concepts of space and place with the social construction of hazards and risk. Social construction is based on the idea that people collectively construct and reconstruct the world on a daily basis according to social and cultural orientations and experiences (Best, 2000; Guba and Lincoln, 1993; Kituse and Spector, 1973; Schwandt, 1993). Recent case studies in human geography have shown that hazards and risk are *spatially* oriented around individual experiences (Ali, 1997; Baxter, Eyles, and Elliott, 1999a; Bickerstaff and Walker, 2001; Cutter, 1993; Fitchen, Heath, and Fessenden-Raden, 1987; Irwin, Simmons, and Walker, 1997; Luginaah, Taylor, Elliott, and Eyles, 2000). Different spatial experiences of industrial hazards may contribute to misunderstandings between groups who propose development, and those who oppose it. People who can participate in public discourse, or who hold decision-making authority, may emphasize certain constructions of risk, while less powerful voices, or those with fewer resources, are silenced. The research proposed here will contribute to growing evidence that risk plays out in unique ways at different spatial scales (local, regional, national, global). Such research is expected to point the way to theory-building, policymaking, and risk management and technological development practices that are more sensitive to local circumstances.

In sum, the proposed research is situated at the intersection of critical humanistic approaches in geography (Cresswell, 2000), social constructionist risk theory (Baxter and Eyles, 1999; Cutter, 1993; Douglas and Wildavsky, 1982), and rural, agricultural community development (Epp

Whitson, 2001; Bryden, 1994; Flora *et al.*, 1992) to understand how spatial concepts, hazards and risk influence industrial development of the agricultural rural landscape. We propose that a combination of place and risk-based differences in decision-making power may contribute to conflict in rural communities, leaving some parts of the community feeling silenced or marginalized.

3. Description of who will benefit from the project and what the benefits are expected to be

There are at least three groups who will benefit from this project:

- **The agricultural rural community**. In the rural community within the AIH, this project clarifies the reasons for the polarization between landowners and developers. Broad-based, community discussion of development issues can help to build community capacity that will likely contribute to more effective community involvement in future development proposals. Once new industrial projects decide to invest in the Heartland, rural communities may be encouraged to provide input into concerns about pollution, noise, safety, and agricultural impact.
- **Local government**. The local governments and planners in the AIH have faced enormous criticism by attention given to residents' concerns in the media. A framework for community consultation will provide a means to address the needs and concerns of all stakeholders before miscommunication and misunderstandings dominate the development agenda.
- **Industry**. By finding compromises that satisfy the concerns of rural communities, companies are in a better position to build more positive and trusting relationships with their neighbours. This helps to ensure more responsible corporate practices and facilitates citizen participation in emergency response planning and other corporate civil obligations.

4. How the proposed activities relate to CARCI's objective

4.1 The local community

This project directly responds to a perceived need from both agricultural rural landowners and the AIH Association for a better means for preventing or resolving polarization. Both parties that were involved in (or opposed to) the AIH development processes have indicated that the proposed project will be useful starting point for future communications and negotiations. The multiple stakeholder contribution to the project with therefore improve local community capacity to respond to industrial development by promoting more positive relationships among stakeholders. In addition, the emphasis on involving participants from the agricultural rural community provides a mechanism for their voices to be listened to, which may otherwise not have been heard.

4.2 Other rural communities

The proposed project will enhance the viability of the rural communities in Alberta and Canada by applying research to build capacity to respond to external pressures that have tended to

marginalize agricultural interests on the landscape. We suggest that these pressures, although exerted by local governments, may stem from larger forces that are associated with globalization and the new economy. The project's focus therefore is on equipping rural communities to face the political challenges posed by the current local and provincial, national, and international emphasis on industrial development in a global context. In situations where agricultural interests are threatened by these larger forces, rural communities must be able to respond effectively through appropriate channels to have their voices heard. Likewise, local governments and industry need to understand that the interests of agricultural rural communities are important to the social, economic, and cultural fabric of our society. We believe that the framework for community consultation will be a useful tool for future negotiations between agricultural rural communities and proponents of industrial development, so that mutually satisfactory outcomes can be achieved on the rural landscape.

5. Description of how and to what extent the project addresses issues in the community and what involvement the community has in the project

5.1   History of the AIH

In 1993, the four municipalities involved in what was to be the AIH (Strathcona County, Sturgeon County, City of Fort Saskatchewan, and Lamont County) agreed to an informal partnership to promote future industrial development in the area. By 1998, this partnership was formalized with the creation of the Alberta's Industrial Heartland Association. The Association initiated the development of four Complementary Area Structuring Plans that would form the basis of a coordinated approach to attracting industrial investment within the 194km^2 boundary. However, by early 1999, area residents began responding with discontent toward potential consequences of the AIH proposal through letters to their councilors, attending planning meetings, and forcing further public meetings and invidivual consulations by the AIH Association. Early stopgap measures introduced by the planners included the buyout of several residents who were becoming increasingly surrounded by new industrial developments. Despite these measures, by late 1999 community opposition to the AIH proposal became louder and more organized. The Heartland Citizen's Coalition was formed in early 2000 to unite the groups who were concerned about the potential long-term effects of the AIH proposal to their health, safety, and social and economic sustainability. From our preliminary discussions and document review, these concerns include increased traffic volume and noise in rural areas, safety and health from pollution and industrial accidents, and loss of farmland. In addition, one of the most common complaints against the AIH Association was a perceived lack of attention given by planners to those people who were living within the boundaries of the Heartland, and that they felt they had been left out of the planning process from the beginning. The increasingly hostile environment eventually led the Heartland Association to hold a series of public meetings and other consultations in an attempt to defuse opposition. The CASPs underwent several revisions, which convinced the AIH proponents that they had listened to the concerns of the rural communities. However the Heartland Coalition, now representing many of the rural residents in the community, disagreed, charging that the revisions were unsubstantial, and that the initial issues and concerns had not been addressed. The environment of mistrust ultimately compelled the Heartland Coalition to take part of their case to court. Accusations of mistrust and deception continued right up to end of the revision process, when the plans were approved (under protest)

by all four municipalities by August, 2001. Now that the CASPs are in place, the implementation phase of the Heartland Association is underway, which is focusing its attention on promotional campaigns to attract industrial investment to the region.

5.2 Community Involvement

The emphasis of this project is to enable agricultural rural communities to apply *local solutions to local challenges* (Canadian Rural Partnership, 2002)*.* The study contributes to and involves the community in four ways:

- First, it is being conducted with the support of *both* the Heartland Citizen's Coalition, the grassroots organization that was created to voice the concerns of the rural community, and the Alberta's Industrial Heartland Association, the agency that was responsible for developing the AIH. This **bilateral support** is important to the goals of the study, in that it helps to ensure that all parties will have interest in following up with its recommendations. Both Coalition and Association members have provided valuable background information to the study, and have assisted in the planning of the research phase. The Coalition members are "in-touch" with the agricultural communities who have been affected by the AIH. Likewise, the Association has been able to provide invaluable information in the form of background documents to the study, and in helping to access key participants in government and industry. Both organizations have a vested interest in the results of the study in order to be able to resolve conflict and communicate better during future negotiations processes;

- Second, we have designed the project to give **priority** to the voices of the agricultural rural communities. Our methodology ensures that a wide-range of perspectives are sought so that community concerns are given adequate attention. Through qualitative interviewing, we will have access to the full perspectives of those who are directly affected by the AIH on their own terms. This is in contrast to a quantitative technique that limits respondents to predetermined responses to pre-set questions in a survey. The group interview at the end of the project provides these participants with an opportunity to speak to other stakeholders in the AIH, and to discuss possible solutions for future planning;

- Third, we ensure that the project results are **actionable** at the community level in contexts outside of the AIH. We accomplish this by putting all research instruments and results through an Advisory Board comprising agricultural and other organizations who work with agricultural rural communities in Alberta and Canada; and

- Fourth, the dissemination and knowledge translation phase of the project emphasizes making information available to the **general public** in a variety of formats. The framework for community consultation will be a useful tool that agricultural rural communities can access and share when faced with future development within the AIH and elsewhere.

6. Description of the linkages with agriculture

An important consideration in the development of this project has been its potential use to Alberta's agricultural rural communities who will face similar circumstances as those involved with the AIH. Over the past decade, Alberta's renewed emphasis on oil and gas development has

had a profound effect on its agricultural landscape. This project responds to a need to expose the underlying reasons decision-makers often fail to satisfy the needs and concerns of Alberta's agricultural rural communities.

In order to ensure the relevancy to Alberta's agricultural rural communities, we have contacted several key organizations in order to engage their support and participation. These include the *Alberta Cattle Commission*, the *Peace River Organic Producers Association*, the *Alberta Surface Rights Federation*, and *the Alberta Canola Producers Association*. Letters of support from these agencies can be found in Appendix C. In addition, at the time of submission of this application, we are negotiating support from at least 10 more similar organizations (see Appendix D for recruitment letter).

7. Description of change(s) in agriculture sector that research addresses and how project assists community in reacting to change(s)

7.1   Adapting to the New Rural Economy

This project focuses on the tension that is occurring in Alberta between industrial and agricultural sectors during a period when oil and gas development has become a high priority for the provincial government. The current emphasis on the contribution of oil and gas to the provincial economy has had trickle-down effects at the local level, where municipal governments are attracted to the economic (i.e. tax) benefits associated with exploration and processing activities. These development activities magnify trends in an agricultural sector already coping with economic challenges (such as global markets and free trade) and environmental disasters (such as localized drought and climate change). The result has been profound social, cultural, and economic effects on rural communities in the new economy (Apedaile, 1994; Fuller and Nichol, 1999)

7.2   Managing Increased Risks

These activities have other implications in terms of the risks that they pose. The steps needed to reduce or mitigate these risks (e.g. risk management including emergency response zones, setbacks, and rezoning of land) often result in conflict with agricultural land uses. It is critical to responsible development of our resources that these implications, and the concerns that they create in agricultural rural communities, are factored into local decision-making policies and processes. The project will provide empirical evidence that demonstrates the importance of local understandings of place and risk in the ways in which people respond to challenges to their health and safety, and social, cultural, and economic sustainability.

8. The workplan for undertaking the project, including the schedule for submission of project and financial reports

Phase One		
Activities	**Dates**	**Activities**
Community Orientation	Sep 2002 – Nov 2003	• Media analysis. Compiling a comprehensive database of news coverage by local newspapers • Establishing key contacts • Advisory committee meeting to guide Phases Two and Three
Phase Two		
Activities	**Dates**	**Activities**
Interviews	Nov – Jan 2002	• Snowball sampling • Random sampling
Data analysis	Feb 2003	• Transcription • Coding • Thematic analysis
Data reporting	Mar 1st, 2003	• Interim report #1 to funders and stakeholders
Phase Three		
Activities	**Dates**	**Activities**
Follow-up Interviews	Feb – Apr 2003	• • Schedule follow-up interviews with Phase two participants
Data analysis	May 2003	• Transcription • Coding • Thematic analysis • Advisory committee meeting to guide Phase Four
Data reporting	Jun 1st, 2003	• Interim report #2 to funders and stakeholders
Phase Four		
Activities	**Dates**	**Activities**
Focus Group Interview	May – Jul 2003	• Schedule one to two focus group interviews with Phase Two and Three participants
Data analysis	Sep 2003	• Transcription • Coding • Thematic analysis
Phase Five		
Activities	**Dates**	**Activities**
Final Data Analysis and Integration	Jan – Nov 2003	• Integration of themes from Phases One through Four • Development of a Framework for Community Consultation • Preparation of final report to funders and stakeholders
Phase Six		
Activities	**Dates**	**Activities**

Knowledge Translation and Dissemination	Nov – Dec 2003	• Advisory committee meeting
		• Knowledge translation strategies
		• Submission of final report, including:
		  ▪ Integrated analysis of Phases One – Four
		  ▪ Implications for agricultural rural community
		  ▪ Implications for policymakers
		  ▪ Financial report

9. **The budget for the project, including funding arrangements by the various parties associated with the project, and time frames for the use of funds. A detailed breakdown of total project expenditures should be provided indicating which items CARCI funds will be used for and which costs or services will be funded by the applicant and partners. All funding sources (cash and in-kind), including federal and provincial departments and agencies, municipal governments and private sector sources must be clearly identified**

| Phase One: Community Orientation | | | Provider | |
| | | | Other** | CARCI |
Activities	Details	Cost		
Community Orientation	Advisory committee meeting	$100 transportation/refreshments $150 teleconferencing fee	$100 (cash) $150 (cash)	
Phase Two: Preparation and Initial Interviews				
Interviews	Research expenses	Postage, travel, cassettes, batteries, office supplies	$700 (cash)	
	Honoraria	$20 X 30 Interviews		$600
Data analysis	Transcription*	$15/h X 4 h/interview X 30 interviews		$1800
Phase Three: Follow-up Interviews				
Preparation	Advisory committee meeting	$100 transportation/refreshments $150 teleconferencing fee		$100 $250
Interviews	Research expenses	Postage, travel, cassettes, batteries, office supplies	$700 (cash)	
	Honoraria	$20 X 30 Interviews		$600
Data analysis	Transcription*	$15/h X 4 h/interview X 30 interviews		$1800

Phase Four: Focus Groups				
			Provider	
Activities	**Details**	**Cost**	**Other**	**CARCI**
Interviews	Research expenses	Postage, travel, cassettes, batteries, office supplies	$100 (cash)	
	Honoraria	$20 X 30 Interviews		$200
Data analysis	Transcription*	$15/h X 8 h/interview X 2 interviews		$240

Phase Five: Data Analysis and Integration				
			Provider	
Activities	**Details**	**Cost**	**Other**	**CARCI**
Theme Development	Model-Building	Integration of themes and framework development Office expenses	$300 (cash)	

Phase Six: Knowledge Translation and Dissemination				
			Provider	
Activities	**Details**	**Cost**	**Other**	**CARCI**
Results Dissemination	Advisory committee meeting	$100 transportation/refreshments $150 teleconferencing fee		$100 $150
	Office expenses	Office supplies	$400(cash)	
	Professional Printing	Brochure and report printing		$2000
	Conferences	Travel to 3 conferences (one provincial, one national, one international), including airfare, road travel, accommodation, meals	$500 (cash)	$2500
	Web support	Web design and hosting for 2 years ($25/month) Hosting Design	$360 (cash)	$1000

Administration				
			Provider	
Activities	**Details**	**Cost**	**Other**	**CARCI**
Research Assistant*	Literature searches, assistance in recruitment, coding, analysis, dissemination	$12/h X 40h/week X 16 weeks X 1.12 (12% benefits) $12/h X 12h/week X 20 weeks X 1.12 (12% benefits)		$8600 $3225
Facility Fee	Includes software licensing, utilities, printing, technical support, and equipment rental	$500/month X 9 months	$18 000 (in-kind)	$4500
		SUB-TOTALS	**$21 310**	**$18 340**
		15% University Administration Charge		**$2751**
		TOTALS	**$21 310**	**$21 091**

*See Appendix E for project staff descriptions
*See Appendix F

10. Provision for performance reporting, i.e. reporting on the results of project activities, outcomes and impacts, performance indicators, methodology, tools, etc.

Progress reporting will occur after each phase of the project (April 1st, June 1st, and December 1st, 2003). The Advisory Board will guide the development of the project activities by scrutinizing research materials and preliminary results. A draft report will be sent to the advisory committee for feedback prior to final printing and dissemination to the project stakeholders. The final report and framework for community consultation will be disseminated to project funders and stakeholders, as well as to the general public via both print and web media. Interviews with local newspapers have been arranged to describe the project results and implications to the wider community.

11. Provision for audit and evaluation

To be negotiated with University of Alberta on awarding of grant.

12. Where applicable, ownership of the intellectual property by the Crown

To be negotiated with University of Alberta on awarding of grant.

13. Dissemination Plan describing how the information and results of the project will be shared with other communities or organizations

Project activities and results will be announced through a final report to our local and provincial stakeholders, including the Heartland Coalition, the AIH Association, Advisory Board, and organizations who have submitted letters of support. All products will be produced in both web and print media. Interviews with local media will advertise the results to the general public, and the interim and final reports and other products will be made available to them through electronic communication via a project website (http://www.knowledgetranslation.com/Heartland). In order to make the project more accessible to audiences outside of the formal academic and bureaucratic sectors, we also produce an easy-to-read brochure that highlights the overall research process and results, providing contact information so that people can call the CHE with questions.We will make print copies of our material available for citizens or agencies who may be interested in the results, but may not have access to email or the internet. The final report and framework for community consultation will also be broadly disseminated to local, provincial, and national audiences.
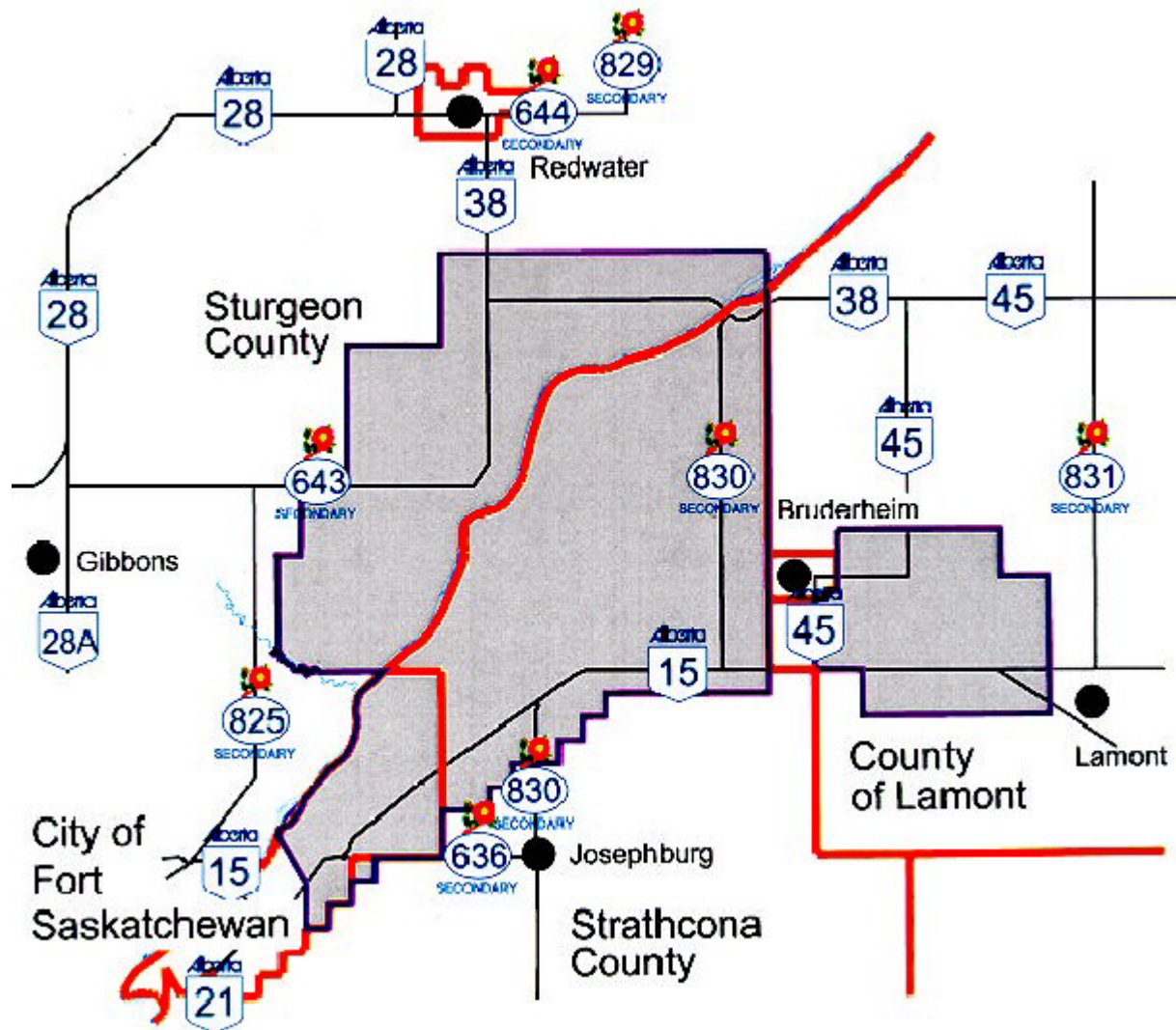
We will provide one face-to-face final briefing to both the Heartland Coalition and the AIH Association. It their choosing, we may make these briefings open to the general public, and advertise them through local newspapers. We expect to report at least three articles to academic audiences through professional peer-reviewed publications. In addition, we will present the final results to one provincial-level, one national-level, and one international-level conference.

14. Confirmation of funding partners

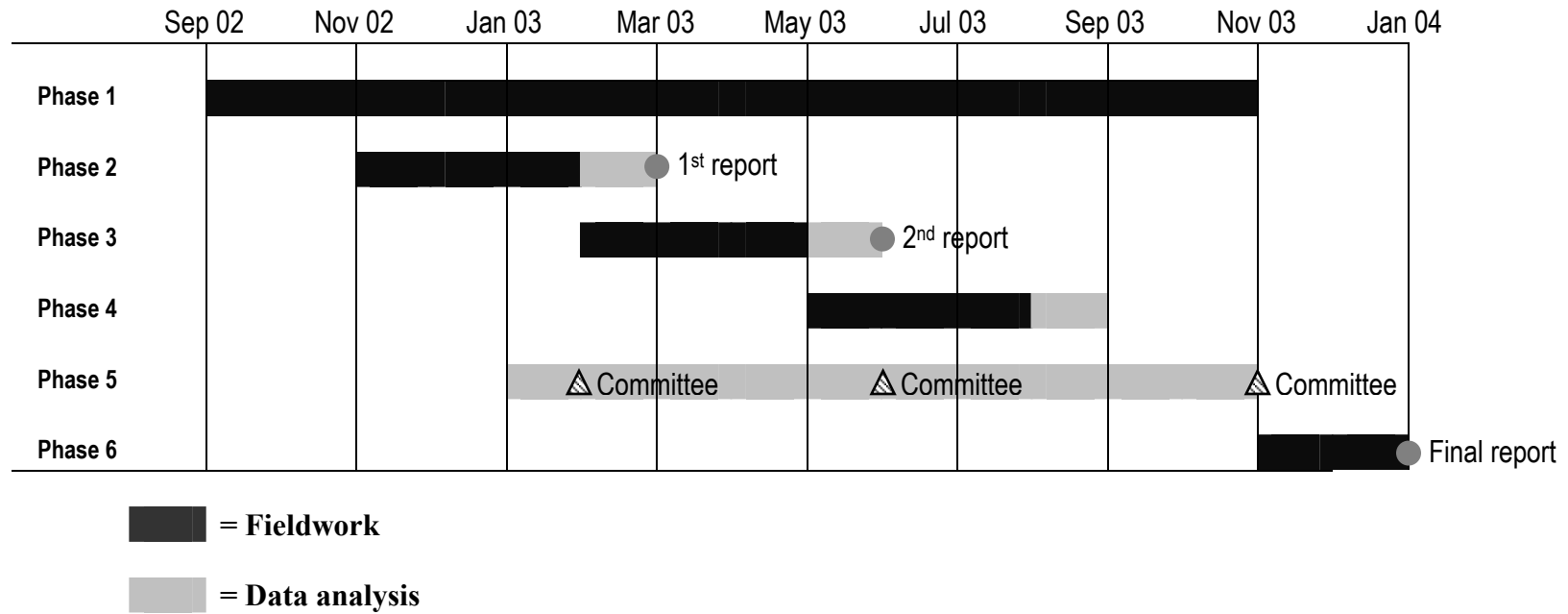See Appendix F

APPENDIX A

Study Site

APPENDIX B

Fig. 1a. Timeline for the six phases of the project.

Phase One: Community Orientation

Rural Residents

Local Government

Industry

N=20

N=5

N=5

Phase Two: Individual Interviews

Phase Three: Follow-up Individual Interviews

Phase Four: Group Interviews

Phase 5: Data Analysis and Integration

Phase 6: Dissemination and Knowledge Translation
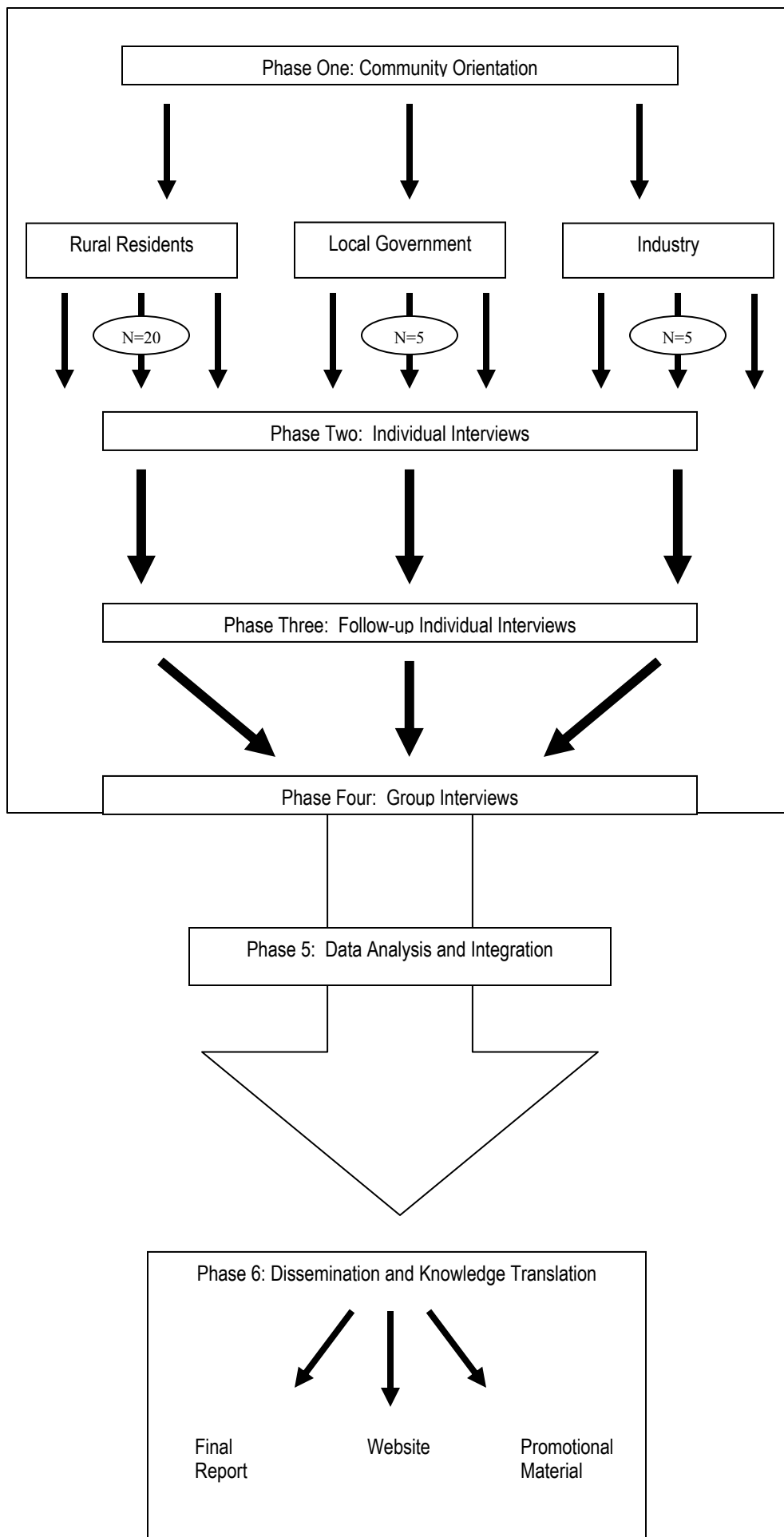
Final
Report

Website

Promotional
Material

Fig. 1b. Conceptual
schematic of project design.

APPENDIX C

Letters of Support

1. G.R. Sargent, General Manager
   Alberta Cattle Commission

2. Ward Toma, General Manager
   Alberta Canola Producers Association

3. Yvonne Sinkevich, President
   Peace River Organic Producers Association

4. Tom Nahirniak, Executive Secretary
   Alberta Surface Rights Federation

5. Anne Brown
   Heartland Citizen's Coalition

APPENDIX D

Date

Address Block

Dear (   ):

I am writing to request your support for a research study on the impacts of the petrochemicals sector on agricultural rural communities in Alberta.   The study is titled Places of Risk Conflict: A Case Study of a Technological Hazard in Alberta. The purpose of this research is to look at how people's social, cultural, and economic experiences of the places in which they live and work may contribute to conflict in situations where industrial development is proposed. People with different approaches to development (e.g. oil and gas developers, farmers, ranchers) have different social and cultural values related to their livelihood and the landscape.

Your agencies support is critical to the success of this project. We are seeking research funding from the Canadian Agriculture Rural Communities Initiative for a one-year project. Part of the requirement of this grant is that we have maximum support from the interested stakeholders, including the community and agricultural sector. This is a grant project by Agriculture and Agri-Food Canada whose objective is to enhance the viability of agricultural rural communities, particularly those communities undergoing change as a result of adjustment in the agricultural sector. I have attached two documents that will provide you with additional information. The first is the CARCI Operating Guidelines and Application Requirements, and the second is an information letter that explains in more depth the nature of our study.

I request your agencies' support of and/or participation in this study in **one or more** of the following ways.

1. Participation in a provincial-level advisory committee. This committee will be comprised of program planners, advocacy organizations, and policy-influencers in the area of oil and gas, petrochemicals, agriculture, and rural communities. The advisory committee will meet twice during the course of the project in 2002 and 2003, and once upon its completion early in 2004. As part of the committee, you will provide input into the overall design of the project, planned methodologies, and research activities. At the end of the project, you will examine the research results and advise on their appropriate uptake at community, provincial, and national levels;

2. Endorsement, in the form of a letter, of the project as a valuable tool or knowledge-resource for your agency;

3. In-kind support through donation of personnel time and informational material from your agency;

4. Help in distributing the project results to your members.

Please confirm your support through a formal letter acknowledging the areas in which you would like to contribute. The letter must be received by **01 December 2002**. I thank you for your consideration of this project. I will call you in the next couple of weeks to find out if you would be willing to provide a letter of support.

Yours sincerely,

Theresa Garvin and Jeff Masuda
enclosure

APPENDIX E

PROJECT STAFF

PAID PERSONNEL

1. **Research Assistant.** One research assistant will be employed for **20 hrs/week**. The research assistant will (1) conduct literature searches for relevant information, including theory, methodology, and other empirical evidence, (2) assist in recruitment strategies through telephone solicitation, sending letters, and compiling a participant database, (3) arrange for transcription and assist in coding of data, and (4) assist in research dissemination. The research student will be a fourth year human geography student who intends on beginning Master's training in the following year. Part of the contract may include allowances for obtaining secondary data for their own use, but will not be part of the 20 hours per week.

2. **Transcriber.** A professional transcriber will be employed for a total of approximately 256 hours to provide verbatim written transcriptions of the interviews.

VOLUNTEER PERSONNEL

1. **Key Contacts.** 2-3 key informants have offered their assistance in providing information, assisting in recruitment, and advising on the local contextualization of research materials.

2. **Advisory Committee.** Representatives from several agencies have volunteered to meet on three occasions to advise on research design, analysis, and dissemination of findings. Tentative dates for these meetings are:

   a. **Introductory teleconference (January 2002).** At this meeting we will discuss the project as a whole, including our recruitment strategies, proposed methods and analysis, and expected results. Committee members will provide feedback on the interview guides for Phase Two. We will have preliminary discussion on the potential uses of the project results to each member.

   b. **Mid-project teleconference (May 2003).** At this meeting, we will look at the preliminary results from Phase 1 and plan the subsequent Phases of the project. Again, committee members will provide feedback on the interview guides for Phases Three and Four.

   c. **Dissemination teleconference (November 2003).** At this meeting, we will look at the complete set of results, and first level analysis. A draft report will be circulated and members will give recommendations for potential audiences and means of dissemination.

APPENDIX F

Confirmation of funding support from CHE

REFERENCES

Alberta's Industrial Heartland Association. (2002). Article retrieved December 11, 2002 from the World Wide Web, www.industrialheartland.com.

Ali, S.H. (1997). Trust, risk and the public: The case of the Guelph landfill site. Canadian Journal of Sociology, 22, 4, 481-504.

Apedaile, L.P. (1994). Farming and the new rural economy. Towards a Whole Rural Policy for Canada. Ottawa, Rural Development Institute, 21-28.

Baxter, J.W., and Eyles, J.D. (1999). The utility of in-depth interviews for studying the meaning of environmental risk. Professional Geographer, 51, 2, 307-320.

Baxter, J.W., Eyles, J.D., and Elliott, S. (1999a). 'Something happened'; The relevance of the Risk Society for describing the siting process for a municipal landfill. Geografiska Annaler, 81B, 2, 91-109.

Baxter, J.W., Eyles, J.D., and Elliott, S. (1999b). Conflict between facility siting principles: A case study of the roles of trust, equity and community participation. Journal of Environmental Planning and Management, 42, 4.

Best, J. (1995). Images of Issues, 2nd Edition. Walter de Gruyter, New York.

Bickerstaff, K., and Walker, G. (2001). Public understandings of air pollution: the 'localization' of environmental risk. Global Environmental Change, 11, 133-145.

Bryden, J.M. (ed). (1994). Towards Sustainable Rural Communities: The Guelph Seminar Series. Guelph, University of Guelph.

Cameron, J. (2000). Focussing on the focus group. Ch. 6, In, Hay, I. (2000). Qualitative Research Methods in Human Geography. Oxford, University Press.

Canadian Rural Partnership. (2002). Celebrating Success in Rural Canada: Annual Report to Parliament 2001 – 2002. Minister of Public Works and Government Services Canada.

Cresswell, T. (1996). In Place Out of Place: Geography, Ideology, and Transgression. London, University of Minnesota Press.

Creswell, John W. (1998). Qualitative Inquiry and Research Design: Choosing Among Five Traditions. Thousand Oaks, Sage.

Cutter, S.L. (1993). Living with Risk: The Geography of Technological Hazards. New York, Edward Arnold.

Douglas, M. and Wildavsky, A. (1982). Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers. Berkeley, University of California Press.

Dunn, K. (2000). Interviewing. Ch. 4, In, Hay, I. Qualitative Research Methods in Human Geography. Oxford, Oxford University Press.

Dye, J.F., Schatz, I.M., Rosenberg, B.A., and Coleman, S.T. (2000). Constant comparison method: A kaleidoscope of data. The Qualitative Report, 4, 1/2. Article retrieved 17 May, 2002, from the World Wide Web, http://www.nova.edu/ssss/QR/QR4-1/dye.html

Epp, R. and Whitson, D. (2001). Writing off the Rural West: Globalization, Governments, and the Transformation of Rural Communities. Edmonton, The University of Alberta Press.

Fitchen, J.M., Heath, J.S., and Fessenden-Raden, J. (1987). Risk perception in community context: A case study. Chapter 2, In, Johnson, B.B., and Covello, V.T. (eds). The Social and Cultural Construction of Risk. Boston, D. Reidel Publishing Company.

Flora, C.B., Flora, J.L., Spears, J.D., Swanson, L.E., Lapping, M.B., and Weinberg, M.L. (1992). Rural Communities: Legacy and Change. Boulder, Westview Press.

Fuller, T., and Nichol, P. (1999). Dynamics of the New Rural Economy:An Exploration of Community-Sponsored Research from Huron County. Guelph, University of Guelph.

Gertler, M.E. (1999). Sustainable Communities and Sustainable Agriculture on the Canadian Prairies. In, John Pierce and Ann Dale (eds.) Communities, Development and Sustainability Across Canada. Vancouver, University of British Columbia Press.

Guba, E.G., and Lincoln, Y.S. (1993). Competing paradigms in qualitative research. Chapter 6, In, Denzin, N.K., and Lincoln, Y.S. (eds). Handbook of Qualitative Research. Thousand Oaks, Sage.

Irwin, A., Simmons, P., and Walker, G. (1999). Faulty environments and risk reasoning: The local understanding of industrial hazards. Environment and Planning A, 31, 1311-1326.

Jarrett, R. L. (1993). Focus Group Interviewing with Low-income Minority Populations: A Research Experience. In, Morgan, D.L., (Ed). Successful Focus Groups: Advancing the State of the Art. Newbury Park, Sage Publications.

Kitsuse, J.I., and Spector, M. (1973. Toward a sociology of social problems: Social conditions, value-judgements, and social problems. Social Problems, 20, 407-419.

Krannich, R.S., and Luloff, A.E. (1991). Problems of resource dependency in US rural communities. Progress in Rural Policy and Planning, 1, 5-18.

Krueger, R.A. (1988). Focus groups. A Practical Guide for Applied Research. Newbury Park, CA. Sage Publications.

Lincoln, Y.S., & Guba, E.G. (1985). Naturalistic inquiry. Newbury Park, Sage.

Luginaah, I.N., S.M. Taylor, S.J. Elliott and J. Eyles. (2000). A Longitudinal Study of the Health Impacts of a Petroleum Refinery. Social Science and Medicine, 50, 7-8, 1155-1166.

Madriz, E. (2000). Focus Groups in Feminist Research. In, Denzin, N. K. and Lincoln, Y.S. (eds). Handbook of Qualitative Research, Second Edition. Thousand Oaks, Sage Publications.

Marshall, C., & Rossman, G. B. (1999). Designing Qualitative Research (3rd ed.). Thousand Oaks: Sage.

Morgan, D. and Krueger, R.A. (1993). When to Use Focus Focus Groups and Why. In, Morgan, D.L., (ed). Successful Focus Groups: Advancing the State of the Art. Newbury Park, Sage Publications.

Rose, D. (2001). The role of focus groups in a research strategy. In, Revisiting Feminist Research Methodologies: A Working Paper. Status of Women Canada, Research Division. Article retrieved 17 December 2002 from the World Wide Web, http://www.swc-cfc.gc.ca/publish/research/drose/020703-drose-II-e.html.

Schwandt, T.A. (1993). Constructivist, interpretivist approaches to human inquiry. Chapter 7, In, Denzin, N.K., and Lincoln, Y.S. (eds). Handbook of Qualitative Research. Thousand Oaks, Sage.

Stake, R.E. (1993). Case Studies. Chapter 14, In, Denzin, N.K., and Lincoln, Y.S. (eds). Handbook of Qualitative Research. Thousand Oaks, Sage.

Strauss, A. L., & Corbin, J. M. (1998). Basics of qualitative research: Techniques and procedures for developing grounded theory. Thousand Oaks, CA, Sage.

Strauss, A., and Corbin., J. (1993). Grounded theory methodology. Chapter 17, In, Denzin, N.K., and Lincoln, Y.S. (eds). Handbook of Qualitative Research. Thousand Oaks, Sage.

Tuan, Y.F. (1977). Space and Place: The Perspective of Experiences. Minneapolis, University of Minneapolis Press.