Conflicts over farming practices in Canada: the role of interactive conflict resolution approaches[☆]

Lorne Owen[a], Wayne Howard[b,*], Mark Waldron[c]

[a]*British Columbia, Ministry of Agricutlure, Fisheries and Food, and University of Guelph, Canada*
[b]*California Polytechnic State University, San Luis Obispo, Agribusiness Department, CA 93407, USA*
[c]*Department of Rural Extension, University of Guelph, Canada*

Abstract

An increasing number of articles in professional and scientific journals, as well as in the public press, give evidence to a rising number of conflicts that exist in rural communities. These conflicts arise from changes in farming practices, the increasing number of large-scale production units, resource use, and demographics. Fair, effective and efficient approaches to resolve these conflicts are of increasing interest and importance. An interactive conflict resolution (ICR) approach that focuses on communication and positive social interactions may be a preferred approach for resolving conflicts. The role of ICR approaches in addressing conflicts arising from farming and agri-business practices is presented and discussed in this paper. The paper posits that ICR approaches are efficient from an economic as well as a social perspective and that they provide the greatest potential to realize socially optimal outcomes from a both a theoretical and practical perspective.

1. Introduction

The sustainability of our rural communities is being questioned and farmers as well as agricultural communities are finding themselves involved in an increasing number of controversies over farming practices. For example, the number of complaints over agricultural practices in the Lower Fraser Valley, British Columbia, increased to 115 in 1997, up from 85 in 1992 (British Columbia Ministry of Agriculture, Fisheries and Food, 1998). Anecdotal evidence indicates that similar complaints and lawsuits are increasing throughout North America.[1] These conflicts encompass a wide range of social, economic, and environmental issues, involve many different stakeholders and pit rural non-farmers against farmers, urban residents against farmers, farmers against farmers, and community against community.

While farming practices that jeopardize the safety and well being of Canadian communities and Canada's environment are indefensible, there is growing concern that public controversies associated with normal farming practices will threaten the immediate and long-term socio-economic sustainability of agriculture. A recent survey of farm organizations identified conflicts over farming practices as one of the five priority issues that will affect the future competitiveness of Canada's agriculture industry (Agriculture and Agri-food Canada, 1998).

In most instances, public conflicts are resolved effectively and efficiently; i.e., in a manner that results in the reconciliation of legitimate interest and positive social change. In some cases, however, conflicts become destructive, extracting high social and economic costs (Rubin et al., 1994).

The purpose of this paper is to identify and discuss efficient options for resolving conflicts over farming practices. Efficient options maximize benefits, minimize costs, and foster the long-term sustainability of rural communities. This paper argues that interactive conflict resolution approaches that focus on communication and improving social interactions are important in realizing socially optimal outcomes when dealing with conflicts over farming practices.

[1] Selected examples of recent media articles include Harrowsmith 1998; Alberta Report 1997; Sunny South News 1998; Globe and Mail 1998; Western Hog Journal 1998.
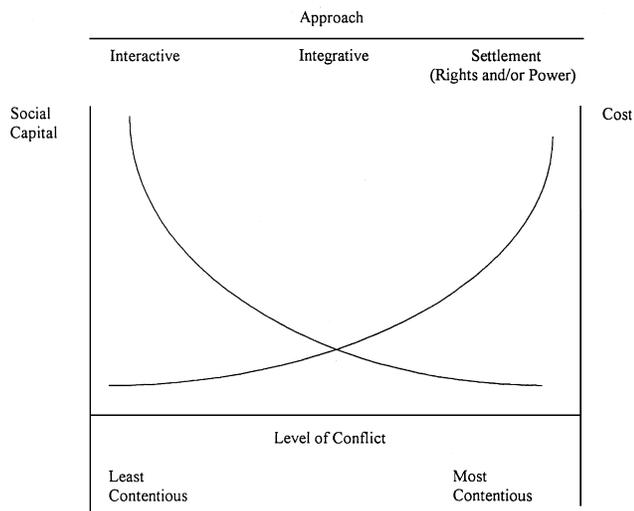
Fig. 1. Social capital, cost of conflicts and conflict resolution approaches.

This paper is based on the following two premises.

(1) It is in society's best interest to use those dispute and conflict resolution approaches that maximize social benefits; and
(2) Improving communication and inter-group relationships is important in developing socially optimal resolutions for conflicts over farming practices (Rubin et al., 1994; Robison and Schmid, 1994).

These premises implicitly imply two relationships diagrammatically presented in Fig. 1. The first is that as the level of a conflict increases, i.e., the parties involved become more contentious, the cost of resolving the conflict increases (Ury et al., 1988).[2] The second is that as a conflict becomes more contentious, social capital in the form of empathy, goodwill, trust, communication, social connection and a sense of interdependence decreases (Rubin et al., 1994).[3]

This paper begins by identifying some of the underlying trends that contribute to the increasing number of disputes and conflicts over farming practices. A review of two dynamic processes that often make resolution difficult and costly follows. Different approaches for resolving farming conflicts are discussed before the paper focuses on one such resolution approach and its potential use. The final section of the paper presents three short case studies to illustrate the concepts presented in this paper. A summary concludes the paper.

---

[2] Costs include time, dollars and declining inter-group relationship.

[3] Social capital is defined later in the paper. A reviewer's suggestion to include a more rigorous definition of the term was problematic, in part because the term is used differently by different disciplines. Interested readers are referred to the references.

2. Causes of increasing rural conflicts

Research literature ascribes a number of micro and macro changes to the recent increase in farm/community controversies. In any given situation one, several, or all of the following trends may be the underlying cause of the conflict.

2.1. Increasing size and clustering of farms

In recent years, commercial agriculture has undergone major changes. Not only is production increasing, it often occurs on fewer but much larger farms — a phenomenon often described as the industrialization of agriculture (Bollman et al., 1995; Urban, 1991; Hurt, 1994; Letson and Gollehon, 1996). Also, large commercial farms tend to 'cluster'. That is, they locate close to each other in areas that provide regional and/or economic advantages. Canadian examples of clustering include the greenhouse industry in Southern British Columbia, 'feed-lot alley' in Southern Alberta, and swine production in Southern Manitoba.

2.2. Demographic changes in the rural population

Rural communities now include more residents who have little direct connection with commercial agriculture and commercial farmers, as reported in Fig. 2 (Toombs, 1997; Fitchen, 1991). Hence, rural does not mean farming and farmers are often a minority in rural communities. Moreover, an aging population, changing migration patterns, and increasing incomes also influence community needs and expectations (Abdalla and Kelsey, 1996). The new rural community often views the noise, odors, and dust associated with farming practices as an unnecessary nuisance and an infringement upon rights. The development of large new barns and greenhouses is often viewed as an erosion of the aesthetic character of the neighborhood and the much desired rural lifestyle and rural park image.
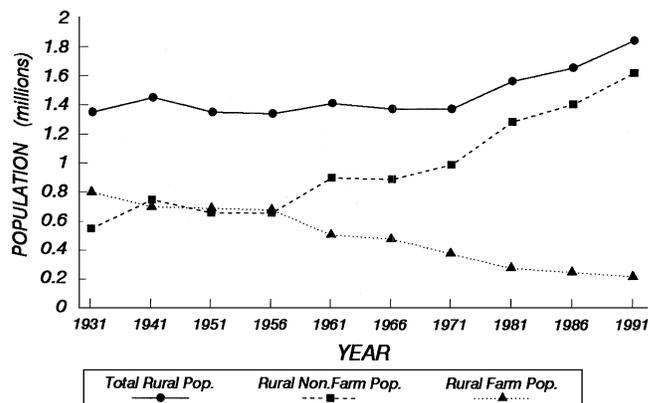

Fig. 2. Rural, farm and rural non-farm population 1931–1991.

2.3. Society's changing expectations

Society's expectations of and perceived responsibilities for all industries are changing. In addition to industry's role in economic activity through the creation of profits and the providing of jobs, society in general views a new social contract or 'compact' with industry as including greater attention toward resource stewardship, increased community responsibility and open and participatory decision making with the public (Dale and Hahn, 1994). Changes in the social ethic or conscience influence behavior and are often codified into laws and regulations. For agricultural practices to be sustainable, they must be in accordance with the dominant social ethic (Rollin, 1993). Increasingly, urban and rural residents view rural spaces and the environment as part of their 'cultural and environmental heritage' that must be protected (Freshwater, 1997). Group rights, the rights of future generations, environmental security and the depletion of resources are issues around which farming conflicts coalesce as fundamental differences in values regarding property rights, public and private responsibility and the intrinsic value of natural resources clash (Clayton, 1998).

2.4. Organized representation

Increasingly, local environmental concerns are represented by well-organized national and international lobby groups (Minkoff, 1997). Non-farm rural community interest groups that were once fragmented have coalesced into organized populist movements. Farm organizations too, are now very often in a better position to create national lobby organizations as they currently represent fewer but much larger farm businesses (Freshwater, 1997). As a result, "policymakers seem trapped by special interests and absence of public support. Involvement has narrowed to an 'iron triangle' of legislators, bureaucrats, and interest groups that is increasingly polarized in ideological ways" (Hahn et al., 1994, p. 2). With an increase in national group identity rather than local community identity, social stability decreases and social conflict tends to increase (Rubin et al., 1994).

2.5. The role of government

While there is a growing desire for change, many individuals are currently experiencing a sense of "alienation and mistrust of traditional institutions" (Fuller, 1994, p. 138). Community residents often view decisions made in isolation by large government agencies as being 'elitist,' and 'out-of-touch' with local experience and conditions. At the same time, society is experiencing a devolution of government. Therefore, local governments are now faced with new and unfamiliar responsibilities (Freshwater, 1997; Abdalla and Kelsey, 1996; deVries, 1997). Hence, government is viewed as either a large isolated agency, out-of-touch with local concerns or, as a small agency with a limited capacity to address major issues.

2.6. Decreasing social capital

Social capital refers to "the norms and networks of social relations that build trust and mutual reciprocity among community residents, social organizations, and civic institutions" (Potapchuk et al., 1998, p. 5). This traditional social interaction is breaking down. As in large urban centers, rural communities are experiencing "a sense of social alienation that leads to anomie and a loss of community" (Hester, 1993, p. 4). Social bonds, traditionally created through interpersonal interaction in rural communities, are decreasing as individuals socialize, shop, and conduct business in larger centers (Fitchen, 1991). Consequently, many individuals in rural communities experience a sense of social distance from their neighbors (Fuller, 1994). When individuals no longer care to be involved in local activities, the social bonds that facilitate the efficient running of communities are not developed and those communities experience a loss of social capital (Putnam, 1995).

2.7. Increasing globalization

The continuing globalization and liberalization of agricultural trade will amplify the number of conflicts over farming practices. Canadian agriculture exports are currently increasing at a rate of approximately 4.5% per year (Agriculture and Agri-food Canada, 1999). Canada's agriculture exports have increased from $13 billion in 1993 to more than $22 billion in 1997, and are expected to reach $40 billion by 2005. As an example of the effects of globalization and economics of large farms, large-scale pork operations in Western Canada currently enjoy a global competitive edge (Drabenstott, 1998), and as their numbers increase, so too will the number of conflicts over their farming practices.

Given the continuance of these trends, rural communities can expect to experience an increasing number of conflicts. These conflicts will shape the social, environmental, and economic sustainability and security of rural areas. However, these trends are outpacing the coping abilities of many individuals and rural communities (Rubin et al., 1994; Freshwater, 1997). Addressing the resulting social and environmental concerns and challenges of these trends, while maintaining economic competitiveness, requires effective and efficient conflict resolution approaches in order to optimize societies' resources and increase overall social welfare (Bryden, 1994a,b; Freshwater, 1997).

3. The language of conflict

Terms in the literature often lack precision and standardization, and usage appears to be dependent upon the perspective of the user (Murray, 1986). The following defines selected terms used in this paper.

3.1. Interests, positions, and needs

Interests are the desires, hopes, emotions, and fears of individuals in a dispute or conflict and can be seen as anything that the negotiator cares about (Fisher and Ertel, 1995). Interests can quickly crystallize into *positions* (Haddigan, 1996): the claims, assertions, demands, or offers made in a negotiation (Fisher and Ertel, 1995). *Needs* are a unique group of interests that are non-negotiable. They may include security, individual and group identity, social justice, participation in decision making, social approval, dignity, some level of physical well-being, happiness and some clarity about the nature of our world (Burton, 1987; Fisher, 1997; Rubin et al., 1994).

The following illustrates positions, interests, and needs. Having land available for farm use at a reasonable cost is an interest. 'No more agriculture land should be used for non-farm purposes' is a position, and economic security and fair access to resources to support one's family, self and future generations is a need

3.2. Disputes, conflicts, and deep-rooted conflicts

Disputes, conflicts, and deep-rooted conflicts exist along a continuum of intensity and complexity. *Disputes* are disagreements arising over differences in interests and positions. They tend to be over a single issue and involve low levels of emotion and little investment of group or individual identity. Disputes have been described as being either distributional: regarding the allocation of resources; or constitutional: disagreements over basic rights (Susskind and Cruikshank, 1987). *Conflicts* are disagreements that tend to involve significant levels of emotion and are enmeshed in the identity of the groups and individuals involved. *Deep-rooted conflicts* are those conflicts that involve basic needs which cannot be compromised or suppressed. These conflicts tend to be very difficult to settle or resolve, and often incur very high social and economic costs. The continuum of disputes, conflicts, and deep-rooted conflicts can be depicted in Fig. 1, with disputes on the left, towards the middle and deep-rooted conflicts to the left.

3.3. Resolution and settlement

Resolution refers to the ending of a dispute or conflict through the consensual satisfaction of interests. Given that the disputants' interests have been satisfied, outcomes are stable (Burton, 1987).

Settlement refers to resolving a dispute or conflict either through compromise or the use of rights or power (Burton, 1987). Settlements tend to be win : lose (distributive) in nature (Fisher, 1992). A compromise implies giving up something and settling for less than what one wanted; a lose : lose result is possible. Rights are independent standards of perceived legitimacy or fairness, but can often be unclear and may be contradictory (Ury et al., 1988). Power is the "ability to coerce someone to do something he would not otherwise do" (Ury et al., 1988, p. 7). Power approaches often involve the giving or withholding of benefits or acts of aggression. Settlement of a dispute or conflict through rights or power often requires enforcement, which may create resentment. Hence, settlements may not be stable and the conflict may arise again.

4. Dynamics of conflict

Two dynamic processes inherent in all conflicts — escalation and polarization — have the potential to quickly turn a simple dispute into a large scale conflict that is difficult and costly to resolve. A classic example is the Hatfield/McCoy feud. This conflict began as a two-man dispute over the ownership of a sow and developed into a (group) conflict that resulted in more than 100 deaths over a 55 year period and embroiled two American states (Worchel and Lundgren, 1991).

4.1. Escalation

Escalation refers to a steady increase in the use and severity of contentious tactics. As such, it is one of the most explosive dynamics of destructive conflict. It is fostered through an increasing cycle of provocation and counter-provocation, threat and counter-threat (Burgess and Burgess, 1996; Worchel and Lundgren, 1991). Issues multiply as each iteration increases the stakes (Creighton, 1993). In highly escalated conflicts, social interactions between individuals become strained, less frequent and more contentious. Changed perspectives regarding the issue, the other party, the relationship and even self may result. Positive social bonds, values, and the desire to advance common interests and solve problems are often replaced with increased animosity, a desire for revenge and intentions to harm members of the other group (Kim and Smith, 1993). Strong emotions of anger and hurt emerge; conflicts become personalized and saving face and preservation of self-esteem by bettering the other person become important objectives (Worchel and Lundgren, 1991). Ambiguous information in the form of behaviors that could have a number of plausible explanations is seen in a way that is most consistent with current

beliefs and attitudes. Hence, self-selection and filtering transpire (McEwan and Milburne, 1993). More often than not, the most threatening explanation is selected. Where negative attitudes and perceptions exist, adversaries are given little benefit of doubt or credit for good intentions.

As a dispute escalates, any trust, goodwill or concern for the other party decreases between the disputants. Any interdependence between the groups dissolves. In effect, there is a loss of social capital. As intergroup social capital decreases, the difficulty and cost of resolving the conflict increases. Conflicts that could have been resolved through informal discussions instead require expensive third party interventions. High costs in terms of both time and dollars, decreased levels of satisfaction with outcomes, negative impacts on relationships, as well as difficulty in implementing and maintaining resolutions, may be realized (Ury et al., 1988; Bingham, 1986).

At some point, individuals in an escalated conflict become over committed and entrapped (Rubin et al., 1994; Fisher, 1997; Creighton, 1993). They realize how much time and money has been expended but they are reluctant to give up their investment, hoping instead that the other party will give up first, so that they can still enjoy a victory. Barring victory, they become determined to make certain that the other party loses as much as they themselves do (Rubin et al., 1994).

4.2. Polarization

The adoption of extreme positions/stances and the building of alliances for the purposes of increasing power are evidence of polarization. In an effort to increase power through strong networks and coalitions, disputant parties often try to force neutrals to choose sides — "us" or "them". Aggressive action is often explained away or justified as a response created by situational factors; a defensive reaction by victims to the tactics employed by the 'diabolical enemy'. "Other" disputants' aggressive acts are considered "their" normal behavior pattern (Duffy et al., 1991; Mezirow, 1991).

Group membership frequently has an important impact on shaping the dynamics of conflict. As individual identity is often associated with group membership and most people like to be perceived as being part of a winning group, members work hard to ensure that the group survives and succeeds. While group members tend to view those of their own group as individuals with different characteristics and motivations, there may be a tendency to dehumanize members of the 'other' group and see them as a homogeneous group — a stereotype. In other words, "if you've met one you've met them all, they are all alike." The resulting biases, prejudices, and suspicions can prolong conflicts as individuals and actions are prejudged.

As groups polarize, members of one group have little direct communication with members of the other group. A predisposition to avoid personal contact with an individual of the opposing side — autistic hostility — quickly develops (Worchel and Lundgren, 1991). Loyalty to the community as a whole is reduced as loyalty to the group increases.

5. Conflict resolution approaches

Conflicts can be settled or resolved through different approaches that vary according to the degree to which they emphasize settlement rather than resolution (Neslund, 1990). These approaches can be placed on the continuum in Fig. 1. Recall that as conflicts become more contentious, the cost of settlement increases and social capital decreases. On the left are interactive and integrative resolution approaches. These approaches try to find stable resolutions by reconciling the interests of the disputants. To the right are settlement approaches, based on either the rights or the power of the disputants. Settlement approaches are more contentious and hence less stable than the resolution approaches (Ury et al., 1988). Each approach is discussed in more detail below.

5.1. Settlement approaches

Settlement approaches are based on rights and/or power. Many rights-based approaches are defined within a legal framework that provides both the power and legitimacy of statute (Neslund, 1990). They are often formal in that they have predefined rules for decision-making (precedent), the presentation of evidence and participation. They are also usually open to public scrutiny. Decisions often require enforcement, as they are imposed rather than voluntary (Burton, 1987).

While rights and power-based approaches are important for the protection of minority interests and the maintenance of social stability, they have several disadvantages. These approaches often use adversarial and contentious processes (Rubin et al., 1994). Outcomes may result in lower stakeholder satisfaction, frequently aggravating and straining relationships, which creates hard feelings between stakeholders. Hence, they are often less stable than other approaches. They can also be costly to use and difficult to implement as decisions are often appealed (Bingham, 1986).

Because settlement approaches that are based on rights and power are normally positional, the range of opportunities for solutions is limited (Fisher, 1992, p. 160). "The court's purpose is to interpret the law, not to reconcile conflicting interests, (moreover) preemptive authoritarian actions usually generate strong opposition" (Susskind and Cruikshank, 1987, p. 9).

5.2. Integrative resolution approaches

Integrative approaches, also referred to as principle-based negotiation (Fisher et al., 1991), rely on the development of voluntary, mutually acceptable solutions which maximize joint gains through face-to-face negotiations. Integrative approaches include processes which are informal in the sense that the structure is modified to suit the individuals and circumstances rather than follow pre-defined rules. Integrative approaches consider both the interests of self as well as the interests of others.

Agreements are arrived at through the development of voluntary consensus and are implemented by consent. Parties are able to generate a variety of creative options, as they are not limited to those on the table at the outset. Therefore, they are often able to find acceptable solutions to seemingly intractable problems (Fisher, 1992).

For integrative approaches to be effective, all parties must have the desire, willingness, and motivation to come to an agreement (Susskind and Cruikshank, 1987). That is, positive attitudes on the part of individuals and institutions, as well as community support, are required (Kressel and Pruitt, 1989; McEwan and Milburn, 1993; Susskind and Cruikshank, 1987). Parties must possess the necessary authority to implement a solution and there must be a legitimate mandate for the processes within the political legal framework (Ury et al., 1988; Susskind and Cruikshank, 1987). Implicit in these approaches is that individuals possess the appropriate skills as well as the resources required (Ury et al., 1988).

Integrative approaches do, however, have the advantage of costing less, providing higher user satisfaction with outcomes, greater stability of outcomes and less recurrence of conflict than settlement approaches (Ury et al., 1988; Bingham, 1986). Given this effectiveness and efficiency, integrative approaches are preferred over settlement approaches in many situations (Mezirow, 1991).

Integrative approaches, however, may not be appropriate in every situation and they can have some weaknesses (Bush and Folger, 1994). When the rights of individuals or groups are at risk, or when disputants are unwilling to resolve differences, settlement approaches may be more appropriate (Ury et al., 1988). Moreover, when issues involve basic needs that cannot be compromised or suppressed, and/or they are embedded in a polarized and highly escalated contest, other approaches should be used (Burton, 1987; Fisher, 1997).

5.3. Interactive resolution approaches

Interactive conflict resolution approaches (ICR) are informal, low-cost, low-risk unofficial processes (Fisher, 1997; Fisher and Keashly, 1988). Interactive approaches temporarily set aside the substantive and objective issues of the conflict and address the social, economic, and cultural environment within which the conflict is embedded. That is, the stated objective of an ICR is not to resolve or settle the conflict, but to get the disputing parties to talk about their interests and differences in the conflict. Through communication, dialogue and structured exercises, ICR creates opportunities for improving interactions between the disputants in order to diminish misunderstandings and tension, build mutual trust and increase their understanding of each others' attitudes and interests. "Emphasis is on simply understanding the other party and the conflict as a mutual problem rather than attempting to change the other or resolve the conflict" (Fisher, 1997, p. 137).

A typical model for an ICR approach involves a number of meetings at which the following steps should occur. A neutral third party who is acceptable to the disputants is needed to hold and lead meetings, which can occur over several months or even years (Slim and Saunders, 1996):

Step 1. Participants identify themselves, agree to a moderator and the nature, purpose, structures and procedures of the ICR process are defined.

Step 2. Participants identify and analyze their relationship and with respect to current and previous conflicts.

Step 3. Participants probe their perceptions, fears, and concerns, as well as the effect of these factors on the substantive issues of the conflict.

Step 4. Participants builds scenarios, identify obstacles to change, and discuss positive options.

Step 5. Research reports for leaders and possible options for building and reinforcing civil processes and institutions are developed by participants.

The five steps are designed to achieve two interrelated objectives: (1) to bring together individuals from conflicting groups to probe the dynamics of their conflict; and (2) to design a sequence of interactive steps that will facilitate a resolution (Slim and Saunders, 1996). ICR is very much an indirect approach. Disputants who would balk at meeting to try to reach a settlement are often more willing to meet to discuss interests. By removing the pressure to reach a settlement, novel solutions can emerge from the dialog.

Various ICR approaches can be used proactively to build relationships and skills in order to prevent conflict, or reactively, to address a specific conflict. When used proactively, interactive processes eliminate or reduce the need for settlement and integrative processes. When used reactively, they can increase the acceptance, efficiency, and effectiveness of integrative approaches: as the new knowledge, information, and perspectives gained by the interactive participants is passed on to other members of the groups and decision makers, a natural transition to an interactive resolution process will occur (Fisher, 1979; Susskind et al., 1993; Dukes, 1993; Gillespie and Bazerman, 1997). Hence, ICR approaches can be used to build social capital and minimize the use of high-cost rights and power-based approaches.

5.4. An illustration of the alternative approaches

The following illustrates the possible outcomes from the settlement and resolution approaches presented above. Suppose two siblings simultaneously reach for the only available orange needed complete a project. Because their relationship does not allow for any discussion, neither realizes that they each require a different part of the orange. An argument ensues, and they automatically look to a settlement approach. In a power-based settlement, the sibling with the greatest ability to withhold benefits or provide rewards gets the orange, creating a win:lose situation and one unhappy sibling. A rights-based settlement may see the orange divided equally. Although each one receives the same amount, neither gets the amount they wanted; in effect, a lose:lose situation. Had they engaged in an ICR, they would have discovered that while one wants the peel for baking, the other requires the juice. Hence, seeking to understand the interests of the other party could create a win:win situation in this case.

Although the above is a very simply situation, it does illustrate the possible out come when a relationship breakdowns. If each sibling is equally powerful, contentious, and contumacious, it is logical to assume that they often damage that which they both value be it property or relationships. A win:lose situation occurs with a settlement approach, which would most likely result in either a stalemate or a costly, inferior and hence unstable outcome. On the other hand, neither sibling appears able or willing to participate in an integrative process. In an ICR approach, a neutral third party is required who is trusted and respected by each of the siblings. This third party helps the siblings to examine the nature of their interactions, relationship and communication patterns to determine if and how they can resolve this and other conflicts. The process provides the siblings with information that can be used to determine how a more mutually desirable outcome(s) can be realized (Fisher et al., 1991).

All three of the above approaches are options for resolving conflicts over farming practices. While settlement approaches have been used most often, there is an increasing awareness and interest in ICR approaches. Interactive approaches represent a promising option as they have the potential to reduce the cost of conflicts over farming practices, while generating socially optimal outcomes.

6. ICR approaches in rural conflicts: three examples

Literature indicates that ICR approaches have been effective in mitigating conflicts around the world (Fisher, 1997; Diamond and Fisher, 1995). While the potential effectiveness of ICR approaches in resolving rural conflicts is apparent to those familiar with both rural issues and ICR, ICR appears to be a "social innovation that has yet to receive wide spread acceptance" (Fisher, 1997, p. xi). The following three cases of conflicts over farming practices are presented as illustrations that (1) the potential savings of ICR over rights or power-based settlement approaches; and (2) the benefits of building social capital through communication and social interactions.[4] While it is questionable to draw conclusions from anecdotes, these cases are presented as examples to validate that ICR may be preferred in some situations.

6.1. Costs of a rights/power-based settlement

An employee of a feedlot opened the wrong valve, resulting in manure from the feedlot entering a river and killing many fish. The feedlot was upstream from a city. Many people in the city were upset about the fish kill and demanded that various government agencies take action to find out what happened, determine who was responsible and what could be done to rectify the situation.

When the employee told the owner of the feedlot what had happened, the owner immediately called his lawyer. The lawyer, trained to be adversarial, said to deny anything and everything and let the courts prove responsibility. Many months later, the court cases are ongoing, but responsibility has been proved. The feedlot owner is facing fines in the millions of dollars. He believes that if he had quickly taken responsibility for the manure spill and offered to work with local government agencies to minimize the subsequent fish kill, he would have faced fines in the hundreds of thousands of dollars instead of in the millions. In this case, it is likely that using a rights/power-based approach cost more than a less contentious integrative or interactive approach.

6.2. Communication and social capital 1

A farmer with an orchard next to an elementary school had postponed spraying his trees during the week to minimize the possible exposure of children to spray drift. The farmer did not know that a youth soccer tournament was scheduled on the Saturday he planned to spray. In fact, in his protective spraying suit it was difficult for him to hear the shouts of parents who were irate that he was spraying while their children played soccer on a field next to the orchard. The farmer was dragged from his tractor. Police were called. The farmer was within his rights and was spraying according to regulations. He declined to press charges. However, the seriousness of the situation alerted school authorities and farm leaders to try to minimize the potential for similar conflicts. Farmers,

---

[4] The cases are real situations. Names and locations have been changed. Further information about the cases can be obtained from the authors.

school authorities and sports associations in that area now share schedules of activities in an attempt to minimize conflicting activities. Farmers and farm leaders have visited schools to talk in the classroom and with parent/teacher associations about farming activities. All parties hope that by sharing interests and concerns they minimize the potential for future conflicts.

6.3. Communication and social capital 3

An owner of an integrated livestock/grain agribusiness with several farms in two counties has seen the trends listed at the beginning of this paper and recognized the potential impact on his operations. He thinks that any complaints or lawsuits related to his farming practices would be disruptive and costly. His strategy to minimize complaints is to "put a face on his farm" by keeping a highly visible profile in his community. He does so by sponsoring athletic teams, making his meeting rooms and facilities available for community groups (e.g., Girl Scouts, Rotary), regularly putting announcements and congratulatory notices in local newspapers and regularly having open houses and tours of his operations. He also tries to mitigate potential conflicts by informing neighbors of his spraying and manure spreading schedules and asks to be told if there is a problem. It is impossible to quantify the benefits from this proactive approach. However, it is not heroic to assume that this farmer is accumulating social capital in his community and that his social capital is likely to keep disputes over farming practices from escalating into conflicts.

7. Summary

Rural communities are experiencing an increasing number of public conflicts over farming practices. Seven trends contributing to the changing social and economic structure of rural communities were identified and discussed. Many of the resulting conflicts are driven by the frustration of underlying basic human needs and values that cannot be compromised (Abdalla and Kelsey, 1996).

When rural communities become embroiled in protracted conflicts, the nature and structure of social relationships and interactions are changed through the psychological processes of escalation and polarization. Once these processes have occurred, they are very difficult to reverse, usually leaving the community divided and often setting the stage for further conflicts. Imposed solutions arising from settlement approaches often increase polarization and escalation. Integrative approaches, without the benefit of preliminary or ancillary interactive process, are often ineffective given the nature of the social interactions in which the conflict is embedded.

Interactive conflict resolution approaches (ICR) can foster conflict resolution where interest groups are motivated by deeply held values. The adoption of this social innovation will help rural communities keep pace with the rapid technical, environmental, and social changes they are experiencing. These approaches can increase community social capital by creating relationships and processes that can become platforms for planning and action, and by creating an increased stock of individual skills and knowledge. When appropriately linked with local, regional, and national leadership, as well as formal community decision making and policy formation, ICR resolution processes can provide practical approaches to public conflicts that are low cost, fair and competent.

It is difficult if not impossible to test or quantify the benefits and costs of ICR approaches. However, anecdotal evidence is that ICR approaches cost less than more contentious approaches and that building human capital minimizes the likelihood of conflicts occurring.

References

Abdalla, C.W., Kelsey, T.W., 1996. Breaking the impasse: helping communities cope with change at the rural-urban interface. Journal of Soil and Water Conservation 51 (6), 462–466.

Agriculture and Agri-Food Canada, Adaptation Division, 1998. Adapting in 1999 and Beyond: key issues affecting the agriculture and agri-food sector and rural agricultural communities. (http://www.agr.calpolicy/adapt).

Agriculture and Agri-Food Canada, Global Excellence, 1999. Building on our accomplishments. (http://aceis.agr.calcb/global/english/index.html)

Bingham, G., 1986. Resolving Environmental Disputes: A Decade of Experience. The Conservation Foundation, Washington, D.C.

Bollman, R.D., Whitener, L.A., Tung, F.L., 1995. Trends and patterns of agricultural structural change: a Canada-U.S. comparison. Canadian Journal of Agricultural Economics 1 (Special Issue), 15–28.

British Columbia Ministry of Agriculture, Fisheries and Food, 1998. Personal Communication. Abbotsford, BC.

Bryden, J., 1994a. Some preliminary perspectives on sustainable rural communities. Towards Sustainable Rural Communities The Guelph Seminar Series. University School of Rural Planning and Development Guelph, Canada, pp. 41–50.

Bryden, J. 1994b. Towards sustainable rural communities: from theory to action. Towards Sustainable Rural Communities The Guelph Seminar Series.University School of Rural Planning and Development Guelph, Canada, pp. 211–233.

Burgess, H., Burgess, G., 1996. Constructive confrontation: a transformative approach to intractable conflicts. Mediation Quarterly 13 (4), 305–322.

Burton, J.W., 1987. Resolving Deep-rooted Conflict: A Handbook. University Press of America. Lanham, MD.

Bush, R.A.B., Folger, J.P., 1994. The Promise of Mediation. Jossey-Bass Publishers, San Francisco.

Clayton, S., 1998. Preference for macrojustice versus microjustice in environmental decisions. Environment and Behavior 162–183.

Creighton, J., 1993. Involving citizens in community decision making. Program for Community Problem Solving, Washington.

Dale, D.D., Hahn A. (Eds.), 1994. Public Issues Education: Increasing Competence in Resolving Public Issues. National Public Policy Education Committee, University of Wisconsin — Extension, Madison, Wisc.

Diamond, L., Fisher,, R.J., 1995. Integrating conflict resolution training and consultation: a cyprus example. Negotiation Journal. 11 (3), 287–302.

deVries, M., 1997. The management of public participation in the policy process with special reference to the Netherlands. International Review of Administrative Sciences 63 (2), 147–164.

Drabenstott, M., 1998. This little piggy went to market: will the new pork industry call the heartland home? Economic Review, Federal Reserve Bank of Kansas, 79–97.

Dukes, F., 1993. Public conflict resolution: a transformative approach. Negotiation Journal. 9 (1), 45–57.

Duffy, K.G., Grosh, J.W., Olczak P. (Eds.), 1991. Community Mediation: A Handbook for Practioners and Researchers. Guilford, New York.

Fisher, R., 1992. 'Quick-fix' solutions are not the answer. Negotiation Journal 8 (1), 15–20.

Fisher, R., 1997. Interactive conflict resolution. Syracuse University Press, Syracuse, New York.

Fisher, R., Ertel, D., 1995. Getting ready to negotiate. Penguin Books, New York.

Fisher, R., Keashly, L., 1988. Third party interventions in intergroup conflict: consultation is not mediation. Negotiation Journal 381–383.

Fisher, R., Ury, W., Patton, B., 1991. Getting To Yes: Negotiating Agreement Without Giving In, 2nd Edition. Penguin Books, New York.

Fitchen, J.M., 1991. Endangered Spaces, Enduring Places: Change, Identity and Survival in Rural America. Westview, Boulder.

Freshwater, D., 1997. Farm production policy versus rural life policy. American Journal of Agricultural Economics 79 (5), 1515–1524.

Fuller, T., 1994. Sustainable rural communities in the arena society. Towards Sustainable Rural Communities The Guelph Seminar Series. University School of Rural Planning and Development Guelph, Canada, pp. 133–139.

Gillespie, J.J., Bazerman, M., 1997. Parasitic integration: win-win agreements containing losers. Negotiation Journal 13, 271–281.

Haddigan, K., 1996. Mediation, 7th Edition. Justice Institute of British Columbia, New Westminster, B.C.

Hahn, A.J., Greene,, J.C., Waterman, C., 1994. Educating About Public Issues. Cornell University, Cornell Cooperative Extension.

Hester, R.T., 1993. It's just a matter of fishhead: using design as a means of building community. Small Town. September/October 1993:4-13 From Metelka, C.J. Community Image: Managing the Face of Change. Supplementary Readings. Cooperative Extension, University of Wisconsin, Madison Wisconsin.

Hurt, C., 1994. Industrialization in the pork industry. choices Fourth Quarter, 9–13.

Kim, S.H., Smith, R.H., 1993. Revenge and conflict escalation. Negotiation Journal. 9 (1), 37–43.

Kressel, F., Pruitt, D.G., 1989. Mediation Research: The Process and Effectiveness of Third Party Interventions. Jossey-Bass, San Francisco.

Letson, D., Gollehon, N., 1996. Confined animal production and the manure problem. Choices Third Quarter, 18–24.

Mezirow, J., 1991. Transformative dimensions of adult learning. Jossey-Bass, San Francisco.

Minkoff, D., 1997. Producing social capital national social movements and civil society. American Behavioral Scientist 40 (5), 606–619.

McEwan, C.A., Milburn, T.W., 1993. Explaining a paradox of mediation. Negotiation Journal. 9 (1), 23–36.

Murray, J.S., 1986. Understanding competing theories of negotiation. Negotiation Journal 2 (2), 179–186.

Neslund, N., 1990. Dispute resolution: a matrix of mediation. Journal of Dispute Reolution 2, 217–266.

Potapchuk, W.R., Crocker, J.P., Boogaard, D., Schechter, W.H., 1998. Building community exploring the role of social capital and local government. Program for Community Problem Solving, Washington, DC.

Putnam, R.D., 1995. Bowling alone: america's declining social capital. Journal of Democracy 6 (1), 65–78.

Robison, L.J., Schmid, A.A., 1994. Can agriculture prosper without increased social capital? Choices Fourth Quarter, 29–31.

Rollin, B .E., 1993. Animal production, the beef industry and the new social ethic for animals. Food Animal Well-Being: 1993 Conference Proceedings and Deliberations (Purdue/USDA Conference on Food Animal Well-Being, Indianapolis). USDA and Purdue University Office of Agricultural Research Programs.

Rubin, J.Z., Pruitt, D.G., Kim, S.H., 1994. Social Conflict: Escalation, Stalemate and Settlement, 2nd Edition. McGraw-Hill, New York.

Slim, R.M., Saunders, H.H., 1996. Managing conflict in divided societies: lessons from Tajikistan. Negotiation Journal 12, 31–46.

Susskind, L.E., Babbitt, E.F., Segal, P.N., 1993. When ADR becomes the law: a review of federal practice. Negotiation Journal 9 (1), 59–76.

Susskind, L.E., Cruikshank, J., 1987. Breaking the Impasse: Consensual Approaches to Resolving Public Disputes. Basic Books Inc, USA.

Toombs, M., 1997. The rising concern in rural ontario regarding swine production. Proceedings Swine Production and the Environment: Living With Our Neighbours. OMAFRA 1-4.

Urban, R.U., 1991. Agricultural industrialization, it's inevitable. The Best of Choices, 1986–1996. American Agricultural Economics Association, Ames, Iowa.

Ury, W.L., Brett, J.M., Goldberg, S.B., 1988. Getting disputes resolved: designing systems to cut the costs of conflict. Jossey-Bass, San Francisco.

Western Hog Journal, 1998. Special edition: Banff park Seminar 19(4), 13–14.

Worchel, S., Lundgren, S., 1991. The nature of conflict and conflict resolution. In: Duffy, K.G., Grosh, J.W., Olczak P , . (Eds.), Community Mediation: A Handbook for Practioners and Researchers. Guilford, New York, pp. 3–20.