Survival Skills: The Economic Transitioning of Forestry and other Single Industry Communities

A Literature Review by

The Rural and Small Town Programme
Mount Allison University

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Rural and Small Town Programme
Mount Allison University
144 Main St.
Sackville, NB E4L 1A7
Tel: (506) 364-2391
Fax: (506) 364-2601
www.mta.ca/rstp

RURAL & SMALL TOWN
PROGRAMME

Executive Summary

Forestry communities, like all single industry communities in New Brunswick and across Canada, are facing difficult times and unprecedented challenges as the main employers close or leave town. This literature review examines the economic transitioning of single industry communities with a focus on forestry communities. Literature was reviewed from a wide variety of sources including journal articles, Government documents and reports, as well as publications from a wide variety of websites and organizations.

Transition is more than just a change, it is a process. Transition in terms of single industry communities refers to a period of decline resulting in something different, a new direction for the community. For all communities transition is about self-determination. What does the community want to be and what resources and capacities does it have to reach its new goals?

Resources have defined Canada's role in the global economy since the days of fur trading and ship building. The review briefly describes the economic history and current status of single industry communities such as those in forestry, agricultural, fishing, and mining, oil and gas, all of which are experiencing periods of transition.

Many authors describe a "perfect storm" of factors colliding to cause the unprecedented changes to single industry communities such as forestry including: new technologies; higher energy costs; shifts in demand; market changes; resource depletion; lower cost competitors; globalization; and corporate downsizing to name a few. These changes have caused a variety of impacts such as: economic instability; layoffs; closures; population loss; a shrunken tax base; indirect job losses; and many other related social problems. These impacts are causing communities to experience a transition like never before.

A number of transition models were reviewed. Most authors agree that all rural communities will go through a phase of decline before transitioning to an alternative future. Briggs (1980) is cited by many authors who write about transition. His model has three stages: endings; neutral zone; and new beginnings. These stages generally apply to any town in transition.

Successful communities all have certain characteristics in common. These characteristics build resilience and sustainability and include: taking risks; being receptive, flexible, and optimistic; having good leaderships and cooperation; developing an inclusive community economic development plan; and many more. Being resilient means having the ability to cope with adversity.

A diverse range of processes and strategies for single industry communities (especially those reliant on forestry) to follow to transition to new outcomes, were

uncovered. Processes include: identifying strengths, weaknesses and assets; revitalising the local economy and community spirit; promoting culture and history; including of youth in planning; building community capacity; shifting to a knowledge based economy; and for forestry communities in particular, shifting to a bio-economy. The best process is not just one of the above, but a combination.

In conclusion, the changes that forestry and other single industry communities are experiencing today are admittedly deeper than ever before. However, there are many options and ideas for these communities as they transition to a new economic existence. Ultimately it is up to each community to come together, be inclusive and devise a plan for their future. It may include closing the community, or it may be to take advantage of local talents and resources and do something different. Collaboration among stakeholders, government, industry, and business is also important. Communities can build on strengths, use existing capacities and resources, and overcome weaknesses.

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1. Introduction: Help for Towns in Transition

Single industry communities across Canada, such as those dependent on forestry, fishing, agriculture, mining, oil and gas, are facing difficult times and unprecedented challenges as their main employers close or downsize their operations due to a variety of reasons. Single industry communities have been subject to boom and bust cycles throughout their history, but recent forces have created much deeper and more permanent changes. Forces such as new and more efficient technologies, higher energy costs, aging infrastructure, product specialization, resource depletion, shifts in demand, change in markets, lower cost competitors, globalization, and a stronger Canadian dollar have combined to create a very difficult situation for many single industry communities.

For the forestry industry, Natural Resources Canada created and funded the Forest Communities Program to help communities develop tools and strategies to respond to the new challenges facing forestry today. Through the Forest Communities Program, the Fundy Model Forest has funded the current literature review by Mount Allison University's Rural and Small Town Programme (RSTP) which examines the economic transitioning of single industry communities with a focus on forestry communities.

This report discusses the definition of transition, and examines the causes and impacts of change in the forestry industry. A summary of the periods of transition in single industry communities, including examples of how some single industry communities are coping with transition is provided. Conditions and characteristics of successful, sustainable and resilient communities are presented. Finally a wide variety of processes, strategies and outcomes for transition survival and long term community sustainability, especially for forestry communities are discussed.

2. Defining Transition

Transition is more than just a change, it is a process. According to Collins English Dictionary (2003) transition is the "process in which something changes from one state to another". Transition in terms of single industry communities refers to a period of decline resulting in something different, a new direction for the community. Outcomes of the transition period may involve the community charting a new track and focusing on different businesses and industries such as tourism or services, or it may involve the complete abandonment and closure of the community. For all communities transition is about self-determination. What does the community want to be and what resources and capacities does it

For all communities transition is about self-determination. What does the community want to be and what resources and capacities does it need to reach its new goals?

have to reach its new goals? Further discussed below is the transition process, which involves three phases – excepting the end of the major employer in town, a time of figuring things out, and finally a new beginning stage. Transitioning to something new requires the community to look inward, assess its capacities, build on strengths and overcome weaknesses.

3. Methodology

Literature was reviewed from a wide variety of sources. Journal articles included those from the Journal of Rural and Community Development, Rural Sociology, and the Journal of Rural Studies. Articles were found using Google Scholar and Proquest. Government documents and reports were reviewed from Natural Resources Canada, Statistics Canada, Western Economic Diversification Canada, and the International Development Research Centre. Publications from NGOs and other groups were also reviewed such as the Centre for Community Enterprise, Northern Land Institute, the BC Coalition for Sustainable Forest Solutions, Canadian Centre for Policy Alternatives, Oregon State University Towns in Transition, and the Sierra Club of Canada. Searches were also performed in the RSTP and Mount Allison University library collections.

4. Resource Dependent Communities

Resources have defined Canada's role in the global economy since the days of fur trading and ship building. This section briefly describes the economic history and current status of forestry, agricultural, fishing, mining, oil and gas communities in Canada, all of which are experiencing different levels of economic and community well-being as well as periods of transition.

a. Forestry Communities

The current period of transition experienced by forestry towns has been driven by a decrease of the industry over time and the introduction of efficient technologies. Other causes of decline include a decrease in the demand for some forest products, increasing energy costs and inflation, fewer housing starts, and higher interest rates for mortgages.

During the pre-industrial era before the 1880s, sawmills and small forestry towns emerged that were constructed by forest companies (Williamson and Annamraju, 1996; Barnes and Hayter, 1992). Between 1880 and 1945, provincial governments began to create regulations for community development. During the 1950s and 1960s, lumber, plywood, and pulp production increased (Barnes and Hayter, 1992). Consequently, the post-war period was marked with rapid growth in the number of forestry towns that emerged, such as those in the interior of British Columbia. Control of these towns was transferred from company control to the residents with a greater concern for the quality of life and stability of these places by developing services and implementing conservation measures to

ensure a sufficient timber supply to support the town's industrial base (Williamson and Annamraju, 1996).

However, the prosperity did not last and in the 1970s and 1980s there were numerous downsizings and closures (Barnes and Hayter, 1992). Problems were the results of high energy costs and high inflation, decreases housing starts and general demand for wood (Luloff, 1990). Furthermore, there were demands for new products in new markets. Most importantly the 1980s were marked by the arrival of the computer and other technological changes that reduced the need for labour (Barnes and Hayter, 1992). This has led to the decline of a number of forestry dependent communities (Williamson and Annamraju, 1996, 3).

Today the forestry industry in Canada includes the wood products, pulp and paper, and paper board sectors. Together they make Canada the number one exporter of forest products in the world, with 17% of global exports. British Columbia, Quebec and the Atlantic provinces, including New Brunswick, are the most dependent on forestry (Natural Resources Canada, 2005a). However, in recent years it has become evident that the industry is no longer sustainable. From 2003 to 2007 22,000 jobs were lost at 184 mills across the country (Natural Resources Canada, 2005b).

Not all forestry communities are the same. Challenges are different depending on region, product, fibre, and land ownership. For example, the duration of employment for pulp mill workers can be longer than for sawmill workers due to the higher degree of variability in the wood market and the relatively low shut-down and start up costs of sawmills compared to pulp mills. Consequently, the sawmill industry requires a more flexible labour force than the pulp mill industry. Hence, the labour force in sawmill towns tends to be more transient than towns based on other types of forest processing, leading to more instability in these places. Within the forest sector, employees of pulp and paper mills earn higher incomes (Parkins et al., 2003). Despite higher incomes, though, logging dependent regions tend to have higher rates of poverty than other regions closely associated with agriculture and tourism (Parkins et al., 2003).

Towns in British Columbia are still harvesting old growth timber, while towns in New Brunswick are harvesting second, third, and fourth crops of trees. Forestry identity in the province dates back to the ship building days of the 1700s. Consequently, New Brunswick forests have lower growth rates, while there is higher value in British Columbia's forest industry (Parkins et al., 2003). Furthermore, while the provincial government in British Columbia controls 95% of the land, control in New Brunswick is divided between private woodlot owners, the provincial government, and large forestry firms (Parkins et al., 2003). Today 44,000 private woodlot owners own a third of the land in the province (Parkins et al., 2003). Currently only 16 of the 85 mills that were operating in 1995 are still running at full capacity (CBC News, 2008). The industry remains an important one in the province and employs 12,000 people (Gordon, et al., 2008).

b. Agricultural Communities

Similar to forest dependent communities, agricultural communities have been negatively affected by certain economic factors such as the impacts of technology, transportation changes, decreased labour needs, and diversification. Farms have become larger and more mechanized, and include the use of bigger machinery and new fertilizers and pesticides (Effland, 2000). Changes in transportation also impacted agricultural towns as trucks for hauling grain widened the distribution range, so that grain elevators were no longer required over short distances which lead to declines in both the number of farms during the 1980s.

Agricultural communities are also being impacted socially. Many have aging populations, unless they are within commuting distance of urban areas. Many farming communities were established by particular ethnic groups but the cultural fabric of these towns are now changing as these people leave to pursue employment elsewhere. Factory farms have taken over and pushed smaller family farms to become involved in off-farm income. It is important to note, however, that the pursuit of off-farm income is not new. Effland (2000) noted that farmers have been pursuing off-farm income since the late 1920s. With mechanization and larger farms, incomes have declined and the percent of families below poverty has increased.

c. Fishing Communities

As with forestry and agriculture, fishing towns have been negatively impacted by new technologies and increased mechanization. They have also been affected by extreme resource depletion, fish moratoriums and closures, as well as new industries such as tourism and aquaculture (Marshall, 2001). The fishing industry has been marked by one of exploration and discovery to the expansion of fishing activities, followed by decrease and collapse. In Atlantic Canada for example, haddock, redfish, and cod were the major groundfish species and had been overfished. Fish processing plants closed or downsized, resulting in many job layoffs (Clemenson, 1992). In fishing communities, there were high levels of unemployment, dependence on welfare, or outmigration. For many places, fishing was no longer the economic base of the community (Sinclair, 1992).

Some fishing towns have attempted to diversify their economies with tourism that has been facilitated by transportation improvements, such as new or updated ferry systems, and government policies for tourism development (Marshall, 2001). Other fishing towns have attempted to diversify within the fishing sector by gathering niche products, such as periwinkles, clams, dulse, and seaweed that are harvested by hand. Such activities help to bridge the gap between the seasons or make up for poor harvest levels (Marshall, 2001).

d. Mining and Oil and Gas Communities

Like other single industry communities, mining towns have experienced large changes throughout history. The 1880s-1914 represented a period of company dominance, with ad hoc and unplanned communities growing up around mines (Robson, 1991, 28). Between 1918 and 1939 there was a greater concern for social issues, reflected in planned communities. The companies, however, still controlled many aspects of community life, and there was a growing consideration of government concerns and involvement. Consequently, numerous planned mega-projects emerged between 1945 and 1970 (Robson, 1991). Robson (1991) declared the 1970-1991 period to be one of crisis management with the decline of many mining towns. The recession of 1980s forced the closure of some communities along with outmigration in others. As with forestry, mining towns differ within themselves depending on what is being mined. For example, open pit mining has developed new capital intensive mining technology that requires a larger proportion of professional and skilled jobs than other types of mines. Mining towns are often characterised by good incomes, younger families, but also by limited housing choices. Ups and downs in housing demands parallel the development of the mining industry with high demand during construction and operation of the mine and declining demand during restructuring or closure of a mining town.

Oil and gas towns may be different from mining towns and other resource dependent communities, but when oil and gas reserves are depleted, such communities will be faced with the same transition process. Research on oil and gas towns is more limited. The development of oil towns includes exploration, drilling and development, production, and maintenance. As drilling activity declines and oil fields reach full development, employment based on oil field development declines. Employment reductions are experienced in areas including technical services, equipment and supply firms, pipeline and drilling firms, etc. Coupled with the fact that oil and gas production requires few workers, and that maintenance (in addition to discovery and development) has adopted the fly in / fly out model, small towns in oil and gas territory do not have large shares of the population in the primary sector, rather they tend to support service activities for the crews that come and go from urban places.

5. Models of Transition

As seen in the previous section, different types of natural resource dependent communities have much in common when dealing with change and transition. The process of transition can be painful, and there are both good and bad ways of dealing with changes and adapting for the future.

a. Rural Community Life Cycle

Clark (1997) refers to Darling's work from Kansas State University who offers a model of transition and he suggests it is a life cycle that all rural communities go though. Beginning with growth, rural towns later begin a period of transition to development, stagnation, retrenchment and decision about the future. The final decision can be to revitalize, stabilize or decline. Understanding changes in economic activity is key to recognizing various stages of development of rural and small town Canada.

b. A Framework for Exploring Stages of Economic Development

Bruce et al. (2005) developed a framework for exploring stages of economic development activity in relatively isolated rural and small town places in Canada. Their model begins with a startup to growth phase, followed by periods of plateau, decline, and finally a transition to alternative futures. The following paragraphs are adapted from Bruce et al. (2005).

Startup involves establishing the settlement of the community. There would be evidence of new construction of buildings and municipal infrastructure (water supply and sewerage, roads and streets, municipal administration and service buildings, houses and other residential buildings). Basic and essential services would also be established in the early part of the startup period, as would a large population influx.

Growth begins with new developments in the community, such as retail stores in the downtown core, an expansion of essential services, or construction of an industrial park are possible. Expansion of municipal boundaries may be another indicator of growth. Sustained population and/or household growth over a long period of time, and a high pace of building starts for all types of structures are other features that would also be indicators of growth.

Eventually rural communities will each a plateau. During this stage there are fewer physical signs of change. New economic activity, as well as new building construction, is limited. There is also little net population growth or decline. Services peak in terms of the volume of activity and staffing, and there is a progressive aging/maturing of the population.

The stage of decline is characterized by a decline in the resource industry or economic activity which fueled the initial growth and sustained the plateau period. This might include a depletion of the resource, the closure or withdrawal of public services or institutions, and the closure of both major employers and small retail or supply businesses. Net population decline from outmigration is a key characteristic.

At any point within the framework, but often following a period of decline, conditions may change to the point where a very different community economy develops. This transitional stage is called alternative futures. Depending upon local history and context, such transition may occur through a diverse range of individual pathways. For example, the community could transform to some other economic activity and grow again. Alternatively it could transform to some other economic activity and plateau at a similar or lower level than before. In other words, the economy is transformed into other activities, or allows the community to adopt a new primary economic activity by default, either of which provides a measure of stability or a plateau, but one which is at a lower economic and population level than before the change. Another alternative future is that the community transforms to some other economic activity but continues to decline. The community could also remain in the same primary activity, but function at a lower plateau than before. This may come about after a period of decline over a finite period of time. There is then a leveling off of economic and population change and the community 'settles in' to a period of stability or a plateau which is at a lower level compared to previously. The final option is for the community to decommission or close. The community, or an outside agency, makes the decision to close the community (often after a long and sustained decline). In some cases, the decision is made quickly where nearly the entire workforce may be unemployed when a major employer closes and where no other options exist for new employment.

c. Towns in Transition: Endings, Neutral Phase, and New Beginnings

Many authors (Conway et al, 1996; Miller, 2000) who write about transition refer to the works of William Bridges. Bridges (1980) claimed that transition has three continuous and overlapping phases – endings, neutral, and new beginnings. According to Conway et al., it is critical to understand that change happens at a specific time whereas transition is a "psychological reorientation folks go though when coming to terms with change" (1996, 10). The authors claim that we do not fear the change itself, but we do fear loss and transition.

Oregon State University developed *Towns in Transition*, a study guide and video, based on the work of Bridges (Conway et al, 1996). We discuss this conceptual framework below as a means for helping New Brunswick communities put their experiences into a wider context. The remainder of this section is adapted from Conway et al. (1996).

According to Conway et al, "Resistance to letting go of the old will keep you from beginning and successfully making it through the transition" (1996, 10). The endings stage is about letting go, accepting the situation, and deciding to move forward. During the ending stage community leaders and members need to identify who is losing what, what will change, and personal losses. It is crucial to

pay attention to the human realities of the change. There may be grieving, denial, anger, bargaining, anxiety, sadness, disorientation, and depression.

Steps for Community Leaders to Take During the Endings Phase

- identify who is losing what
- be creative
- allow residents to have control over their future
- share information
- focus on remaining resources and capacities
- mark the end in a respectful manner

Community leaders can help their citizens through this grieving stage by being creative and allowing residents to know they will have a hand in their future. There is a need to share information and to focus on what resources and capacities are still present in the community. Perhaps most importantly, it is crucial to mark the end in a respectful manner, and to treat the past with respect while looking toward the future.

The neutral phase can be a difficult time and is characterized by increased anxiety, decreased motivation, re-emergence of old weaknesses, confused priorities and mixed signals, polarized citizens, and increased dialogue. This stage is often the longest and communities and residents can find themselves here for months or years depending on the depth of change. It has been described as an “unproductive timeout” (Conway et al, 1996, 14). However, it is really a time of figuring things out: Where do you want to go? Who do you want to be? What can you do?

Neutral Zone

- translate words into actions
- create temporary systems
- rebuild a sense of identity
- create a community-based transition monitoring group
- nurture innovation

During this time of figuring things out, community leaders have an important role to play. They should translate words into actions, create temporary systems (create task forces, etc.), rebuild a sense of identity, create a community-based transition monitoring group. This group should represent a wide variety of residents and stakeholders, help facilitate communication among community members, demonstrate caring, and help to control rumours. This group can also act as a focus group to review and comment on plans and ideas. The neutral zone should be a time of creative thinking. Innovation should be nurtured. There should be opportunities to question the normal way of doing things, and for new ideas to be encouraged. Most of all, do not rush creativity.

The joy of a new start can only come after the pain of an ending. The new beginning phase is marked by the start of new activities, making an emotional commitment to do things in a new way. In this stage the community needs a good plan and good communication. The entire community should be involved in the creation of the new vision. However, the past must be left in the past before a

Steps for Community Leaders to Take During New Beginnings

- involve community in the creation of a new vision
- involve all citizens in the planning process
- refocus and create short term goals
- reach quick successes
- reinforce the new identity of the town
- celebrate new successes

vision of the future can be realized. It is important for all individual citizens to help the community as a whole through the transition.

Leaders can guide the planning process by involving all citizens (they have first hand knowledge to help problem solve). Citizens will feel a sense of ownership if they helped to create the plan. It will be more successful. Leaders should also offer a refocus, create short term goals, reach quick successes, reinforce the new identity of the town, and celebrate new successes (Conway et al, 1996).

6. Causes and Impacts of Economic Change

Many single industry communities across Canada have experienced the endings phase identified by Bridges because of a variety of economic factors. For example, in the forestry industry, many authors describe a "perfect storm" of factors colliding to cause unprecedented changes. Many of these causes are also true for other primary sectors like mining and fishing. Reed (2003), who examines sustainability in rural British Columbia, acknowledges a variety of causes including a decrease in the resource, changes in international markets, increased mechanization in harvesting and processing, corporate restructuring, environmental protection, changing relations with First Nations, and government policy. Similarly, Markey et al.(2005) who examine forestry communities in British Columbia also list environmentalism, First Nations activism, and government policy as causes for community instability along with globalization. According to Natural Resource Canada (2005), domestic, market and trade issues are forcing the changes. Specifically, changes in regional fibre supply, new technologies, higher energy costs, shifts in demand, changes in markets, lower cost competitors, the soft wood lumber dispute and the stronger Canadian dollar are all to blame. Similarly, the Canadian Council of Forest Ministers Forest Communities Working Group (2007) lists the rising Canadian dollar,

Causes of Transition in Canadian Single Industry Communities

- new and more efficient technologies
- higher energy costs
- aging infrastructure
- product specialization
- resource depletion
- shifts in demand
- changes in markets
- lower cost competitors
- globalization
- stronger Canadian dollar
- corporate downsizing
- government policy and cutbacks
- First Nations activism
- environmental protection

increased competition, and the softwood dispute, but also blames aging infrastructure. A recent article by the CBC (2008) argues that the damage in Canadian forestry due to the pine beetle, increasing Canadian dollar, low housing prices in the United States, and paper surpluses around the globe.

Miller (2000) looks at the causes of transition more broadly for all single industry communities and she includes global trade, product specialization, resource depletion, corporate downsizing, government cutbacks and new and more efficient technologies. Likewise, Western Economic Diversification Canada (2004) states that all single industry communities, whether fishing, mining, forestry, agriculture or energy, are impacted by resource depletion, shifts if commodity markets, economic restructuring, and changes in government policy. Furthermore, these effects are made worse due to a lack of diversity in the communities.

Across Canada forestry and other industries have been reacting to the above changes. Companies have been forced to cut costs, cut jobs and close mills. In 2005 the Canadian forestry industry saw 50 mills closed or downsized in 2005 alone (Natural Resources Canada, 2005). Between 2003 and 2007 there were 22,000 layoffs across the country. In New Brunswick over the same time period eight mills closed, three permanently (Parkins and White, 2007) and closures continue today in places like Miramichi and Doaktown. These were high paying jobs from the main employer in town. In these towns non-forest businesses are impacted as well. One forestry job supports 1.5 to 2 non-forest jobs such as retail, housing, and services (Natural Resources Canada, 2005).

For single industry communities, the effects of the “perfect storm” are made worse by the lack of economic diversity. Industry closures are also accelerating rural depopulation and impact all aspects of rural life. In addition, as more and more people move to urban centres in Canada, urbanites are getting a larger percentage of the vote. Their concerns are much different from those in far away single industry rural communities. Furthermore, Reed argues that there is a digital divide at play which contributes to the marginalization of resource towns. She states, “This uneven access to information affects the ability of rural communities to participate in societal debates that affect their lives and livelihoods” (Reed, 2003).

Outcomes of Economic Change

- economic instability
- layoffs
- closures
- population loss
- a shrunken tax base
- few economic opportunities
- increasing school drop out rate
- indirect job losses
- related social problems

The effects of changes beyond their control leave single industry communities experiencing shutdowns, layoffs, economic instability, a shrunken tax base, decreased population, and sometimes few economic opportunities. As time goes on, communities worry about youth outmigration, an increasing school drop out rate, more and more job losses, and related social problems (Miller, 2000). It can be a downward spiral if communities are not proactive and have the capacity to transition.

7. Case Studies of Single Industry Communities in Transition

This section presents four examples of how some single industry, resource dependent communities have experienced and dealt with transition. Some have reached new beginnings while others are still in the neutral phase. Tumbler Ridge, BC, Canso, NS, Great Harbour Deep, NL, and Gold River, BC are examined.

Tumbler Ridge, BC
Tumbler Ridge is a planned coalmining town founded in the early 1908s in British Columbia's interior. When designing the town, planners knew that one day the mine would close and the town would be faced with the challenge of how to survive. The planners established a local government framework that included one main town site, not several remote camps. The municipal boundary was large and included a large tax base. The town had a social planning director whose job it was to develop social networks and facilitate social cohesion in the community. The town was planned with separate land uses, and a functioning commercial market. It had a health centre and a school and was not at the end of dead end road like many resource based towns. The town's largest mine announced closure in 2000 and this initiated a transition plan by town officials. Stakeholder collaboration was key and involved the federal, provincial and local governments, the departing industry, and community organizations. They formed a Community Revitalization Task Force which worked to maintain the population and tax base. The diversification strategy in Tumbler Ridge included resource development in forest, mining, oil and gas, as well as recreation, tourism, home businesses, and as a retirement and educational centre (Halseth et al., 2003; Halseth, 2005).

Canso, NS
Canso, on the northeast coast of mainland Nova Scotia, near Cape Breton, was founded in 1604 by Basque fisherman. Its identity has been a small fishing town for over 400 years. The collapse of the fishery in the 1990s presented many challenges for Canso. Between 1990 and 2001 unemployment nearly doubled to 32% and the population declined 19% (Western Economic Diversification Canada, 2004). The closure of one fish plant resulted in the loss of 200 jobs. The transition was severe for this small community, but they decided to move forward by promoting tourism and the 400 year history and natural beauty of the town. They are also preparing for offshore oil and gas and wind turbines. However,

despite these measures, there remains high unemployment, a reliance on government, and an uncertain future (Western Economic Diversification Canada, 2004).

Great Harbour Deep, NL
Great Harbour Deep was an isolated fishing community on the eastern coast of Newfoundland's northern peninsula. The only way in and out of this remote village was by float plane or a three hour ferry ride. It was solely dependent on the cod fishery, but the codfish closure in the early 1990s caused the abandonment of Great Harbour Deep. The landed catch decreased 40 times and the processing plant closed. The small population of 245 in 1986 decreased to 135 by 2001(Western Economic Diversification Canada, 2004). The loss of the tax base was too much for the town to remain viable. In addition, it was too remote for any other industry to be viable, including tourism. So the decision was made to close the town and relocate the residents. The residents marked the end of their town with a festival.

Gold River, BC
Gold River is an isolated community on Vancouver Island. It was based around pulp and paper, but when the mill closed in 1998 the town used a two-stage recovery strategy. Part one addressed the immediate financial and employment needs of workers. The federal and provincial governments supplied employment insurance and forest worker transition funding respectively. There was employment assistance and local counselling as well. Part two involved transition planning activities that promoted dialogue in the community about the future. This stage also saw a transition committee form, updates to the local community economic development plans, a recreation project, a small business transition study, and a forum on the future (Halseth, 2005). The Gold River diversification strategy included home-based businesses, small businesses, tourism, aquaculture, value-added forestry, the retirement industry, arts and crafts, a sports training centre, and natural resource processing (Halseth, 2005).

8. Conditions for Resilience and Success

Successful communities all have certain characteristics in common. These characteristics build resilience and sustainability and many authors (Clark, 1997; Community Resilience Project Team, 1999; Miller, 2000; Markey et al., 2005) have written about them.

A resilient community is one that "takes intentional action to enhance the personal and collective capacity of its citizens and institutions to respond to and influence the course of social and economic change" (Centre for Community Enterprise, 2003b). Resilience allows a community to cope with adversity and better adapt to changes. Furthermore, community resilience comprises four dimensions – people, organizations, resources and community process. They form the foundation of a resilient community and are also the core components of

a community's economic structure. The people dimension includes strong leadership, cooperation, education, optimism. Organizations should include a variety of community economic development groups, and many partnerships. Strong resources mean a diverse economy, locally owned businesses, an openness to alternative employment, and looking outside the community to address weaknesses. Resilience also comes from having a strong community economic development plan that involves the visions and ideas of all citizens, and is evaluated regularly as goals are achieved (Centre for Community Enterprise, 2003b).

Characteristics of Resilient Communities

- accept controversy and take risks
- depersonalize politics
- emphasize academics
- receptive and flexible
- persistent, tenacious, optimistic
- empowering
- cooperation
- participation and volunteerism
- willing to take responsibility
- diverse demographics
- favourable geography
- good financials
- effective human resources
- knowledge in different areas
- leadership, cooperation
- variety of organizations and partnerships
- diverse employers
- an inclusive community economic development plan

According to Mangham et al. (1995), resilience is especially important during times of transition, which can be overly stressful. They define resilience as the capacity to bounce back despite significant adversity. The authors explain resilience as a balance between adversity and coping ability. Mangham et al. (1995) go on to argue that resiliency is also dynamic. Each crisis experienced by an individual or a community helps to strengthen coping skills and in turn build resilience. They claim that factors that contribute to community resiliency include mutual support, collective expectations of success in meeting challenges, a lot of community participation, cooperation, volunteerism, egalitarian treatment of community members, optimism, and empowerment, or a sense of control over policies and choices (Mangham et al., 1995).

Clark (1997) states that communities which accept controversy, depersonalize politics, emphasize academics, take risks, tax themselves, have open leadership, and are receptive and flexible tend to be successful. Similarly, Miller (2000), who writes about community economic development, explains that community characteristics are an important part of successful change. In her opinion, successful communities are persistent, have a positive attitude and are tenacious, are resilient and optimistic, and are willing to take responsibility for their own future. Miller goes on to say that community capacity and physical

features also impact on success such as demographics, geography, financials, human resources, and knowledge.

The Community Resilience Project Team simply state, “A resilient community is one that takes intentional action to enhance the personal and collective capacity of its citizens and institutions to respond to and influence the course of social and economic changes (1999, 11). The team believes that communities need to be strong in four dimensions of resilience: people (leadership, cooperation), organizations (variety, partnerships), resources (diverse employers), and community process (an inclusive community economic development plan). Similarly, Markey et al. (2005) argue that there are four capacity areas which should be strong for successful community economic development: human, economic, social and ecological. In contrast, according to Miller (2000) communities who do the worst during times of transition are strongly dependent on a single or few employers and government, continue to want a familiar way of life and work, do not want change, and are narrow minded in their thinking.

9. Managing Transition – Processes, Strategies and Outcomes

Managing transition can take many complicated and stressful years. There can be no quick fixes and no single path to success. A transition management team was used in some of the single industry community case studies discussed earlier. They are beneficial for a range of reasons including planning for closure ahead of time, providing early warnings, determining the factors that will influence recovery and to generally manage the transition for the community. Furthermore, transition management teams foster cooperation and collaboration among all stakeholders – community leaders, community groups and residents, government, industry and businesses.

A review of the literature uncovered a diverse range of processes, strategies and outcomes for single industry communities, federal and provincial governments, the industry, and companies to pursue during times of transition. A transition management team could be the group to suggest to the community and coordinate the processes reviewed in the literature such as identifying strengths, weaknesses and assets, revitalising the local economy and community spirit, promoting culture and history, including youth, building community capacity, shifting to a knowledge based economy, and, for forestry communities, shifting to a non-timber economy. The best process is not just one of the above, but a combination. There must not only be a diversified economy but a diversified plan of attack. Table 1 outlines these processes and their strategies and outcomes along with possible groups to take the lead such as a transition management team, the local municipal government (or equivalent governing body), economic development agencies (any community development group such as enterprise agencies, regional development authorities, community futures, etc.), the business community, chambers of commerce, and provincial and federal governments, etc.

Table 1 – Processes, Strategies and Outcomes for Transitioning Single Industry Communities

Transition Processes	Strategies	Lead	Outcomes
Identify strengths, weaknesses, assets and resources of the community	Perform a SWOT analysis	Municipal government, transition management team, community members	• Knowledge of areas to strengthen and resources and abilities to use • A clear understanding of the town's existence
	Develop a strategic action plan that builds on strengths and addresses weaknesses	Municipal government, transition management team, community members	• Specific action plan for the future with realistic short, medium and long term goals • Desirable environment for new industries such as tourism • Attraction of new businesses • Economic diversification • Less dependence on one resource or industry
	Include all community members, give everyone a voice	Municipal government's strategic planning committee	• Everyone is empowered • Take control over their future
Revitalize the local economy and community spirit	Conduct a business retention and expansion study	Municipal government, chamber of commerce, community economic development agency	• Retain and expand businesses • Attract new businesses • Economic diversification
	Stop economic leakage and capture outside dollars	Municipal government, chamber of commerce, community economic development agency, business community	• Economic diversification
	Support local entrepreneurs with training, funding, incentives, etc.	Community economic development agency, chamber of commerce	• New business development • Economic diversification
	Implement job creation strategies; provide access to loans and venture capital; start cooperatives; promote tourism; upgrade infrastructure, and build industrial parks, office and commercial space	Municipal, provincial and federal governments, economic development agency, chamber of commerce, community members	• Job creation
	Collaborate with provincial and federal governments to address policy and legislation changes, for research support, information dissemination, and access to start up capital	Business community, and municipal, provincial and federal governments	• Job creation • Economic diversification

Transition Processes	Strategies	Lead	Outcomes
	Offer basic services, stabilize municipal finances, provide support for workers and their families	Municipal government	• Community pride • Increased community morale
Promote cultural and historical resources	Develop a heritage strategic plan, focus on historical and cultural resource	Transition management team, municipal government, tourism association, historical society, community members	• Community pride • Uniqueness • Spin off industries and economic diversification into tourism, ecotourism, and regional tourism
Include youth in community planning	Actively include youth in all processes and strategies of the transition	Transition management team, municipal government, economic development agency, community members, and others working on community plans	• Youth will feel an stronger connection to their community. • Adults and youth learn from each other • Leaders emerge • Reduced rate of youth outmigration
Build community capacity	Provide leadership training	Community economic development agency	• More resilient community
	Implement education and awareness campaigns	Transition management team, community economic development agency, municipal government	• More resilient community
	Improve community cohesion and social capital	Transition management team, community economic development agency, municipal government, community members	• More resilient community
Shift to the knowledge economy	Attract new businesses and encourage entrepreneurship in internet, communications, graphics, research, etc.	Business community, economic development agency, chamber of commerce, municipal government, community members, provincial government, community members	• Economic diversification into the knowledge sectors • New and diverse products and markets • New, younger employees
Shift to the non-timber economy	Focus on value added forestry, manage for a community forest, promote bioenergy, biofuels, non-timber products such as blueberries, mushrooms, pharmaceuticals, etc.	Business community, economic development agency, provincial and federal governments	• Economic diversification • Sustainable economy

a. Identify Strengths and Weaknesses

A good place to begin the transition process is to assess the community's strengths, weaknesses, opportunities and threats (SWOT). Strengths are community resources and assets like beautiful walking trails, a rich history, and

lots of energetic volunteers. Weaknesses are community shortcomings like few tourist accommodations, lack of skilled workers, youth outmigration, etc. Opportunities are external and present a chance to enhance the community such the trend toward ecotourism. Threats are external forces which may cause problems in the community such as pollution or globalization (The Rural and Small Town Programme, 1994). Once a community knows its SWOT, it can develop a plan to build on its strengths and overcome its weaknesses while being aware of external forces. For example, Clark (1997) suggests that before communities can plan strategically for revitalization they need a thorough understanding of the purpose of the town's existence and this can be done by doing a SWOT analysis.

Another reason why it is good to start by assessing local assets and resources is because by promoting their assets and creating the right environment, communities can lay the foundation for and attract new industries (Albert, 2007). In the end, it is up to each community to decide what assets it has and to use them to create a new and diverse economy. Reed (2003) notes this may include non-extractive uses such as ecotourism or services. According to Miller (2000), for any process to be successful it should build on community assets, include all community interests, and be proactive and participatory. The entire community should be involved in developing a vision for the future and using the results of the SWOT to develop a strategic plan, described in the next section.

b. Revitalise the Local Economy and Community Spirit

The process of revitalising the economy and community spirit is key to making a successful transition. A common theme in the literature is that economic diversification is the key to success for single industry communities. By completing the SWOT analysis above, communities will be able to see if they have enough resources and opportunities to create a strategic action plan with the goal of diversifying the local economy. If not, they may, like Great Deep Harbour, decide to close and relocate.

Page and Beshiri (2003) state that economic diversification makes rural communities less vulnerable to economic variability which can come from dependence on the primary sector. They define economic diversification as "… an increase in community employment through the introduction of a new industry or through the expansion of an existing industry other than a single sector or dominant industry" (2003, 2).

Many authors have written about strategies aimed at diversification. Clark (1997) refers to a 1992 study in the Journal of the Community Development Society that surveyed 15 rural counties in Maryland, USA about job creation activities that were the most successful in helping communities diversify. Some of them include:

- Have a new firm to locate in the community
- Improve access to loan and venture capital
- Develop an industrial park
- Attract government work
- Establish new commercial and office sites
- Upgrade infrastructure
- Improve schools
- Promote tourism
- Seek new businesses
- Provide counselling and education on entrepreneurship
- Tax advantages (Clark, 1997)

Similarly, the Community Resilience Project Team (1999) and The Centre for Community Enterprise (2003a) both list access to financing (loans, funding), and job creation (which may require feasibility studies, joint ventures and co-operatives) as measures that single industry communities can take to become more diverse and sustainable. The Centre for Community Enterprise (2003a) also includes performing inventories of businesses, and offering self-employment services such as entrepreneurship training, loans and funding, small business support, etc.

Clark (1997) provides five specific actions: stop economic leakage, retain and expand local businesses, support local entrepreneurs, capture outside dollars, and develop new businesses. According to George and Robertson most importantly, “diversification strategies in economic planning should minimize the threat of economic losses or industry collapse by spreading the risks over various economic generators” (2001, 2).In other words, if a community is going to try something new, it should ideally have a range of new economic activities, and not rely on just one which could do poorly and send the community back into a state of decline.

Some authors (Miller, 2000; Western Economic Diversification Canada, 2004; Centre for Community Enterprise, 2008) suggest the importance of external collaborations for single industry communities wanting to revitalise their communities and economies. Partners may include schools and universities, government, and private businesses. Collaboration with the government should not be for handouts but find ways to change legislation and policy; support research and data collection; facilitate information dissemination, and access start up capital and relevant expertise (Miller, 2000). Western Economic Diversification Canada (2004) also states that all stakeholders should expect to provide an appropriate level of time-limited financial support to resource based communities undergoing transition. This can allow the community to have time to adjust without needing to rely on outside financial resources.

Along with revitalising the economy, should come revitalising community spirit. Community spirit and be kept alive by maintaining the current level of public services, stabilize municipal finances, provide support for workers, maintain a high level of community morale, and continue to make the community an attractive place to live (Western Economic Diversification Canada, 2004). A sense of normalcy will help keep residents motivated and their spirits high.

c. Promote Cultural and Historical Resources

During the SWOT analysis special consideration of cultural and historical resources should be noted. Markey et al. (2005), state that communities should create a heritage strategic plan, focusing on historical resources, and promoting cultural tourism. Promoting local culture and history can also instil community pride by focusing on what is unique and special about the community. It can also create spin off industries such as eco and cultural tourism and hospitality. By partnering with nearby communities, a regional destination offering diverse activities could attract a wider range and larger number of tourists and result in an outcome of economic diversification.

d. Include Youth

The process of including youth in community planning has many benefits not only for single industry communities in transition, but for all communities (Miller, 2000). Youth should be apart of the assessment and revitalisation processes above. Youth are the future leaders of their communities. If they feel valued and listened to they will be more willing to be responsible citizens who participate and give back. Furthermore, they will be more willing to remain in their communities if they feel that the community is making an effort to include them, if their community wants them. By including youth in all steps of the transition process, ties will be strengthened, adults and youth can learn from each other, leaders emerge, and a sense of belonging is built. Youth are a community's future leaders and to stop youth outmigration, youth must be given a voice in discussions about the future of their community. Furthermore, youth are not constrained by norms and expectations. Their minds are free and their ideas may be extremely valuable. The potential outcomes of including youth are that youth will feel a greater connection to their town, adults and youth will learn from each other, leaders will develop, there will be less youth outmigration, and new ideas will emerge (Miller, 2000).

e. Build Community Capacity

Parkins and White (2007), in their report about forest dependent communities write, "Recognizing the changing context of rural Canada, much of the thinking on sustainability has changed from a focus on community stability to a focus on community capacity." By consciously including the process of building community capacities during times of transition, communities will become more resilient and

as discussed earlier, resilient communities are successful and sustainable. According to Marlin et al. (2007), key capacity areas to build are knowledge resources (awareness and understanding of the issues), institutional resources (local government, municipal plans, information dissemination), economic resources (funding, finances), human resources (innovation, leadership, education, skills), and social resources (social cohesion, social networks, cooperation).

Building capacity in social resources is especially important. According to Reimer, “Social cohesion is the extent to which people respond collectively to achieve their valued outcomes and to deal with economic, social, political, or environmental stresses (positive or negative) that affect them” (2002, 13). He goes on to explain that social cohesion measures the extent to which people work together. It is also possible that a community can work well together on one issue, but not on another. “Social cohesion is highest when groups work together to achieve economic, social, political or cultural objectives or when they do so to deal with the stresses facing them” (Reimer, 2002, 14).

Flora and Flora (2004) and Schuller (2001) believe that social capital is a community or group level phenomenon. Matthews (2006, 27) writes that social capital is the “product both of the way economic relations are embedded in social structure, and also on the way that people themselves are embedded in the nexus of social relations that constitute their society.” He goes on to claim that, “social capital is created through the resources and actions of individuals, but its strength is manifested in its collective social and economic outcomes.” Similarly, Glaeser (2001) states that social capital is a community level variable but it is individuals that choose whether or not to invest in social capital. Glaeser specifically describes community social capital “as the set of social resources of a community that increase the welfare of that community” (35, 2001). He goes on to ask “when do private social skills combine to create a more socially productive society?” (2001, 36).

Schuller (2001), states that a common measure of social capital is civic engagement and participation in voluntary associations. Matthews (2006) measures social capacity by the extent of social network involvement and by the strengths and types of interpersonal trust. Reimer (2002) claims that social capital stock can be evaluated by the existence of a common identity, a feeling of community support, and a confidence in one’s neighbours. He argues that the outcomes of social capital are visiting, participating and borrowing.

High levels of social capital and positive social cohesion have been proven to lead to and maintain community wellbeing. Putnam (2001), notes that social capital is linked to education performance, health, welfare, and other public policy issues. High levels of social capital are also connected to happiness, successful careers and even living longer. As Woolcock states, “the well-connected are more likely to be housed, healthy, hired and happy” (2001, 12). Thus, if there are

low levels of social capital and social cohesion, they could indicate community distress. Butler Flora and Flora state, “Ultimately, it is the quality of community social capital that affects the extent to which people expand their scope of concern beyond self-interest and beyond their family to include the community as a whole” (2004, 51). They go on to claim that a highly social community will also become a highly entrepreneurial community, thereby addressing more than one facet of community distress. Similarly, Woolcock states, “for both countries and communities… rich and poor alike, managing risk, shocks and opportunities is a key ingredient in the quest to achieve sustainable economic development” (2001, 16). Communities in distress can build their social capital by improving communication and mutual trust. Reimer (2002) explains that many community development programs are based on identifying untapped social capital and learning to how to use it.

f. Shift to the Knowledge Economy

Untapped capital may be in the knowledge economy. Because Canada finds itself ever more in a knowledge based economy, single industry and resource based communities should build capacity in knowledge sectors such as communications, research, graphics, etc. O’Hagan and Cecil (2007) examine primary industry towns in the knowledge economy and argue that such towns are not positioning themselves well for success in a future that includes the knowledge economy. Such towns and the industries they are home to have had little to do with knowledge generation or use. They are also often located far away from post-secondary institutions and centres of research and development. Furthermore, O’Hagan and Cecil (2007) state that their concentrated economic base makes it difficult for them to enter the new knowledge economy. However, participating in it can lead to economic diversification as well as decreased youth outmigration. The knowledge economy may appeal to the community’s youth and focusing on developing knowledge sectors may also help to retain local youth.

g. Shift to the Non-Timber and Bio-Economy

Tapping into the knowledge economy may not be viable for all single industry communities, or at least not immediately due to the need to build capacity in the knowledge sectors. A process for forestry communities to consider is shifting to a non-timber or bio-economy. This process can lead to a sustainable and diverse local economy. According to DeYoe (2005), focusing on bio-based products other than timber provides a wealth of opportunities for small and medium businesses in rural communities. The bio-economy can mitigate environmental and economic uncertainties.

Bio-based products from the forest are non-timber and derived from biological material also called biomass. Biomass is organic material such as plants, solid wastes, and animal manures. Examples include food, medicines, cosmetics, crafts, gardening products, and biofuels. Biofuels are biomass converted into

gas, liquid or solid form. They are renewable and considered carbon neutral (DeYoe, 2005). Focusing on bio products will not hurt the traditional forestry industry but rather help communities transition to more sustainable economic futures (Albert, 2007).

There are various strategies to harvest non-timber resources from the forest. For example, in their book, *Second Growth*, Markey et al.(2005) argue for the management of community forests where more than one economic activity takes place together such as tapping trees for syrup in the spring, picking berries and mushrooms in the summer and offering hiking and skiing in the fall and winter seasons.

Albert (2007) writes that employment opportunities in forestry communities will have to come from companies engaged in value added wood products and that this engagement can increase quality of life for employees. Specifically she lists non-timber forest products such as hemp, plant fibres for construction, forest foods (blueberries, mushrooms, etc.), nutraceuticals, pharmaceuticals, cosmetics, biomass, and bio fuel. The bio-economy can lead to increased quality of life for those communities that pursue it (Albert, 2007).

However, according to Albert (2007) companies thinking of entering the non-timber forest product markets should be aware of challenges including supply chain issues, need for new knowledge, inventory, entrepreneurship, and governance.

Because many businesses in the bio-economy tend to be small or medium in size there can be benefit in collaborating with other producers and other communities. According to Albert (2007) an inadequate supply chain can be managed by controlling the cost of production up the chain and the generation of revenues down the chain to achieve long term sustainability and increase profits.

A knowledge hurdle must be overcome to enter the bio-economy. Many single industry communities have little knowledge outside their main industry. There is a need for innovative thinking but often universities and other centres of research are located far away. Ones that may be nearby may have expertise mainly in the resource based industry. Albert argues that the “challenge is to find the researchers involved in ground breaking work or that have detailed knowledge of new opportunities such as those in bio products, value added, and non forest timber products and match them with communities that are trying to advance these concepts with entrepreneurs” (2007, 74). A further knowledge challenge may come from the lack of entrepreneurial skills in the local community. However, potential entrepreneurs can be assisted with opportunities, guided through dealing with government systems, and presented with a business case.

The inventory challenge relates to the things that companies need to relocate in a particular community. Attractiveness is more than just about community

capacities in knowledge and human resources. Companies also look for communities that have office space, transportation, telecommunications, and health and education services. Many rural communities may find it challenging to attract a new company involved in the bio-economy without these resources (Albert, 2007). Furthermore, it can be challenging to convince traditional sources of capital in the forest industry to invest in bio-products and non-timber forest products (DeYoe, 2005).

Depending on the region, further challenges may come from government policies. Much power exists for those in the traditional forestry industry. Governments may not be set up to fund innovative and alternative uses of the forest. Albert (2007) suggests that pilot projects may need to take place and policies will follow.

Halseth reflects on the experiences of Gold River and Tumbler Ridge and states "… different geographic imaginations of rural places and their contributions to the [economy] have limited the options for local renewal" (2005, 326). In other words, it is time for single industry, resource dependent communities to think outside the box. Forests are more than just trees. Just because they have been dependent on a resource and their identity has been attached to it for so long, does not mean that changes cannot be made. Communities can value and honour their rich cultural history while embracing a new economy – whether tourism, knowledge, non-timber, or something altogether new.

10. Conclusion

The changes that forestry and other single industry communities are experiencing today are admittedly deeper than ever before. However, there are many processes and strategies for these communities as they transition to new and different outcomes. Ultimately it is up to each community to come together, be inclusive and devise a plan for their future. It may include closing the community, as in Great Harbour Deep, or it may be to take advantage of local talents, skills, hobbies, interests, and resources and do something different. Communities can build on strengths, use existing capacities and resources, and overcome weaknesses. Communities need to work together and concentrate on building resilient characteristics. They must also work with external partners such as government, industry and neighbouring communities. Collaboration between stakeholders, government, industry, and business is not only important but incredibly useful as shown in the community examples.

There is no single solution but there are many options for survival.

Most single industry towns are transitioning to new economies. Those communities which are creative, innovative, resourceful team players who are not afraid to take risks may be the most successful and sustainable. However,

others may need to make the tough decision to close up and move. Economic transitioning is a community issue, and each community must follow a path that is right for it and designed by its leaders and citizens working together. There is no single solution but there are many options for survival.

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