

# **SUSTAINABLE DEVELOPMENT IN SMALL JURISDICTIONS: THE CASES OF NEW BRUNSWICK AND VERMONT**

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## **INTRODUCTION**

Our world is in the midst of a crisis that is both economic and ecological. The 2008 collapse of the financial sector called into question many of the assumptions of neo-liberalism that had been dominant since the collapse of Keynesian economics in the 1970s. These assumptions included unlimited growth and unfettered markets. At the same time, the threat of global warming and resource depletion remains ever-present and questions the assumptions of unlimited growth. These two crises – the economic and the ecological – may potentially force policymakers to rethink traditional models of economic development that have focused on industrialization and unlimited growth. This is especially true for smaller jurisdictions in North America which are characterized by rural areas and small communities where this rethinking of development happened well before the 2008 economic crisis.



Such a jurisdiction is the Canadian province of Prince Edward Island (PEI), whose strategy for economic development has focused on non-manufacturing sectors such as tourism, biotech, and green energy sources such as windmills. Provincial leaders have sought to preserve Prince Edward Island's identity as a province of small communities and pristine natural sights. They have used this reputation to promote the Island as a tourist destination. This strategy has paid off not only in terms of preserving the province's natural beauty, but also economically. A *Reuters* story on March 30, 2009 noted that PEI was one of only four provinces that was projected by the Conference Board of Canada to grow over the course of 2009, despite the economic downturn.

Another jurisdiction notable in this regard is the American state of Vermont, which supplies one focus of analysis in this paper. Vermont is a small jurisdiction of well under one million people, characterized by small communities, rural areas, and forests. The state has established an economic niche for itself by building on its natural advantages and by seeking to preserve its rural areas and forests rather than embarking on large-scale industrialization. Vermont has a thriving tourism industry and has become an attractive home for people from New York City and Boston who seek to escape the urban life (Smart Growth Vermont). In these respects, as smaller jurisdictions which have built on natural advantages, Vermont and Prince Edward Island have much in common. While the latter can serve as a useful reference point for the former, Prince Edward Island is not a primary focus of this paper.

The Canadian province of New Brunswick, like Vermont, is a low-population jurisdiction characterized by picturesque natural sites, small communities, and rural areas. In the past, economic development schemes in New Brunswick (and in Atlantic Canada as a whole) have sought industrialization and urbanization as their

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goals in order to “catch up” with traditionally “have” provinces such as Canada’s industrial heartland of Ontario. In particular, analysts such as Donald Savoie have cited New Brunswick’s lack of large urban centers as a reason for its underdevelopment (2006, 32-35). However, we argue that policymakers should instead seek to capitalize and build on New Brunswick’s unique advantages as a province of rural areas, small communities, and natural beauty, rather than try to emulate urban centers like Ontario. They should recognize that New Brunswick is not Ontario and gear economic development strategies with this in mind.

Vermont is located in Northern New England which, like Atlantic Canada, is traditionally considered an “underdeveloped” or “have-not” region. Geographically and demographically, Vermont resembles New Brunswick in many respects. However, while New Brunswick’s population growth has been sluggish and the province’s unemployment remains above the national average, Vermont has been able to maintain steady population growth and an unemployment rate that is consistently below the United States average (Ewan and Condon 2009, 4-6).

A jurisdiction such as Vermont potentially offers New Brunswick some important lessons on building an economically viable and environmentally sustainable strategy for development that builds on local strengths. This essay examines Vermont’s conservation policies and how Vermont has successfully balanced ecological concerns with economic development. Furthermore, we consider how the lessons of Vermont can be applied to New Brunswick, a jurisdiction with comparable geographic, economic, and demographic features. The interaction of ecological concerns with economic development provides our primary focus. This is not to discount other factors that affect economic development, such as educational attainment, but factors such as this are outside the scope of our paper.

The first section offers a background on both New Brunswick and Vermont and illustrates the points of comparison that will be discussed below, such as differing rates of population growth. The next section focuses on Canadian and regional development schemes that have been aimed at “have not” provinces like New Brunswick. Particular focus is directed to policies that aimed to “modernize” Atlantic Canada and New Brunswick by seeking to emulate industrial hubs such as Ontario. The following section



reconsiders this “modernization” paradigm and examines whether traditional indicators, such as GDP, provide an adequate picture of social well-being. As well, the role of forests and rural areas in contributing to social well-being in smaller jurisdictions such as Vermont is discussed. In the next section, the role of local activism in developing new models of development that balance economic and ecological concerns is examined, with special attention to the needs of smaller jurisdictions where nature and rural landscapes form a significant part of local identity and well-being. The paper concludes with a series of policy recommendations for New Brunswick drawing on Vermont’s experience in balancing economic and ecological concerns.

**Background: New Brunswick and Vermont**

In analyzing and comparing these two jurisdictions, we need to gain an understanding of key demographic, economic, and historical factors shaping each. The tables below offer information on population change and unemployment rates in our two jurisdictions.

**Table I: Demographics (New Brunswick and Vermont)**

	Population (base year)	Population (reference year)	Population change
New Brunswick	749,400 (2004)	747,300 (2008)	-2100 (-0.28%)
Vermont	608,827 (2000)	621,254 (2007)	+12,427 (+2.04%)

*Sources: Statistics Canada, US Census Bureau*

**Table II: Unemployment Rates (New Brunswick and Vermont)**

	Pre-recession	National Rate (Differential)	Post-recession	National Rate (Differential)
New Brunswick	8.2% (Jan 08)	5.8% (-2.4)	8.5% (Oct 09)	8.6% (+0.1)
Vermont	3.7% (06)	4.7% (+1.0)	6.7% (Sept 09)	9.8% (+3.1)

*Sources: Statistics Canada, US Census Bureau*

*Challenges Facing New Brunswick*

While New Brunswick’s economic position relative to the rest of Canada has improved over the past forty-five years, it is still considered a “have-not” province. In 2008, New Brunswick’s per cap-



its income was 85% of the Canadian average (Ruggeri 2008, 1, 4).<sup>1</sup> Population growth in the province has been stagnant in recent years and even experienced periods of decline. According to Statistics Canada, in 2004 New Brunswick's population stood at 749,400. By 2007 this number had declined by roughly 4,000 people to 745,400. However, 2008 saw a modest rebound with the province's population increasing to 747,300 which, while a gain, was still below 2004 levels (Statistics Canada, Population by Year) (See Table I).

These numbers are of particular concern as they represent an out-migration of youth – especially those educated at the province's universities. Such out-migration represents an investment in human capital from which the province ultimately does not benefit.<sup>2</sup> This is of particular concern as the province's population is aging. With baby boomers entering their senior years, concerns over an elderly population lacking a large enough labor force to support them are increasing (Ruggeri 2008, 4-7).

This out-migration of youth has been exacerbated by New Brunswick's historically high unemployment rate which, in January 2008, stood at 8.2%, a rate well above Canada as a whole (5.8%). It is worth noting that, in light of the economic downturn, Canada's unemployment rate has risen at a faster pace than the rate in New Brunswick. By February 2009, the gap had narrowed and Canada's unemployment was 7.7% while New Brunswick's was 8.8% (Ruggeri 2008, 4-7; Statistics Canada; Statistics Canada, New Brunswick: Heavy Losses; Statistics Canada, Labour Force Survey 2008). By October 2009, Canada's unemployment rate, at 8.6%, had slightly surpassed New Brunswick's 8.5% (See Table II). However, whether this is a temporary state – due to the effects of the global economic downturn on the manufacturing industry in Ontario and the oil industry in Alberta – or the reflection of a new long-term trend, remains to be seen. Furthermore, these numbers do not account for factors such as out-migration from New Brunswick due to that province's longstanding status as a high unemployment jurisdiction (Statistics Canada, Labour Force Survey 2009).

Within New Brunswick, regional disparities also exist. In particular, the province's rural areas provide fewer employment opportunities than the three largest cities of Saint John, Moncton and Fredericton. In addition, the economic viability of the northern part of the province – including the Miramichi and the Acadian Peninsula – is threatened by lack of employment opportunities. This cre-



ates demographic pressures where people – especially youth – from these less prosperous regions migrate to comparatively more prosperous cities in the south (Ruggeri 2008, 7).

### *Economic and Demographic Background of Vermont*

As discussed earlier, Vermont is similar to New Brunswick. Both are small jurisdictions with low populations characterized by small communities and rural areas. However, there are some key differences to note. These differences are important in pointing out the relative success of Vermont's model of economic development.

For one thing, Vermont's unemployment rate is below that of the United States. In 2006, its unemployment was notably low, standing at 3.7%, compared to the national rate of 4.7%. The recent economic situation has increased the ranks of the unemployed in the state. However, at 6.7%, according to a September 2009 report, Vermont's unemployment rate was still well below the national figure of 9.8% for that month (Ewan and Condon 2009, 6; OECD, OECD Standardized Unemployment Rates; US Bureau of Labor Statistics, Employment Situation Summary; Department of Labor State of Vermont, Latest Unemployment Press Release) (See Table II). In terms of population growth, while Vermont's rate has slowed in recent years, the state's population has increased steadily. Between 1960 and 2000, the state experienced significant population growth, growing by 56% from 389,881 in 1960 to 608,827 in 2000. Between 2000 and 2007, the state's population grew by 12,427 people from 608,827 to 621,254 (US Census Bureau, Vermont Population of Counties; US Census Bureau, Vermont QuickFacts) (See Table I).

Like New Brunswick, Vermont policy makers share concerns about youth out-migration and an aging population. However, considering the state's unemployment rate and population growth figures, while these concerns are pressing ones for the state, they are not as serious as in New Brunswick (Ewan and Condon 2009, 4-7).

Vermont's relative prosperity is helped, in part, by the fact that the state is an attractive alternative to the urban lifestyle for people living in New York City and Boston. Unlike New Brunswick, which is relatively isolated from major urban centers, Vermont is fairly close to Montreal, Boston, and New York City. Nonetheless, like Vermont, New Brunswick has the potential to capitalize on its status as a province of small communities and rural areas to attract migrants and tourists from Toronto and Montreal (and even from



New York City and Boston as well) who are seeking to escape the urban lifestyle.

Vermont also benefits from a diverse economy which includes a vibrant tourism industry – based on the state’s rural and natural appeal – and an information technology sector that benefited from IBM locating offices in the state. This latter fact was facilitated by new information technologies which enabled Vermont offices to remain in easy contact with urban centers such as New York City and Boston. Additionally, Vermont has benefited from strong and innovative local enterprises that have achieved national and international fame. These include Ben & Jerry’s Ice Cream and Green Mountain Coffee, both of which pride themselves on socially and ecologically responsible business practices, and Burton Snowboards which played an essential role in the development of the modern sport of snowboarding (Ewan and Condon 2009, 5-6; Lake Champlain Regional Chamber of Commerce). While New Brunswick has strong local enterprises as well – such as Ganong Chocolates, the Irving group of companies, and McCain Foods – there is concern that the oligopolistic nature of New Brunswick’s firm structure (or even monopolistic regarding the Irvings) stifles new enterprises and outside investment (Wein and Corrigan-Brown 2004, 341).

This oligopolistic stifling in the economic sector frequently extends into New Brunswick’s politics. For example, the Irvings have opposed government economic strategies that they deem deleterious to their interests. Given their economic dominance in the province they can easily make their views heard. As Richard Starr, biographer of long-serving New Brunswick Premier Richard Hatfield, observes, “It has been said that Irving has never lost an election” (1987, 25). During the 1950s for example, Irving patriarch KC Irving supported the Progressive Conservative government of Premier Hugh John Flemming. However, by 1960 the industrialist had turned against Flemming when his government entered into negotiations with a Belgian company over use of Crown (provincial government-owned) lands, which would have introduced new competition to the Irvings’ forestry operations. The Tories lost the 1960 election. Likewise, the Louis Robichaud government in the 1960s faced steep opposition from Irving to the Program of Equal Opportunity and over economic strategy. All this led to a rocky 1967 re-election campaign and likely contributed to the government’s 1970 electoral loss (Starr 1987, 25-28).



New Brunswick and Vermont do share an important economic similarity: both jurisdictions are characterized by urban-rural disparities, as well as by intra-regional disparities. In recent years, there has been modest population decline in parts of southern Vermont, which is more rural and less developed than the northwestern part of the state where the main metropolitan center, Burlington, is located. Also, the largely rural and forested Northeast Kingdom has the state's highest poverty and unemployment rates (Ewan and Condon 2009, 4-5).

However, despite these notable disadvantages, the Northeast Kingdom experienced modest population growth from 2000 to 2006. Furthermore, some towns in southern Vermont have been able to distinguish themselves culturally and socially. For instance, the town of Brattleboro has a strong culture of local bands and artists and South Royalton is the location of Vermont Law School. Therefore, while the primary center of economic and population growth is in the northwest of the state, there are signs of viability in at least some of the state's other areas (Ewan and Condon 2009, 4-5).

## **REGIONAL DEVELOPMENT IN CANADA: THE MODERNIZATION PARADIGM**

As discussed in the introduction, federal and local policies of regional development in Atlantic Canada and New Brunswick have generally focused on industrialization, exploitation of natural resources, and development of urban areas. These regional schemes – whether informed by government intervention or the operations of the free market – in many respects follow the criteria of the “modernization” paradigm as they seek to promote industrialization and, in many respects, seek to emulate development in industrialized regions of southern Ontario and southwestern Quebec (Wein and Corrigan-Brown 2004, 341).

The modernization paradigm originates from literature on international development which states that developing countries should (and will) modernize by emulating the industrial and urbanized countries of the north. Such a process involves sweeping away traditional values and characteristics of a society that are seen as blocking modernization – such as traditional political and cultural institutions, social structures, and relationships. For modernization theorists, this progress is achieved through the free market and the dissemination of modern technologies (Wein and Corrigan-Brown 2004, 327-329).



We may expect Canada's have-not regions to seek to eliminate "deficiencies" impeding modernization and development. Both government policy and the operations of the free market have a role to play in achieving this end. A characteristic (or "deficiency") often cited as a reason for New Brunswick's and Atlantic Canada's "backwardness" is the lack of large urban centers which are necessary for economic progress according to economic views informed by the modernization paradigm, views that have been influential in regional development discourse and policy (Wein and Corrigan-Brown 2004, 327-329; Savoie 2006, 32-35).

Modernization and industrialization have formed the rhetoric of many federally sponsored regional development initiatives, but in practice, throughout much of Canadian history Ottawa has favored Quebec and Ontario as sites for industrial development. For example, in the aftermath of WWII the federal government encouraged the aerospace industry to locate in Quebec, and in the 1960s the Canada-US Autopact fuelled the growth of the automobile industry in southern Ontario. More recently, the information technology sector was encouraged to locate in Kanata, outside Ottawa, to be in close proximity to federal government institutions. Meanwhile, regions such as Atlantic Canada have been largely left out of such enterprises. They primarily rely instead on economies driven by resource extraction. In New Brunswick this is the forestry industry and the fisheries. In more recent years, the decline of these sectors has hurt employment and economic development in New Brunswick. While proximity to the industrial Great Lakes states accounts for much of central Canada's edge in manufacturing, New Brunswick has languished even where it would seem to have a natural advantage. For instance, the port city of Saint John does not enjoy the status of Boston, New York, Montreal, Toronto, or even Halifax. Saint John has received less attention and money from Ottawa than the other Canadian ports (Savoie 2006, 47-49).

At the provincial level in New Brunswick, a notable policy informed by economic modernization was the Equal Opportunity program in the 1960s of Premier Louis Robichaud, the province's first elected Acadian Premier. For context, it is worth noting that this policy was informed by the discourses of an era when environmental and ecological concerns did not figure prominently on policy agendas in North America. Also, poverty, unemployment,



and lack of services and amenities were pressing concerns in rural New Brunswick and in the mostly Acadian north of the province.

Equal Opportunity sought to combine social justice and economic development goals by centralizing services such as education, health, and welfare in the provincial government, taking these responsibilities from municipalities and county governments (the latter of which were abolished). The aim of this centralization was to provide comparable and equal services to both poorer and wealthier regions of the province, which involved transferring some tax revenues from wealthier Anglophone regions to poorer Acadian (and poorer Anglophone) regions. In addition to providing better social services to the poor, Equal Opportunity addressed wasted human resources due to inadequate healthcare and education. Furthermore, Equal Opportunity sought to facilitate capital and labor mobility in the province by removing local particularities in service provision and taxation that hindered such mobility (Young 2000, 23-24; Beaudin 2000, 87-93).

The Robichaud government also sought to “stimulate industrialization”, exploit untapped natural resources, and thereby “develop the natural riches in all areas of the province” by promoting outside investment, often to the displeasure of local companies such as the Irvings (Beaudin 2000, 88). These policies of industrialization and natural resource extraction thus sought to provide new employment and economic opportunities throughout the province. While these policies were in many respects appropriate for the concerns of the 1960s, an increased awareness of climate change and resource depletion issues has afforded the environment and conservation a more prominent place on the policy agenda. Furthermore, the decline of the automobile industry in Ontario and Michigan has called into question the permanence of industrial development. It is time to reconsider the modernization paradigm.

We might also note that environmental and development policies in New England and the Maritime provinces do not occur in isolation from each other. For instance, there is a history of cooperation between New Brunswick and the New England states on energy and environmental issues. In 1973, during Richard Hatfield’s tenure as Premier, a formative Joint Agreement between New Brunswick and the state of Maine set out a basis for cooperation on energy and environmental issues, affirming the two



jurisdictions' common goals and aspirations and the benefits of cooperation (Governments of New Brunswick and State of Maine 1973). With globalization and liberalization of trade, including the establishment of NAFTA, there is a greater recognition that national governments are not the only basis for forming environmental policies. Other actors, including subnational governments, are also relevant (Juillet 2001, 126). Charles Howe writes that, in many respects, local governments are better equipped to incorporate local cultural, economic, and environmental concerns (1996, 22). In this context, we may consider regional cooperation between subnational units in New England and the Maritimes as a device to accommodate regional concerns.

## RETHINKING MODERNIZATION

A new model of economic development is needed, one that builds on the local strengths of New Brunswick and that seeks to preserve the province's natural ecology, rural areas, and small communities. While monetary wealth and GDP clearly matter, we also should consider factors like community, health, and environmental conservation.

### *Defining Progress – It is more than just GDP*

The gross national product does not allow for the health of our children, the quality of their education or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage; neither our wisdom nor our learning; neither our compassion nor our devotion to our country; it measures everything, in short, except that which makes life worthwhile. – Robert F. Kennedy, 1968

This frequently cited quote from Robert F. Kennedy illustrates the shortcomings of measures such as GNP (and GDP) which focus on monetary wealth to the exclusion of other factors relevant to human well-being. Cambridge University economist Parth Dasgupta writes that:



GNP misleads because it does not acknowledge that capital assets depreciate. This happens if increases in GNP are brought about by mining capital assets – for example, degrading ecosystems and depleting oil and mineral deposits – without investing appropriate amounts of output in the accumulation of other forms of capital such as knowledge and skills (Quoted in McKibben 2007, 190).

Environmental and resource degradation adversely affects human well-being through negative health effects (i.e. air pollution that leads to respiratory problems) and through the loss of natural environments valued by local residents. A particularly dramatic example of this occurs in one jurisdiction which, like Vermont and New Brunswick, is geographically small and composed largely of small communities, forests, and rural areas and is considered “have-not”: West Virginia.

In West Virginia, a region rich in coal deposits, mining companies practice a form of mining known as “mountaintop removal.” This involves the literal blasting of mountaintops – or even of entire mountains – to extract coal in a manner that delivers greater profit margins to the mining companies. After the mining, the debris and sludge are deposited in valleys, a practice known as “valley-filling.” This combination of blasting and valley filling is destroying local ecosystems, damaging streams, and releasing debris into the air. This harms the health of West Virginians and is destroying the natural beauty of the Appalachian Mountains that form an important part of the state’s identity. The dangers of mountaintop removal mining have been noted by Tim Huber of *The Huffington Post* as well as by several activist outlets such as *The Appalachian Independent* and Bill Price of the *Mountain State Sierran* (Huber 2009; Mountain Justice 2009; Price 2009). Ostensibly mountaintop removal adds to the state’s GDP through extraction of coal, but this measure does little to account for the disastrous effects on the state’s landscape and public health.

As mentioned above, like New Brunswick and Vermont, West Virginia is a small jurisdiction that can be considered an economic “have not.” West Virginia provides a useful basis of comparison and contrast to New Brunswick and Vermont on several fronts. For instance, unlike in Vermont, conservation issues have not taken a



central place on the West Virginia policy agenda. As in New Brunswick, the urgency of job creation frequently seems to drown out ecological concerns in West Virginia. As well, like New Brunswick where the Irving group of companies exercises great control in setting the economic policy agenda, West Virginia's coal companies exercise comparable influence over elected officials and policymakers, thus hindering possible alternative economic strategies (Huber 2009; Price 2009; Beaudin 2000, 88; Smart Growth Vermont).

Some economists have attempted to internalize environmental costs by attaching monetary values to environmental degradation and including these costs in assessing the economic viability of new industrial projects – that is, internalizing these market externalities, which are unintended and unpriced costs of economic activity, to provide a more comprehensive cost-benefit analysis (Secord and Efimova 2008, 137-138). With this in mind, in March 2007 thirteen economics professors from four New Brunswick universities (the University of New Brunswick-Fredericton, the University of New Brunswick-Saint John, Mount Allison University and Université de Moncton) wrote an open letter to the Premier urging him, and the Self-Sufficiency Task Force which was conducting deliberations at the time, to consider these environmental costs in assessing economic development initiatives such as a second oil refinery in Saint John, a second nuclear plant, and the building of more highways across the province. Daniel McHardie of the *Telegraph Journal* provided highlights of this letter. Among other things, McHardie noted that the economists outlined how air pollution leads to respiratory problems that create additional healthcare costs and endanger related sectors such as tourism (McHardie 2007).

#### *Environmental Indicators – New Brunswick and Vermont*

On key environmental indicators, New Brunswick fares poorly when compared to the rest of Canada. Janice Harvey and Barry Watson point out that New Brunswick's per capita rate of greenhouse gas emissions from 1999 to 2005 was higher than the Canadian per capita rate and is the third highest in the country. The only two provinces with higher per capita rates of greenhouse gas emissions were Alberta and Saskatchewan, both oil producing provinces (Harvey and Watson 2008, 101-102). Harvey and Watson identified other indicators where New Brunswick also performs poorly. For instance, from 2000 to 2005, cancer-causing air-emissions per



capita in New Brunswick were more than double the national average. With regards to total water releases of CEPA toxic substances on a kilogram per capita basis, in 2002 New Brunswick was above the national rate and only dropped below the national average from 2003 to 2005 because of pulp-mill closures, not because of environmental policies. Water pollution of this kind has notable environmental consequences as it harms marine life and has negative implications for the fisheries industry. On forest conservation, provincial government guidelines dictate that twelve percent of forests must be maintained as older growth forests to protect bio-diversity when, in reality, preservation of thirty-five to eighty percent of old-growth forests is necessary for this objective. The province's recent decision to allocate more Crown lands to large-scale lumber operations will only further harm biodiversity and economically damage small woodlot owners whose lumber will be less in demand because of the new Crown land supplies (Harvey and Watson 2008, 102-107).

While New Brunswick under performs national averages in Canada on key environmental indicators, Vermont by contrast over performs its respective national averages in the United States. For instance, Vermont has the second lowest rate of toxic chemical air emissions, at one pound per capita. By comparison, the national average is fourteen pounds per capita. In pollution emissions per short ton, Vermont ranks forty-seventh. While Vermont does face issues of air pollution and acid rain from neighboring jurisdictions, the state ranks low on emissions originating from the state (Hessler et al. 2008, 20-21).

Also, Vermont has among the toughest environmental laws in the United States and the strictest land use regulations in the country. While there are concerns about the sizeable loss of agricultural land to urban sprawl, Vermont's forest cover has steadily grown. This latter point is especially noteworthy as, a century ago, the state was largely clear-cut to the point that only twenty-five percent of the state was covered in forests. Today, forest cover stands at three-quarters of the state due in large part to reforestation and conservation efforts (Hessler et al. 2008, 26-27).

Vermont thus has strong environmental laws and conservation efforts coupled with a relatively low unemployment rate and steady population growth. For these reasons, the state provides an example of a jurisdiction that performs relatively well in both traditional economic measures and in environmental conservation



measures. Policy-makers in New Brunswick and elsewhere might note that environmental conservation and economic prosperity can be complementary goals.

### *Vermont and the Genuine Progress Index*

Returning to the earlier discussion on the inadequacy of GDP as a measure of human well-being, it is worth noting that attempts have been made to measure well-being more comprehensively by including social and environmental factors along with monetary ones. Economists are attempting to internalize the environmental costs of industrial projects. Another such effort is the Genuine Progress Index, or GPI.

The GPI aims to include social and environmental measures along with monetary ones. The GPI includes twenty-six elements covering personal consumption adjusted to income distribution, non-market benefits such as housework, and the impacts of negative items such as loss of social capital (specifically crime, family breakdown, loss of leisure time, and underemployment), ecological degradation, and net foreign lending and borrowing (Costanza et al. 2004, 140-145). GPI is not a perfect measure and it does have its shortcomings. For one thing it excludes the depletion of environmental resources in other jurisdictions. Still, it is nonetheless a more comprehensive measure than GDP (Costanza et al. 2004, 149-154). Robert Costanza et al. apply the GPI measure to Vermont, with only net foreign lending and borrowing not included due to inadequate data on this measure. They find that Vermont's GPI in 2000 was double the national average, at \$16,000 for Vermont versus \$8,000 for the United States. While Vermont's income per capita is comparable to the national average, the state dramatically outscores the country on environmental indicators (2004, 145).

Thus, as this comprehensive (if imperfect) measure shows, conservation and the state of the natural environment are important factors contributing to well being and should not be ignored by policymakers. As the earlier mentioned case of West Virginia shows, economic development that disregards ecological factors can have disastrous consequences for the well-being of local residents in regard to health and to the terms of use and enjoyment of natural surroundings. Constanza's article discusses Vermont. There are no comparable data for New Brunswick, but Constanza's findings are suggestive. Economic development has often taken precedence over environmental concerns in New Brunswick.



### *Natural Landscapes and Rural Ecology – Values and Identity*

Economic analysis, GPI, and other scales that seek to quantify social and environmental well-being provide a valuable illustration of traditionally unpriced costs. However, they do not supply the complete picture. These measures do not fully invoke the intangible values of enjoying a pristine lake or a majestic forest, nor do they capture the values and identity with natural surroundings of those who live in rural areas, small communities, or smaller cities where nature is easily accessible. This is where qualitative research is especially valuable.

A qualitative study by Elizabeth O'Brien sought to evaluate and describe how the forests of Vermont shaped the values and identities of the state's residents. Through a series of interviews and focus groups with a representative sample of Vermonters, O'Brien sought to "explore the ways in which the forested landscape of the state is seen, used, perceived and understood by some of the people who live there" (2006, 258). Her findings revealed that Vermont's forests constituted an important component of the identity of Vermonters as residents of a non-urban state. Also, the state's forests played an important role in enhancing the quality of life of its residents (2006, 257-259).

According to O'Brien's research, the forests of Northern New England form the "imagined" identity of the region with "extensive forests, village greens and white steeple churches" (2006, 261) especially when contrasted to urban and industrialized southern New England (Massachusetts, Rhode Island, and Connecticut). The forests furthermore constituted an important source of recreational activities – though the nature of these recreational activities differed between residents of Burlington and those born out of state, in contrast to those from more rural areas such as the Northeast Kingdom. For those from Burlington and those born out of state, preferred activities were hiking and skiing while residents of the Northeast Kingdom preferred hunting and snowmobiling. Additionally, while both groups were concerned with conservation, the latter also viewed the economic function of the forests more sensitively as they depended on such industries as tourism for their livelihoods (O'Brien 2006, 265-266).

The author also found that three of the Burlington residents she interviewed, having moved from out of state, had actually opted for lower paying jobs in Vermont because they wanted to be in-



volved in more outdoor activities and be closer to nature (O'Brien 2006, 264-265). The values placed by residents on their natural environment surpass monetary considerations, though these considerations are not necessarily excluded in the case of those who make a livelihood off the forests. Furthermore, Vermont's natural environment forms an important component of identity and quality of life. While the author found differing values and meanings ascribed to the forests by residents of the state, she found that valuing forests and nature formed a common theme (O'Brien 2006, 264-265).

For O'Brien, public policy concerning land use must include consultations with residents aimed at hearing their diverse points of view and incorporating these views into decision making about land use. Residents must not merely buy into an already pre-conceived plan (O'Brien 2006, 271-272). Aurasri Ngamwittayaphong, in a presentation to the International Rural Sociological Association World Congress, discussed development schemes in rural Thailand that failed precisely because policy-makers did not consult rural residents or try to incorporate their values. Instead, they attempted to impose a vision based on growth and wealth creation (2008).

In New Brunswick, a jurisdiction characterized by forests and rural areas like Vermont, policy-makers must consult the province's residents and seek to incorporate their values and concerns respecting both economic livelihood and conservation. Loss of natural environments due to unchecked degradation and pollution could have serious consequences for the quality of life and self-identity of the province's residents. At the same time, jobs and employment must not be neglected either.

## **LOCAL ACTIVISM AND POLITICAL LEADERSHIP**

While the importance of strong political leadership should not be discounted, Vermont's tough environmental protection laws and regulations are also the result of an activist base in the state pushing lawmakers to place a high value on conservation. Activists can also help elect individuals supportive of their causes to public office. It is noteworthy that former Vermont Governor Howard Dean (who later became a Presidential candidate and Democratic National Committee Chair) got involved in politics through activism to stop condominium development along the shores of Lake Champlain (Gordon 2003).



A useful concept to examine here is community capacity. Cindy Wachowski defines community capacity as “the ability of a community to produce outcomes – actions – through its actors – agents – by utilizing resources at its disposal” (2008). Community capacity includes a sense of community among members, commitment to community, the ability to set and identify objectives, and the ability to utilize economic, human, physical, and political resources (Wachowski 2008). Vermont largely meets these criteria.

In Vermont, there is a robust sense of local identity and a strong tradition of community involvement and direct democracy embodied in the New England town hall meeting where town citizens gather to make decisions on local, state, national, and even international issues. For instance, a report by Susan Smallheer of the *Rutland Herald* on January 26, 2008, noted that citizens of the town of Brattleboro had voted to issue arrest warrants for George W. Bush and Dick Cheney. On March 4, 2009, WPTZ-TV reported that thirty-three towns passed a resolution calling on the Vermont State Legislature to close the Vermont Yankee Nuclear Plant over concerns about safety and radioactive waste. Of course this raises issues of where the state would get its electricity as one-third of Vermont’s power has come from Vermont Yankee.

As mentioned in the previous section, it is important to consult with affected residents regarding use of land and forests. However, where Vermont has a strong tradition of town hall meetings, in New Brunswick (and in Canada generally, both in federal and provincial politics) the tradition is a more top-down one of policy from above (Savoie 1999, 3-8). VanNijnatten highlights the impact of the differing political contexts in Canada and the United States on participatory decision-making and on the development and strength of environmental interest groups. She describes the United States as characterized by an “emphasis on popular sovereignty and political participation” as well as a separation of powers (1999, 269). Meanwhile, in Canada, political institutions have a more elitist character with a “high degree of concentration of policymaking capacity in the political executive” (1999, 270). The United States, through dispersion of power, creates an opening for interest groups to participate in the policy process and also a greater receptiveness to public participation in general. In the case of Canada, the more top-down policy approach often excludes the public and relevant interest groups alike (1999, 268).



Greater consultation would thus seem to be a significant change for New Brunswick's political culture. However, this change may prove less abrupt than it appears on the surface. Unpopular decisions by the province's Liberal government over the past few years carried out with little public consultation—most notably the sale of NB Power—forced the government into embarrassing retreats (NUPGE 2009). Given this background, there may be greater receptiveness, both by the public and by the political establishment, towards use of genuine public consultations.

In Vermont, there is also a strong base of social activist organizations. One of these organizations is Smart Growth Vermont, a non-profit organization that works with other non-profits, developers, and political and business leaders to formulate policies to stem the growth of urban sprawl, preserve rural and forested areas of the state, and encourage centralized development that focuses on revitalizing downtowns and village centers. On this last point, Smart Growth was part of the initiative to create the Vermont Downtown Program which has been part of the designations of twenty-three downtown development districts and over eighty village centers (Smart Growth Vermont).

Smart Growth's goals are not only motivated by conservation, though this is an important factor. They also seek to preserve Vermont's identity as a state of villages and small communities in close proximity to farms and nature, thus reflecting some of the principles reflected in O'Brien's qualitative study of public attitudes in the state (Smart Growth Vermont; O'Brien 2006, 257-259). Would a comparable organization be possible in New Brunswick? Many who move to Vermont do so to escape the sprawl and congestion of urban areas. Naturally, they wish to prevent such sprawl in their adopted home. In New Brunswick, this motivation is weaker among the population; economic development and jobs figure more prominently as priorities while concerns about sprawl are less widely expressed (Beaudin 2000, 88; Smart Growth Vermont; O'Brien 2006, 257-259). This is not to preclude the possibility of an organization like Smart Growth Vermont arising in New Brunswick. But a greater public education campaign would be required to show why urban sprawl is a concern and how sustainable urban development can be compatible with a healthy economy.

Another conservation organization in the state is the Vermont Land Trust which works with landowners and other groups to help



them voluntarily limit development on private land and preserve this land for farming, forestry, and recreation. Among other things the Vermont Land Trust supplies technical assistance and helps private landowners conserve their land. This work is especially important as ninety percent of the state's forested lands are privately owned and many state programs aimed at forest conservation require the voluntary cooperation of landowners. The Vermont Land Trust, through its work, provides an essential role in ensuring this conservation. To date, this organization has assisted landowners to protect 483,000 acres making up eight percent of the privately owned land in the state (Vermont Land Trust).

There are other conservation organizations in the state as well which work on promoting environmental sustainability and lobbying the state government. For instance, the Vermont Natural Resources Council lobbied for some of Vermont's federal stimulus money to be directed towards energy efficiency projects (Vermont Natural Resources Council).

### *Local and Sustainable Development – Vermont*

Increased local consumption can help keep more money in the locality and create more jobs for the local economy. In addition, a strong local component to the economy – coupled with a diversified economic base – helps shield (to some degree at least) the locality from fluctuations in the international economy. Ruggeri writes that one of the risks of export-led growth is that a small jurisdiction such as New Brunswick is more vulnerable to downturns in the global economy from which the province does not have the resources to protect itself. Increased local production for local consumption could be an alternative to focusing solely on export-led growth (2008, 7-9).

Writing on his home state of Vermont, Bill McKibben cites a study in that state which outlines how, if local consumers substituted ten percent of their food consumption for locally produced food as opposed to imported food, there would be \$376 million in new economic output including increased personal earnings of \$69 million from 3,616 new jobs (2007, 165). There is no readily available study of this sort on New Brunswick, but greater local food consumption likely would also benefit its province's economy.

Popular resistance in the state to Walmart – Vermont was the last state in the union to have a Walmart – stemmed from a de-



sire to protect local businesses and to prevent the proliferation of big box stores. Other local initiatives in the state include Vermont Family Forests, an enterprise which aims to harvest wood in a sustainable manner by following strict ecological guidelines and preserving biodiversity, even at the expense of sacrificing some profits. Vermont Family Forests in part (but not entirely) makes up for this financial loss by selling the wood directly to consumers and eliminating the step of going through a middle-person. While returns, at three-percent, are low by traditional business standards, Vermont Family Forests has proved a sustainable enterprise (McKibben 2007, 158-160).

Furthermore, there are several Community Supported Agriculture (CSA) operations in the state. These are local farms where consumers directly pay the farmer a few hundred dollars for a weekly bin of assorted vegetables that are delivered to their homes during the harvest – and like the Vermont Family Forests, the middle-person is eliminated (McKibben 2007, 48-49).

Vermont also has export-oriented enterprises that operate along more traditional business lines, like Burton Snowboards, and outside companies such as IBM that have set up operations in the state and supply local jobs. Nonetheless, the willingness of some local farmers and woodlot owners to take the initiative, to produce and sell locally, and eliminate the middle-person, help to provide an excellent local complement to the state economy. These are models that local enterprises and policy-makers in New Brunswick should consider emulating.

## **CONCLUSION AND POLICY RECOMMENDATIONS**

Vermont provides an illustrative example of how the goals of economic development and environmental conservation can be compatible in a small “have-not” jurisdiction. The state has among the strictest environmental laws and regulations in the United States while maintaining a healthy economy with a steadily growing population and a (relatively) low unemployment rate. These goals are by no means mutually exclusive. They are compatible. For instance, Vermont’s natural beauty makes it a draw for both tourists and new residents (Ewan and Condon 2009, 5-6; Costanza et al. 2004, 145-149).

Vermont’s example provides some pertinent policy recommendations for sustainable development in New Brunswick. Most



notably, we need not consider New Brunswick's status as home to small communities and rural areas as a hindrance to development but rather as an asset. In addition, a lack of large urban centers does not need to be considered a weakness. The provincial government already is aggressively promoting New Brunswick's natural beauty as a draw to attract additional tourists. It would be useful as well to devise strategies to use New Brunswick's natural beauty and small communities as a draw to potential new migrants from overseas, the United States, and from Canadians who are seeking an alternative to the urban lifestyle.

Furthermore, economic development projects must account for the need to preserve these advantages. Factors such as air and water pollution, as well as the destruction of natural ecology, must be addressed when evaluating new industrial projects. In addition, environmentally sustainable industries that do not destroy the province's environment like sustainable logging, the information technology sector, and socially responsible businesses, must be encouraged. Also, the interests of the public respecting jobs but also conservation must be considered regarding land use issues. Consequences of neglecting concerns such as public health, and public enjoyment and identity with the natural landscape, can be dire, as Tim Huber pointed out on mountaintop removal in West Virginia (Huber 2009).

On the economic development front, encouraging local production and local consumption will be important to keep more money in the province to create new jobs, and to further environmental protection by reducing emissions from transporting goods over long distances. Also, initiatives such as Community Supported Agriculture and sustainable forestry, along with eco-tourism, could provide new economic vitality to the province's rural areas (McKibben 2007, 48-49, 165).

To push for these goals of sustainable development will require a change in much of the dominant mindset which still favors industrialization and urbanization. Effecting this change in policy direction will require a strong network of social activists and the right political leadership. Politically, a sustainable development initiative comparable in scope and boldness to Louis Robichaud's Equal Opportunity program may be required. On the activist side, environmental organizations such as the New Brunswick Conservation Council work hard to lobby the provincial government.



But the network of conservation activists is less developed in New Brunswick than in Vermont (Smart Growth Vermont; Vermont Land Trust; Wachowski 2008).

The scope of this paper is primarily focused on the example of Vermont and how it can be applicable to New Brunswick. However, there are several further questions for future study that arise out of this research. For instance, we might consider how to instill in New Brunswick a culture of activism, as exists in Vermont. What kind of social, economic, or cultural shift would be required? Could New Brunswick communities adopt institutions similar to New England town hall meetings? Relatedly, can New Brunswick implement stronger conservation policies? In particular, what specific policies are required for this province? What potential hurdles would be faced in their implementation? Another research question to consider is the role of the Irving monopoly in New Brunswick in influencing economic and environmental policy in the province. We might also usefully contrast the Irving group of companies with the less monopolistic firm structure in Vermont.

It is also worth considering other small “have not” jurisdictions and the applicability of their experiences to New Brunswick. For instance, Prince Edward Island, like Vermont, has strong conservation policies. The Island also has experienced steady population and economic growth through establishing economic niches in areas such as tourism and wind power. Another jurisdiction to consider is the state of West Virginia, in the poor Appalachian region, which provides an example of the negative consequences of economic development that fails to account for ecological and social considerations. Mountaintop blasting in the state is destroying the landscape and endangering the health of West Virginians.

Returning to the topic of this paper, it is important to note that while Vermont does provide many valuable lessons for New Brunswickers, the state is by no means perfect. The economic downturn has taken its toll on the state as unemployment rates have nearly doubled. Furthermore, while the rural areas do show some signs of economic sustainability, growth and business in the state are mainly concentrated in the Greater Burlington area. Also, while the labor demographic problems may not be as dire as in New Brunswick, like other rural states Vermont faces issues of youth out-migration and an aging population. Other concerns include the loss of agricultural land to suburban sprawl and tensions between environ-



mentalists and the political establishment over plans by the state's governor to cut funding to conservation initiatives (Vermont Land Trust, Press Release 2009; Costanza et al. 2004, 145-149; Ewan and Condon 2009, 4-5).

Nevertheless, Vermont still provides a good example of a small "have-not" jurisdiction finding compatibility between the goals of economic development and environmental sustainability. Currently, New Brunswick performs poorly on many environmental indicators when compared to the rest of Canada (Harvey and Watson 2008, 99-109). This does not have to be the case and, as Vermont shows us, a more sustainable future is possible for New Brunswick.



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## ENDNOTES

<sup>1</sup> This difference in the average incomes of New Brunswickers relative to the Canadian average is significant even when accounting for the Consumer Price Index (CPI) as New Brunswick's CPI level is only slightly below the Canadian average. As of February 2009, New Brunswick's CPI was at 112.0 relative to the Canadian CPI of 113.8. Statistics Canada, "Latest Release from the Consumer Price Index." Statistics Canada, <http://www.statcan.gc.ca/subjects-subjects/cpi-ipc/t090319a2-eng.htm>.

<sup>2</sup> According to the 2001 Canadian Census, between 1996 and 2001, 6% of New Brunswick's population over the age of five left the province. This figure rose to 11% for youth aged 15 to 29 (representing an out-migration of 16,400 youth). This out-migration was likely due to a desire to find work as youth unemployment in New Brunswick averaged 17.7% between 1996 and 2001 in contrast to the Canadian average of 14.3% for this same age group, Statistics Canada, "New Brunswick: Heavy Losses in Migration to Ontario." Statistics Canada, <http://www12.statcan.ca/english/census01/products/analytic/companion/mob/nb.cfm>.