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THE LONE EAGLES

INFORMATION PROFESSIONALS AND RURAL ECONOMIC DEVELOPMENT



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About the Rural Renaissance Project

The Rural Renaissance Project (RRP) explores solutions to issues facing our rural communities. Many of the challenges can be traced to old public policy models which may no longer be appropriate in today's wide-open, fast moving trading environment. In addition, the psychological malaise within the agricultural sector, exacerbated by downward trending commodity prices, threatens to overshadow the best ideas, projects and opportunities that abound in rural areas. The RRP, however, takes the view that there are opportunities in the midst of adversity that call for a new focus on the advantages of living and working in rural communities. The RRP's focus is consistent with the Frontier Centre's theme of seeking "New Economy" solutions to "Old Economy" challenges.

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THE LONE EAGLES

Information Professionals and Rural Economic Development



Executive Summary

The development of instantaneous, rapid and reliable communications systems is transforming the rural areas of North America. The exponential expansion of the necessary infrastructure to the most remote regions, often expressed as the "death of distance," implies a revolutionary change in social and economic behaviour. For the first time in human history, rural regions have as much information as cities. Consequently, at least in the service sector, rural regions can compete with urban centres.

The environmental quality of exurban life has always exceeded the norm in cities, and evidence suggests that this gap is widening. Many in the demographic group broadly defined as "information professionals" are reaching that stage in their lives where this consideration has become an important priority. For a certain percentage of them, country living is the preferred option. Twenty years ago, no means existed for them to work outside cities, to manage, store, analyze or transmit information efficiently. Now that ability has arrived.

The Denver-based Centre for the New West uses the term "Lone Eagle" to describe self-employed information professionals who live in rural areas. In many developed countries, the trend represents a quiet migration towards country living. In the United States, for example, many rural areas are gaining population.

These information professionals are well placed to take advantage of the strategies of outsourcing and contracting out now commonly engaged by many corporations. Modern enterprises must be nimble, flexible and quick, and they expect the same qualities from suppliers. Highly skilled, entrepreneurial and motivated Lone Eagles are ideally placed to take advantage of this demand. They can fulfill their strong desire to live a high quality rural life without any loss in productivity.

This trend to rural living will only accelerate, as more people forsake cities for a higher quality of life in rural areas. Modern threats like epidemics of the SARS type, terrorism and crime are widely perceived as reducing the quality of life in our biggest cities. Even more city dwellers are consequently opting for country life.

Instead of "chasing smokestacks," rural communities should take advantage of the environmental and social amenities they have to offer. The priority for enhancing their economies must shift from the pursuit of urban-style industrial expansion to an emphasis on communications infrastructure and environmental quality. Making sure that these fundamentals are in place represents a major shift in policies for rural development. Their full exploitation will make these regions ideally suited for the new country pioneers.

A. Introduction

Rapid technological change and continued economic challenges are realities that face all communities, large and small. Rural communities are especially sensitive to change. These communities react quickly to threats and opportunities, hence the boom-and-bust cycle so common in rural Canada. Currently, they are experiencing more bust than boom, as commodity prices spiral ever downward. Declining commodity prices are a reality in primary production economies because technological development spurs greater efficiency and a constantly expanded global supply of basic commodities. Although extraordinary world events such as famine, weather, or war provide occasional exceptions, abundance of commodities and declining prices have been the rule for many years, and this trend with some exceptions due to.

All things being equal, these inexorable price trends would be cause for continued rural decline, increased rural to urban migration and the consolidation of communities into larger regional centres. But all things are not equal. New communications technologies, coupled with improved transportation infrastructure, modern medical services and better techniques for housing construction, are changing the equation. Together, these changes hold great promise for rural communities and rural living.

The trend to a service-based economy continues unabated in urban areas. But the hinterland is participating in the same process. Service workers are now a majority in rural economies. This does not diminish the importance of commodity production; many of those service jobs are directly related to serving primary industries or the people employed in these industries. Technical services and managerial consulting are examples of the former, while finance, insurance, and real estate services are examples of the latter. The value they add in terms of efficiency acts as a partial counterweight to steady price declines in commodities. A reduction in the cost per unit of production allows resource exploitation to continue in an unfavourable price climate.

In recent years, a new type of service worker has emerged, namely the information professional (IP). Many of those employed in the service sector deal exclusively in the realms of ideas or information management. Activity in the information industry ranges from traditional data management all the way to professions such as the law, accounting and auditing, consulting, finance, policy analysis and development, insurance, marketing, writing, and journalism and the arts.

Our society has developed a great reliance on the timely and efficient provision and transmission of information in whatever form. These activities have been greatly enhanced by new communication and data management technologies. More and better information is the rule; as information management and transmission became more efficient, workplaces became more flexible. Organizations need information from a wide variety of sources, at any time of the day or night. Costs of information management continue to plummet. In many cases, the providers of information and the experts in its transmission are not employees in the traditional sense of the word. They provide data and advice to organizations in a fee-for-service arrangement.

Analysts Beyers and Lindahl refer to these types of businesses as providers of “rural producer services.” Typically these enterprises provide services to businesses and

government, as opposed to retail operators. Producer service firms can be further divided into those that provide services to local businesses and those who export them. Service exporters, as defined by Beyers and Lindahl, are those who derive at least 40% of their revenues from outside their local area. They categorize these exporters as “Lone Eagles,” one-person proprietorships, or “High Fliers,” firms with more than one employee.

One of the by-products of the new information age is the “virtual company” or virtual organization.” Existing in name only, with perhaps a small head office, these organizations are loose affiliations of information professionals linked to each other via e-mail, the Internet, the telephone and the fax machine, with the occasional airline ticket added to the mix. Where they live is less important than their ability to communicate.

Only now are we beginning to realize the significance of these developments for rural communities. Conventional wisdom previously held that urbanization would relentlessly proceed and that remote rural regions would continue to decline. The rural communities that would remain after such a process would be small, and exist only to serve the few workers and companies that would remain behind to run highly mechanized and capital-intensive primary production industries or mega-farms. These assumptions are no longer reliable.

Some other apparent trends are also affecting the outcome. Life spans are increasing, the result of better medical care and healthy living. Many people, especially from the information industry, are seeking to leave full-time work and the stress that accompanies high-pressure jobs. Many are looking to relocate to less stressful (and lower cost) areas and are seeking higher levels of environmental quality. The demographic bubble of the “baby boomers” is increasingly the recipient of estates from their parents. This transfer of wealth provides many of them with the option to pursue other paths in life. Finally, these people are eager to remain engaged with the larger society, albeit on their own terms. They can now stay in touch from afar.

Many information professionals and even businesses are looking for regions and situations that provide a high quality of life. They assess a location’s desirability based on its livability. As Curtis Johnson, a Minnesota-based consultant and commentator on the future of metropolitan regions, points out, “It used to be that any good place to work was a good place to live; today only good places to live are seen as good places to work.”

What makes a “good place?” For Lone Eagles at least, it combines several attributes, including high levels of environmental quality and personal security, reasonable transportation links, modern communications infrastructure, low-cost real estate, wide=open spaces and a reasonable level of health, education, and community services. Hundreds of rural communities and regions in North America are already “good places”. These regions need new blood, new ideas and stable sources of incomes.

Rural communities in Prairie Canada are ideally placed to take advantage of these new trends. The purpose of this report is to discuss the implications of these trends for rural community development in Manitoba and to suggest ways in which rural communities can improve their economic prospects. Case histories are also presented.

B. Trends

Specific information on the numbers of people who are moving into rural regions and establishing enterprises based on producer services is difficult to find. This is not surprising, as many of them are established with little or no fanfare. The nature of this activity also makes this style of enterprise almost invisible. No storefronts or signs, nor any outward manifestations of business activity, identify them. Zoning variances are usually not required for such businesses, so the usual monitoring through government records is impossible. Because they are typically small enterprises, they pop up without the ribbon-cutting and promotion typical of business start-ups.

Beyers and Lindahl used the United States Bureau of Census figures for 1993 to estimate the number of rural jobs provided by Lone Eagle or "High Flier" businesses. These two groups made up 40% of the 1.6 million jobs categorized as rural producer services in the United States, or 640,000 job equivalents. The corresponding number for Canada, with ten percent of the American population, would be approximately 64,000 rural jobs in producer services. Manitoba, with approximately three percent of the Canadian population, would generate about 2,133 jobs or job equivalents. Rural Manitoba, in other words, is home to at least 2100 enterprises in the Lone Eagle or High Flier category.

These pro-rated numbers are very crude, but for a number of reasons are probably underestimated. First, the data are about 10 years old. Telecommunications technology has improved dramatically in the last decade, and more and more rural areas are serviced with information infrastructure. The rapid expansion of satellite options now allows these services even where land lines do not exist. Furthermore, local rural markets in Canada are much smaller than in the United States. It is therefore reasonable to expect that a greater proportion of these enterprises share the Lone Eagle or High Fliers status. The overall Canadian economy is more export-oriented than in the U.S., so our proportion of outsourced work is probably higher. Finally, the last 10 years have seen an explosion in flexible working and service arrangements. This last point, combined with the trend of companies' shedding experienced workers and then re-hiring them as consultants, has created conditions favourable for the development of export-oriented rural producer service enterprises.

Some quantitative information does exist on the movement of city dwellers into the U.S. countryside. It is definitely at odds with the prevailing view of continued rural decline. According to an article in the *Wall Street Journal-Real Estate Journal* (July 2, 2003), "A decade-long pattern of city dwellers retreating to rural counties in search of a better quality of life is likely to continue, says Calvin Beale, a senior demographer at the Agriculture Department. Based on 1999 Census estimates, most rural counties are gaining population." An article on Lone Eagles in the *Puget Sound Business Journal* (1998) noted, "Washington's small towns are seeing another kind of new-comer: well-educated entrepreneurs who use the latest telecommunications gear to sell specialty goods and services all over the country if not worldwide. . . . Some Lone Eagles fled a big city and a corporate job. Many of them moved because they were fed up with crime, long commutes, miserable weather, burdensome taxes and high costs of living."

The trend was presciently described by social philosopher Peter Drucker, in a 1999 *Atlantic Monthly* article on the information revolution: "In the new mental geography created by the railroad, humanity mastered distance. In the mental geography of e-

commerce, distance has been eliminated. There is only one economy and only one market.”

The mastery of distance for the information professional has been matched by the ever-increasing importance of knowledge and ideas. Employers and clients (at least the most progressive ones) do not care where knowledge comes from; just as long as problems are solved and services are provided. This is where the inexpensive Lone Eagle comes in. By providing producer services from a home office with few frills, the Lone Eagle is in a position to compete very well with his or her structured competitors, who often have high overhead costs. Can a Lone Eagle do everything? Most assuredly not. But enough new styles of work exist to provide fertile markets in which many a Lone Eagle can thrive. Definitions and categories of work can become semantic strait-jackets. In the wired world, a wide variety of work arrangements are possible.

A successful Lone Eagle is flexible, nimble, and creative. Just-in-time delivery, constant change, competition, adaptability, innovation, and flexibility represent the new business model. Many economic entities have evolved into virtual organizations where associates are dispersed, rarely meet in person as a group, are in constant communication, and are always ready to respond to the needs of the group or to present new ideas to the “firm” at any time of the day or night.

A major precipitating trend has been the steep decline in the cost of information management. In a January, 2001 *Atlantic Monthly* article on the new economy, Jonathan Rauch noted that, “The cost of storing one megabit of information, or enough for a 320-page book, fell from more than \$5,000 in 1975 to seventeen cents in 1999.” It’s probably far less now. The cost of computer hardware itself has taken a similar path.

Employers and clients are always confronted with the “make or buy” decision: “Do we do this in house, or farm it out?” Increasingly, the latter has become the option of choice, since contractors do not carry the high costs of full-time staff or infrastructure. Throw in the new flexibility required by the marketplace, and the Lone Eagle is now in lock step with the requirement to reduce costs, be innovative, and stay one step ahead of the competition. This is why organizations are allowing some of their associates to work “wherever,” just as long as the service is provided. Apart from the odd collaboration, why would a software developer need to come into an office every day?

In addition, many employers are rehiring newly retired or downsized former employees as consultants. Such individuals represent a storehouse of business knowledge that firms are loath to lose. For these people, the opportunity to stretch their intellectual muscles and earn more money as part of a semi-retired” lifestyle adds another dimension to their lives.

Besides the mere existence of these opportunities, the new marketplace is receptive to the creation of new ones. By presenting new ideas, innovative work solutions, and by pushing the boundaries, Lone Eagles can thrive. Their human ingenuity is the real natural resource.

As Jonathan Rauch notes in his January 2001 *Atlantic Monthly* article on the New Old Economy: “Most people understand intuitively that the essential resource in Silicon Valley is not magnetic particles on floppy disks, or hard drives in servers, or lines of code or bits of data; it is human ingenuity.” Rauch goes on to say, using the petroleum industry as an

example: "Knowledge, not petroleum, is becoming the critical resource in the oil business; and though the supply of oil is fixed, the supply of knowledge is boundless. In every sense except the one that is most literal and least important, the planet's resource base is growing larger, not smaller. Every day the planet becomes less an object and more an idea."

In other words, what you know is what counts. Ideas have consequences and ideas matter. What you know is more important than where you live.

C. Case Histories

The five case histories presented below were derived from interviews with individuals who are in the category of Lone Eagle or High Flier, as defined by Beyer and Lindahl. The following questions were asked:

1. Could you describe your business/enterprise?
2. Why did you choose to live and work where you do?
3. What role does information technology play in your business?
4. What future developments in information infrastructure would you like to see?
5. What proportion of your business is export oriented?

Since the sample size is relatively small, this analysis cannot be considered as exhaustive. But the consistency of results is in itself instructive. Names were used with the permission of the subject. Some declined to let their names be used, but such identifications are not important to the analysis.

1. A. J. Dunsmore Engineering – Allen Dunsmore, Proprietor

Location- Dauphin, Manitoba

This business provides electrical engineering services to architects and building designers. The proprietor, Allan Dunsmore, P.Eng, is an electrical engineer whose specialty is the design of electrical systems for buildings. His main clients are architects and building designers.

Dunsmore has located in Dauphin for a number of reasons. His spouse operates a dental practice. The location is ideal since they enjoy outdoor activities such as skiing, biking and golf, all easily accessible within a few minutes. The Dunsmares appreciate the "convenience" of small town life; Dauphin provides flexibility and the ability to "get things done" in a timely manner. Environmental quality is becoming increasingly important as their reason for remaining in Dauphin.

While this business was operating prior to the Internet and e-mail, Dunsmore was emphatic that the new modern communications technologies are crucial to his business. A recent client exemplifies this. From Dauphin, Dunsmore is working on a building in Dryden, Ontario, while the mechanical engineer is located in Kenora, Ontario, and the architect in Winnipeg. Dauphin has the capacity for High Speed Internet, which allows the transmission of complex drawings and designs.

Dunsmore would like to see the future availability of High Speed Internet in all of Manitoba. He perceives the need for wireless access and believes that development the infrastructure to enable it should be a priority for governments. One constraining factor in the growth of his business has been a lack of skilled people to hire. He anticipates that the arrival of High Speed Internet will facilitate staff recruitment.

Less than ten percent of his business can be considered "local." Over ninety percent of its income is derived from the export of services. He noted the contribution that such businesses make to the local economy and the potential for development of businesses not dependant on commodity markets.

2. Ceres Quality Systems – Mike Bonner, Proprietor

Location- Onanole, Manitoba

This business provides services like agricultural auditing, crop insurance adjudication and safety in food production facilities. These plants produce food for human consumption off the premises. Bean processing plants are one example. Because of concerns about food safety and food security, customers require that plants and suppliers have audited systems to ensure those values. As Bonner is one of the first people in Canada to offer such services, he enjoys an important competitive advantage.

His business is located in a remote area near Riding Mountain National Park. Since his business only needs a modem to operate, it was possible to locate it almost anywhere. He chose that location because the area offers "a picturesque and peaceful landscape." As well, Bonner notes that he "fled the city for country privacy."

Information technology and communications are crucial to the success of this business and Bonner could not live there without e-mail. High Speed Internet cannot come soon enough for Bonner. His clientele is spread across Manitoba and he does not rely on local businesses. This would obviously change if a food plant were built in the area.

3. Computer Consultant and Woodworker

Location- Sandy Lake, Manitoba

This individual is the Director of Information Technology for an organization, but will be retiring soon to picturesque Sandy Lake, Manitoba. The business that he plans to establish there will be in the unrelated fields of custom woodworking and consulting in the area of designing automated systems.

This family chose Sandy Lake because they would be free to build the kind of home and business that they want. Friends have also settled there, and the combination of a scenic environment and good transportation were also important factors.

In terms of the computer consulting work, this Lone Eagle absolutely needs High Speed Internet. Satellite and wireless Internet will be adequate for now, but high-speed wireless needs further development. He expects this to be widely available within five years.

None of the business would be local, and he intends to work with businesses and institutions across Canada.

4. Environmental Consultant – Kurt Mazur, Proprietor

Location – Erickson Manitoba

Kurt Mazur works as an employee for a major environmental consulting firm. He travels to various work locations to conduct environmental studies, but is able to maintain a home office in a residence south of Riding Mountain National Park. Mazur selected this location for lifestyle reasons. The proximity to natural and wild places was the most important factor in his choice.

Information technology is absolutely vital to this business and it made this important lifestyle decision possible. High Speed Internet will be an important development. Many documents and drawings are large files and High Speed will make the transmission of these documents possible.

None of the business is local and all the business deals with “export services” right across Canada. Future expansion plans depend on the development of High Speed Internet, since Mazur’s spouse is a graphic designer.

5. Technical Writer

Location – Duck Mountain Area of Manitoba

This individual works full time for an Alberta company that deals with audio technologies and software solutions for consumer application. Managing projects is also part of this business, but he noted that it was difficult to carry out project management activities from such a remote location.

The location was chosen because this individual had a “lifelong desire to live in a rural setting.” After looking all over western Canada, he and his family settled on the Parkland region of Manitoba as the place that best suited their needs. Prices in B.C. and Alberta were much higher than in Manitoba. This person noted that “environmental quality is the number one reason to live here.”

Information technology is extremely important to this business. Without e-mail, this business would not be possible. The subject considers the current “dial-up” internet service to be “barely adequate,” but since there is no high-speed option, it will have to suffice for now. He is considering a satellite installation.

All of the business is export-oriented.

6. Mechanical Engineer

Location- Northwestern Ontario

This individual operates a family corporate business from an office in a lakefront home in Northwestern Ontario. He is a mechanical engineer, with extensive career experience

working for fertilizer companies. His business now deals with the relocation and management of fertilizer projects around the world. He has managed projects in Canada as well as in the United States, Europe, the Caribbean and elsewhere. He also does a significant amount of work as an expert witness in legal and insurance work. The global fertilizer industry is large and diverse. The specialized nature of his knowledge appears to be in great demand. His business at this time is largely international. He noted that when he is speaking with clients, "For all they know I'm located in an office tower in a big city."

He and his spouse were drawn to the region because of the lakes, clean water, and environmental quality. He noted that they are able to use domestic water right from the lake. "I would never live in the city again," he said. "Out here my alarm clock is the bald eagle that is sitting in a tree on the island just off shore."

He noted that this lifestyle would be impossible in the absence of modern communications technology. He uses a cell phone extensively, and the home office has separate lines for the private phone, office phone, fax, and Internet. He did note that communications services were poor in the more sparsely populated areas of Ontario. He is in great need of high speed Internet and is investigating a satellite installation.

His distance from Winnipeg allows for convenient travel to the airport but he noted that he would not want to be much further away.

All of the business is export-oriented and none is conducted in the area where he lives.

7. Proact Business Transformation Inc. – Art Caston, President

Location – Muskoka Lakes, Ontario

Art Caston is President of Proact Business Transformation Inc., a firm specializing in "enterprise architecture." Caston predicted this dispersed future in his 1992 book, *Paradigm Shift, The New Promise of Information Technology*. With three companies under management and a subsidiary in North Carolina, Caston is proof that complex business and technical transactions can be carried out from a lakeside cottage. He is living the future he predicted in his book.

While he wishes for broadband Internet service, he finds that dial-up service is adequate for most of his needs. To send complex documents, he saves them on a disk and then uses an overnight courier. Mr. Caston's wife is executive assistant for the businesses and his children are also involved.

Mr. Caston is completely taken with the lifestyle he has designed for his family. "As soon as you turn on to our small road to the cottage," he notes, "you feel relaxed." His comments on the efficiency of conducting business in a home-based work environment resonate: "I found most business meetings a complete waste of time. Out here, I am productive and always capable of working because I am in control." His flexible work schedule allows for nice weekday afternoons of golf, even while he is always available to take that important client's phone call.

This constant capacity for work is an important aspect of being a self-employed rural professional. Since weekends and weekdays are little different, this flexibility allows an entrepreneur to serve the needs of clients more efficiently.

D. Caveats for Country Living

For many information professionals, it should be noted, country life is simply not an option, even if they wanted to move. Staff supervision or project management with partners or colleagues on a constant basis is difficult. Similarly, if access to specialized scientific and medical equipment is a work requirement, then urban life is probably the only possibility. Finally, if personal collaboration with colleagues is vital, dispersed rural living is probably not an option. Of course, if constant access to exclusively urban amenities, like restaurants, theatres, symphonies, ballets, etc., is important, then a rural existence is not a realistic option.

The following summarizes the advantages and disadvantages of living in rural areas:

Advantages:

- Lower cost real estate
- Higher environmental quality
- Lower cost of living
- Privacy and personal freedom
- Ability to generate income-in-kind

Disadvantages:

- Distance to services
- Higher transportation costs
- Inconvenience
- Distance to medical and ambulance services
- Lack of school choice
- Fewer traditional economic opportunities

E. The Health Care Conundrum

One of the first questions usually asked about the Lone Eagle lifestyle is, "What about health care?"

If a residence is chosen where the ambulance is an hour away, it must be acknowledged that immediate care after a life-threatening event or catastrophic accident is not possible. For many Lone Eagles, the benefits in terms of environmental health and quality of life are simply worth this additional risk.

On the other hand, rural health care can be surprisingly convenient and effective. The countryside is dotted with little clinics, and the slower pace of life makes doctors much more available for appointments than in the city. There's little crowding at emergency rooms and even some city people are starting to seek medical providers in nearby small towns for the sheer convenience. In fact, rural doctors could be considered the original

Lone Eagles. After all, their profession is one of the most portable and they could live anywhere. But these doctors chose rural life, probably for lifestyle reasons.

Health and medical services are definitely available in rural areas. Reliable transportation links and better medical technology also mitigate the fear that any reasonably healthy person might have of rural life. Remote operations are starting to be performed as well. Although these complicated procedures are carried out by highly specialized physicians, from the most modern of medical facilities, the patient can be located anywhere.

Western Australia has a rural health care system known as “Telehealth.” According a government report, “Telehealth offers enhanced health service provision to rural and remote areas and is being used for; assessing patient records and up-to-date health related data; transmission of X-rays, ultrasound’s, CT scans and a wide range of other diagnostic information between remote locations and specialist resources for assessment; video conferencing for counseling, diagnostics, training, support, and so forth. The benefits of Telehealth include:

- Increased availability of services including psychiatry, radiology and dermatology,
- Increased accessibility of services therefore reducing stress,
- Increased acceptability of services through overcoming cultural and gender differences, and
- Increased affordability of services by reducing travel costs and by spreading specialized health services more effectively.”

The same report noted that the introduction of Telehealth may result in the reduction of the number of health service professionals in rural areas, as the efficient dissemination of medical information may make some clinics redundant.

F. Implications for Community Development Strategies

1. Targeting a New Style of Investor and Rural Entrepreneur

The development and installation of new communications infrastructure in rural Manitoba and indeed in all rural areas has catalyzed a revolution in thinking about community economic development.

In the past, it was assumed that the community development was best served by attracting new businesses in the areas of manufacturing and “hard” industry. The development of value-added processing of agricultural commodities represents one type of industry with a fairly successful track record in Manitoba. Many communities hope that further such development will continue. But community development strategies that focus solely on “chasing smokestacks” or hard industry are omitting a vital new area of economic potential, namely the new knowledge worker and the enterprises that result.

As evident in the case histories described above, the new rural knowledge worker demands a high level of environmental quality and access to technology. As well, transportation infrastructure and the ability to access an airport from time to time are also important.

What has fundamentally changed for the countryside is that, for the first time in human history, rural areas have as much information as urban areas. This has never happened before.

Urbanization and the movement of people from rural areas into cities occur for a wide variety of reasons. At least some of that migration happens with people who would rather stay in the country but do not think that they would be able to make a living. Conversely, many urban people would like to live in the country but are constrained by a number of factors.

One of the major constraining factors, lack of information, has been eliminated.

2. The Importance of Environmental Quality

Secondly, the consistent emphasis on “quality of life and lifestyle” reported on in the case histories is consistent with the larger findings of Beyer and Lindahl. They report that, “Quality of life is cited by much larger shares of High Fliers and Lone Eagles than of the other rural firms.” Beyer and Lindahl also note: “Many of the Lone Eagles and High Fliers’ detailed responses [to surveys] elaborate upon quality of life factors, environmental conditions, and desires to get away from urban settings.”

In a 1999 study of nontraditional income, quality of life, and economic growth in the rural west of the United States, Prof. Peter Nelson noted: “Increasingly, household decisions to move to new places are not based on strictly economic considerations, such as wage levels and employment opportunities, but rather on perceived improvements in the quality of life the new residences offer. The promise of better schools, less congestion, less crime, and scenic beauty attract relatively well-off individuals and families that are in a financial position to act upon residential preferences. When these people move to an area, they bring with them both financial and human capital that can stimulate local economic development.”

These findings suggest that rural economic development strategies should focus much more on marketing a community’s quality of life than is currently the case. Ironically, much of the previous agriculture policy in North America provided incentives to farmers to create farmland from wild land. While that may have been an appropriate strategy in pioneer times, a modern agricultural policy should not encourage more cropping of land in a world awash in commodities. Not only does this depress prices even further, it encourages communities to “cut their own throats” by encouraging farmers to get rid of the very environmental amenities that could be used to bring new economic activity into farming communities. This is why communities in the United States need to build on the Conservation Reserve Program that has supported conservation-oriented land use changes in vast stretches of the Great Plains. This new scenic landscape should be considered as places for Lone Eagles to establish businesses. Canada should follow suit with a major agricultural conservation program of its own.

In terms of rural economic development strategies, an effort to catalogue and publicize areas of high environmental quality would be a good first step. Interestingly, these areas would probably be in areas of marginal agricultural land. Regions and landscapes with river valleys, lakes, wetlands, parks, wildlife areas, and forests would all be prime “habitat” for Lone Eagles and High Fliers.

Furthermore, provinces such as Manitoba should investigate the opportunity to market resort towns, scenic regions, and “cottage country” as places for businesses to invest. The current increase in full-time residents in resort communities such as Falcon Lake in Whiteshell Provincial Park attest to the demand for such living opportunities. As well, the Province of Manitoba should endeavor to expand cottage development in a number of key areas and market these new areas as places for information professionals and businesses to work and invest.

3. Establishing Broadband Internet

Once a region’s environmental resources are catalogued, the next most important step is to ensure the installation of the most modern communication infrastructure. The provision of high speed Internet should be a top priority for both local and senior levels of government. Rural Internet usage is increasing rapidly, presumably in response to the improvement in communications infrastructure and general level of awareness. An Industry Canada report showed that the rate of Internet use in rural areas went from twelve in 1997 to twenty-two percent in 1999, a growth rate averaging forty-one percent per year.

The question for public policy makers then becomes, “Should technology lead or follow?” Without broadband Internet, many companies or individuals would not consider investing in rural areas, and public assumption of the cost of broadband establishment, in the absence of any real demand, is risky. McGregor et al. discussed the development of communications infrastructure for Western Australia in a study for the Muresk Institute of Agriculture. They reviewed approaches from around the world, and described the experience in Scotland:

In Scotland two approaches have been used by two different development agencies. In the first instance the provision of IT infrastructure has been shown to be a suitable catalyst to development. The Highlands and Islands Enterprise (HIE) has adopted the approach of supply leading to demand as it realized that its area was going to be the last area in Britain to benefit from ISDN (Integrated Services Digital Network) because of low business volume. In this instance HIE provided five million pounds and British Telecom (BT) eleven million pounds to provide ISDN level services to the remote areas of Scotland including the remote communities of the Highlands and Islands giving them a five year advantage over the rest of the UK. This investment initially led to the establishment of the UK-wide BT caller inquiry services and the relocation of a company providing value-added services to publishing houses (Bryden et. al., 1996). Since then there has been a consequential increase in the number of teleworkers and has more significantly led to rural repopulation in Parishes where there had been a long history of rural depopulation. Another notable factor has been the inward migration of professionals seeking lifestyle benefits.

Demand can also be shown to generate the implementation of the appropriate infrastructure. As an example, Scottish Enterprise, another regional development agency operating in the Central Belt of Scotland, adopted a demand driven approach. Scottish Enterprise used three strategies to stimulate demand for services and hence supply. These were:

- organizing, educating and mobilizing demand;
- integrating advice on better use of communications into the general strategic support they provided to companies; and
- fostering development of new telecommunications applications and showing how companies can use these to add value to their businesses.

The two approaches adopted by similar regional development agencies in the same country show that both supply and demand driven approaches have the same impact. Of interest is that the supply leading to demand approach was adopted in a remote rural environment whereas the demand driven model was adopted in the highly populated area.

In short, information professionals took advantage of the new infrastructure in Scotland and were attracted by the lifestyle benefits. But they needed to have the communications infrastructure in place. The strategy, "If you build it they will come," appears to have merit. It is also noteworthy that the increase in the number of teleworkers led to a "repopulation" of rural areas.

The question then becomes, "Who will build the information infrastructure, the public or private sector?" While the eventual outcome will be the same, it appears that remote areas will need some assistance in the establishment of that infrastructure, or a "supply driven approach" and that rural regions with higher populations should be able to support a "demand driven" approach.

The argument has historical precedence in Manitoba. In the 1950s, the government of Premier Douglas Campbell, although notably frugal in most respects, undertook a massive and expensive project, the electrification of the entire rural community. Although by critics as wasteful, the project's debt was amortized through future rate structures and all of it paid off over time. In addition, the arrival of electricity throughout rural Manitoba made its economy much more productive, and thereby increased the overall tax base. In hindsight, the public investment in technological infrastructure paid dividends far beyond its costs.

Community development strategies should also emphasize the issues of personal security and public health. These two advantages weigh heavily on the minds of people in big cities as they come to grips with epidemics such as SARS and terrorist events like 9/11. Lower crime rates and safer, healthier environments for children in rural areas are often cited as attractions by exurban migrants.

In terms of the contributions that Lone Eagles and High Fliers make to the rural economy, Beyers and Lindahl note: "If we assume that an average rural economy has an economic base multiplier of three, then the Lone Eagles and High Fliers and their employees would generate two additional jobs in the local economy." They go on to say, "With continued advances in information technologies and low transportation costs for people and information, we anticipate these industries will play an increasingly important role in the development of rural economies."

Conclusion

New developments in communication technology and information management have the potential to transform the economy and social organization of rural areas. But these developments are so new and so diffuse and diversified that agencies and communities concerned with rural development have yet to grasp the implications of the communications revolution.

It used to be that cities were the repositories of the world's information and this led to a concentration of knowledge-based enterprises and agencies in urban regions. Sophisticated technical activities required information and a level of collaboration between colleagues that was simply not possible in dispersed rural societies.

The communication and information revolution has completely transformed this situation. For the first time in human history rural regions have as much information as cities. This has never happened before. New developments in information technology have fostered the emergence of the independent information professional. These are people with sophisticated skill sets whose "products" are analyses, information, data, studies, writings, or commentary. They work in all facets of the knowledge-based economy from engineering, to financial management, the arts, journalism, accounting, or any number of professions that deal with information.

There is a new emphasis on lifestyles, personal security, and environmental quality. Rural regions and communities have always been "safe havens" in these terms but, until today, have lacked a critical ingredient; information. This is no longer the case.

Rural communities have an opportunity to market the rural lifestyle to a new group of potential entrepreneurs. Many highly qualified urban professionals are seeking new lifestyles outside of cities and rural communities should be targeting this market.

Independent information entrepreneurs can provide new sources of income and expertise to rural communities. This will enhance and diversify the rural economy, thus providing stability and resilience to regions that heretofore had been at the mercy of world commodity markets.

It is a brand new world for the countryside.

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