

Environment and Economic Development in Ontario Municipalities

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Abstract

The environment provides natural resources to the economy. Economic developers will need to understand proactive and reactive measures to address extreme weather so as not to inhibit economic growth, taxation, employments and quality of life. The links between economic development and environment are multifarious. To have an economic growth with underlying consciousness of protecting the environment, requires a determined decision to place the environment as a primary economic objective.

Introduction

Climate change, which is the major threat to the environment, affects the geography within which the economy operates. It changes growth zone, shorelines, and geographical territories. Research from the University of Sussex reported that climate change will only affect the economic growth of the poorest countries; however, in the long run it will be destructive on developed countries such as, Canada and United State of America.

While the report is partially true because many developing countries have natural warmer climate and the economy resources are climate sensitive sector such as forestry, agriculture, and tourism. However, there are regions in Canada that depend on heavy snow downpour for tourism business and transportation. Climate projections for regions in North America suggest less snow and more rain. Wet areas are expected to be wetter and dry areas drier which will in turn put pressure on the nation water system and water dependent sector such as agriculture, fishing, and health.

United Nation Economic Commission for Europe affirmed that air pollution, which is one of the effects of climate change, affects the economy in several ways: it reduces people ability to work, it affects products e.g food, it damages monumental buildings and infrastructures, it makes the ecosystem to perform less.

Healthy ecosystem requires a balance biodiversity. Biodiversity affects our food, medicine and environment. When undiscovered wildlife specie goes into extinction, it will be a stumbling block for scientists trying to discover new sources of inspiration for future vaccines and medications. Biodiversity provides recreational business opportunities, hurricane storm urge protection and good quality of life. To protect the biodiversity ecosystem policies must be established.

Ontario Municipal Environments

There are several activities connected to climate change that have negative effect on the environment, such as, urban sprawl, soil degradation and erosion, waste disposal etc. All these factors inadvertently have a deep connection with the economic growth and quality of life.

Urban Sprawl

The Pennsylvania Land Trust Association reported that sprawling patterns of development create heavy economic burdens and problems. Urban sprawl is typically a low-density development community with high automobile dependent. The design has an endless outward expansion that consumes significant natural and man-made resources.

The Green Horseshoe of Ontario is Canada's most populated and fast-growing area. Farmlands makes up about half of the land area of the GGH and represent one of the most important economic sectors of the region, contributing \$11 billion and 38,000 jobs to Ontario economyⁱ. This economy activity generates 1.7 billion in tax in revenue for the three levels of government, about 38% of all taxes received from agriculture in Ontarioⁱⁱ. The government of Ontario initiated Greenbelt plan 2005 to protect the Green Horseshoe area; however, preservation of farmlands outside the greenbelt is uncertain and can still be paved over for development.

Strong and stable agricultural industry is essential to Ontario municipals for long-term economic health. The municipals should adopt smart growth that focuses on new development and redevelopment where there is existing or planned infrastructure rather than farmland conversion to urban area. Smart growth conserves valuable use of natural resources through the efficient use of land, air, and water. Preserving farmlands will promote better public health and ensures food security

Soil Erosion

Poor land management can cause soil erosion with impact not just food production but water quality, and infrastructuresⁱⁱⁱ. The Grand River Conservative Authority Ontario identified watersheds, such as, Upper Conestoga and Fairchild's Creek has having significant soil erosion issues. The Authority also educated farmers on how to reduce soil erosion problems on their farms by emphasizing the importance of using cover crops which are planted between harvests. Cover crops not only reduces soil erosion, they reduce nutrient loss and improve soil fertility. When there is food scarcity, goods and services become expensive.

Waste Disposal

As the population of Ontario increases, the wastes produced will also increase. When wastes are disposed indiscreetly the environmental effect include water and air pollution, floods and health issues. A municipal that is susceptible to flood may not be able to attract or retain business.

Ontario generates almost 12million tonnes of solid waste^{iv}. Waste diversion is an important strategy of solid waste management. This strategy is designed to reduce the amount of waste disposal by recycling, compositing, and reusing.

The diversion of waste from landfill has been found to provide net job creation^v. However, jobs related to collection of waste and maintenance of landfill may be displaced in the waste disposal industry. But more jobs are created in the waste diversion industry, for example, people are hired to collect diverted materials and to work at material recovery facilities.^{vi}

Economic Developers should think about the future by understanding the scope and linkages between different issues at play. Issues needs to be understood along with its links with other issues to design a solution that can minimize unintended consequences. Striking a balance between action needed over the short, medium and long term is critical to understand the timeline to weigh the consequences of our action now and later. Finally, if we approach future from a risk management perspective, we can develop alternative paths for action and adapt to challenges that emerge.

Report from Economic Developers Council of Ontario Conference 2019

Economic Development professionals are saddled with the responsibility to strike a balance between business retention and attraction. Though economic growth is often seen as at odd with the environment, the EDPs at the roundtable aimed to balance the concepts, drawing on analysis from experience and environmental policies on the ground. Professionals at the roundtable discussion were representatives of municipalities from the far north, southern Ontario rural areas and the city of Toronto. The roundtable discussion was held for the purpose of asking the following questions:

What environmental trends/changes/challenges do you see impacting your community in the next 5-10 years?

There was unanimous agreement that all levels of governments should introduce stern regulations to protect the environment, but this action will make investment and business unattractive to foreign and local investors. Consequently, this may result into job exporting to developing countries like Mexico, Nigeria etc.

The beautiful rainforests were seen to be under threat of forest fire because of climate change. Greenhouse gases are causing the global temperature to increase and the climate to change and this enhances wildfire in the forest.

Caribou is an iconic Canadian species that inhabits the Arctic and mountain regions; there are high prospects that this species will migrate en masse from their habitat due to increased mining exploration and development, absence of effective land use planning, and climate change altering the habitat.

The global warming that causes warmer weather, also leads to earlier snowmelt. This is a threat to the winter roads in the far north that connect remote first nations communities to highways and rail system. The winter roads reduce cost of transporting consumer goods, convenient access to primary healthcare, job creation and training opportunities for first Nations involved in delivering programs and services.

Similarly, representatives from Muskoka stated that their tourism sector is projected to experience some challenges. Muskoka tourism business account for 3.4% of Ontario GDP. Resort operators link weather pattern to revenue and jobs. Both snow and sunshine are

essential for tourism to flourish. EDPs also envisaged efficient stormwater management system. The objective of stormwater management is to protect water sources as well as mitigate the effect of urban development.

How can your community or the communities of those at your table, change or adapt to prepare for this emerging trend?

Partnering with neighbouring communities to build resilient communities for emergencies preparedness. Nothing can prevent natural disaster from happening, municipalities can take bold steps to mitigate through resilient land use and infrastructure planning. Also, having clean technology support with development of expertise in green mining technology can make communities ready for the future challenges.

Establishing recycling programs will assist communities to manage waste properly. Collaboration with waste management departments in the public and private sector will foster sustainable growth and balance ecosystem.

The municipal government also needs to direct policies towards promoting greenfield land in urban and rural areas. Greenfield development will encourage compact sustainable city which prevent urban sprawl and other factors that damage the environment. Greenfield can help mitigate natural disaster such as flood, drought, desertification, and pollution^{vii}.

The EDPs also stated that the ice road network may not sustain the First Nation north region in the next few years. The First Nations depend on the ice roads for building supplies, healthcare and diesel. The Federal government needs to build concrete and asphalt road so as not to cut services and jobs provided to the First Nations.

The Muskoka Watershed Council provided a plan for climate change in Muskoka in the year 2016. The council came out with fifteen action plans. Some of the action plans include^{viii}:

Actions to improve understanding of the ecological functioning of the Muskoka environment by strengthen and developing new research programs on the management of Muskoka lakes. Actions to address anticipated impacts of climate change. Actions to prepare built infrastructure and its management for the climate by making plan for added capacity for winter road maintenance. Also, to encourage the construction of energy neutral housing. In the same vein, the region planned to promote golf course to replace its winter games.

The Municipal government should encourage natural farming through agricultural parks. Agricultural parks are designed for multiple uses, to accommodate small farms, public area, and natural habitat. This system can improve biodiversity, clean air, and quality of water.^{ix} Toronto and Region Conservative Authority created agricultural parks within its ten-watershed jurisdiction, such as, Black-Creek community farm. Farming on these lands are means of protecting and preserving the environment and providing space for people and organisations to grow and harvest fresh foods.^x

More efficient transit services by municipal and provincial governments. Since greenhouse gas is one of the major causes of global warming, EDPs suggested that the government should fund better transit system to encourage residents to commute rather than driving cars. Similarly,

distribution of goods and services through diesel fuelled heavy trucks should be regulated and, better intermodal logistics like electric rail system should be encouraged.

The Future Ready Framework

The framework is structured to help EDPs to think and better prepared for the future. The framework strives to outline the important issues likely to be of relevance to EDPs in the future. There are three concentric circles that represent different level of control, influence, and awareness.

Spheres of Control

Economic Development professionals represent the control level. All attempt should be made to promote policies designed to achieve the highest sustainable economic growth, employments and good quality of life, while maintaining financial stability and contribution to the development of our communities. Healthy environment is important for sustainable development. When attracting businesses or investors, organisations should plan and implement sustainable green policy guideline that will protect the environment.

This will provide better opportunities for businesses such as, improving the efficiency use of water, energy and other natural resources. Nevertheless, there are challenges attached to the full implementation of these policies. The challenges could be from upper government not in support of a policy, technology advancement, and the desperate act to attracts and retain business in the community irrespective of industry mode of operations.

Spheres of Influence

The EDPs also have sphere of influence over there respective communities. Environmental Disaster are extraordinary and unpredictable events. The influence EDPs has on natural disaster is to build a resilient community. Community resilience will only be evident after a disaster strike, but effort can be made to prepare the community. In February 2018, the City of Brantford issued a state of emergency forcing over 5,000 residents to evacuate their home because of heavy flood. The city provided emergency shelter for affected residents. Similarly, Toronto Island residents became resilient when faced with heavy flood in January 2017. The residents placed sandbags in flooded area to soak up the rain and protect the island's buildings and residents are working full time. Building back community after environmental disaster takes several months; it's important to identify the risk awareness and sources of help in emergency or disaster.

Spheres of Awareness

National and international governments play significant roles that impact economic development and the environment. It is essential that all levels of governments listen to and work with businesses to design policies that will not create unnecessary burden and remove potential barriers to success. International and national levels of government need to acknowledge the importance role of local government in the fight against climate change. Proper funding and human resources, and training should be made available for communities.

Conclusion

There are projections that change of climate would birth creativity, new industries, and new jobs. The new industries are expected to be void of fossil fuel energy such as, battery powered equipment and biomass. Equally, because of the envisaged warmer climate in developed country like Canada, there would be longer agricultural seasons that would enable new arable and cash crops.

ⁱ Statistics Canada 2011, Agriculture census

ⁱⁱ Statistics Canada 2011, Agriculture census

ⁱⁱⁱ Impact of erosion, Queensland Government

^{iv} Statistics Canada 2011, Waste management survey

^v Duncan Bury Consulting, Overview of Stewardship and Extended Producer Responsibility

^{vi} Opportunities for Ontario Waste: Economic impact of waste diversion in North America

^{vii} Greenfield development without sprawl, Jim Heid

^{viii} Muskoka watershed Council 2016, plan for climate change in Muskoka

^{ix} Agricultural Resources Management Division, State of Hawaii

^x Toronto and Region Conservative authority

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