A Community Economic Development Report for Tofino, British Columbia

ECON 3690_01
Executive Summary

This paper is an overview of the current socio-economic well being and analytical assessment of Tofino, BC. With the data collected, a recommended goal will be suggested as a development plan for the community of Tofino.

Tofino is a community situated on the west coast of Vancouver Island with a population of 1,895. Their restricted location constrains the community from developing and forces the community to attain long-term planning. With exquisite beaches and rugged headlands, Tofino offers a wide range of outdoor recreation that people from around the world come to view and enjoy. Tofino is surrounded by a unique ecosystem, so unique that a Biosphere Reserve was created by a land trust to ensure the wildlife habitat is not interfered with. The surrounding location of Tofino has made the community inevitably dependent on tourism.

Although Tofino is heavily reliant on tourism, this paper will explore another option that Tofino may be able to seize in order to diversify their economic base. It will outline some of the major strengths through a socio-economic profile and an analytical assessment. Diversifying Tofino’s economic base will ensure the stability and growth of the community. It will allow community members to enhance their quality of life, through job creation and wealth for the community. As Tofino diversifies their economy, they will be on the road to sustainable development.
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Socio – Economic Overview

Human Capital

Population Demographics

The remote coast community of Tofino is situated in the Regional District of Alberni–Clayoquot on the west coast of Vancouver Island. It has a population of 1,895, as of 2006 according to Stats Canada, and has an increasing growth trend, with a slight decrease in 2009 in population which may be due to the 2008 recession. The higher growth rate of Tofino is likely to be the increasing number of tourism related activities and tourism related business. Figure 1 shows the

Figure 1: Population Growth Rates 2001- 2010

![Population Estimates](image)

Source: Statistics Canada

A steady growth rate at an average of 2% and a high density population focused around the ages of 25-64, suggest that there may lots of opportunity to diversify the economy through entrepreneurship.

Education

A measure of the level of human capital in an economy can be the amount of education attained by the population. Education serves as a measure of entrepreneurship and the skills for the labour force.
Figure 2: Population 15+ with Post-Secondary Education.

Source: Statistics Canada

- Tofino, at 70% in 2006, averages out between Alberni-Clayoquot with 58% and British Columbia with 77%
  - The community is doing better than the regional district, but has much room to grow in order to keep up with the province
- Only 13% of Tofino’s population has a bachelor’s degree, which is relatively close to British Columbia’s with 15% and double the regional district of 7%
  - May mean more entrepreneurial business will pop up around Tofino, rather than surrounding communities

Although, post-secondary education at an accredited university is said to me more conventional and a traditional measurement of human capital, in a coastal remote community we must include other factors of education. There must be knowledge in such practices of fishery, harvesting, marine & ecological aspects in order for the community to operate sufficiently. Although Statistics Canada doesn’t measure these less conventional practices, we must understand that they are a big strength added to the overall level of human capital and production of the economy. This information gap should be identified through the sector level interviews.
Physical Capital

Land Inventories

Tofino has a comparative advantage over other tourist-like industries for their exquisite beaches and rugged headlands, the community offers a wide range of outdoor recreation that people from around the world come to view and enjoy. Currently, there are actions taken towards enhancing the tourism-related industries through creating walkways, height restrictions on buildings and restrictions on big box companies. Some problems that may arise are:

- The community may be reliant on tourism
- May fluctuate with outside business cycles
- Tendency to be seasonal

The community’s natural setting for whale watching, dramatic landscapes, outdoor recreation, and rolling surfs are driving forces of the community. In order to sustain the tourism sector, long term planning is a must regarding the development of Tofino.

Aquaculture

As Tofino is dependent on their location, this gives them an opportunity for aquaculture. Aquaculture is defined as the culturing of farming of finfish or shellfish in a controlled environment such as tanks, ponds, or net cages.

- Requires more employment than tourism
- Year round employment

This resource-based industry stabilized the economy, which helps diversify the economy’s base employment, but still has much more room to become more diversified to feel less dependent on tourism.

Biosphere Reserve

The Clayoquot Biosphere Reserve was created 12 years ago, in January 2000. It was an act to protect the land and live in a more sustainable way while continuing economic activities in the Regional District of Alberni Clayoquot, such as logging and aquaculture. The Reserve encourages community members to create a respectful relationship with the environment.

Conserving the land is critical to wildlife habitat, as the coastal temperate rainforest is a unique ecosystem habiting many species that are endangered or rare. Currently there is no central location or facilities center for education, research or projects to be completed, which is a major downfall to the economy, especially when the Biosphere Reserve is incredibly unique ecosystem and could offer lots of new information and advancements in the field.
## Analytical Assessment

### Location Quotient

<table>
<thead>
<tr>
<th>Industry</th>
<th>Tofino</th>
<th>Alberni-Clayoquot</th>
<th>LQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural &amp; other resource-based industries</td>
<td>75</td>
<td>1,475</td>
<td>0.73</td>
</tr>
<tr>
<td>Construction &amp; Manufacturing</td>
<td>155</td>
<td>3,315</td>
<td>0.67</td>
</tr>
<tr>
<td>Wholesale &amp; retail trade</td>
<td>90</td>
<td>1,890</td>
<td>0.68</td>
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<tr>
<td>Finance &amp; real estate</td>
<td>25</td>
<td>500</td>
<td>0.72</td>
</tr>
<tr>
<td>Health care &amp; Education services</td>
<td>100</td>
<td>1,540</td>
<td>0.93</td>
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<tr>
<td>Business services</td>
<td>180</td>
<td>1,715</td>
<td>1.51</td>
</tr>
<tr>
<td>Other services</td>
<td>415</td>
<td>3,810</td>
<td>1.56</td>
</tr>
<tr>
<td>Total experienced labour force 15 years and over</td>
<td>1,050</td>
<td>15,070</td>
<td>-</td>
</tr>
</tbody>
</table>

The location quotient compares the industrial concentration of the District of Tofino to the Regional District of Alberni-Clayoquot. It takes the local industries employment of each particular industry and divides it by the total employment, then compares it to that of the regional district from a ratio percentage of employment. The location quotient is to characterize specific industries that a community may be specialized in and other areas that may be under represented. The data collected is used with a basic variable of employment data, with the assumption that employment leads to output.

Source: Statistics Canada

- **High Concentration** - Business services and other service sectors
- **Low Concentration** - Agriculture, construction, wholesale trade, finance and real estate
Considering Tofino’s characteristics, the resource base industry, in my opinion, may have room to grow in the form of aquaculture, with a location quotient of 73%, which may be able to support the tourism industry when it’s in the low point of a business cycle.

**Shift- Share Analysis**

The Shift-Share Analysis was conducted using employment data, in Tofino and the Regional District of Alberni-Clayoquot, to identify which industries may have a competitive advantage in a particular area. It creates a relative understanding about the main differences between the industries patterns and the employment growth in particular industries.

*Proportional Shift* – Measures the advantages and disadvantages that Tofino may have in relation to the overall economic growth in the Regional District of Alberni-Clayoquot.
- Exceptional Growth – Construction, business services, finance and real estate
- Declining Growth – Resource based industry and wholesale trade

*Differential Shift* – Identifies which industry may have a competitive advantage compared to the regional district, which are:
- High Shift - Construction, manufacturing, business services, health care, education services, finance and real estate.
- Low Shift – Other services, resource based industries, wholesale and retail trade

The finance and real estate sector, in Tofino, is not one of their strong points, but it does seem they are better off than Alberni-Clayoquot. It is understandable that the business sector has a competitive advantage due to their dependency on tourism.

As for the resource based sector, Tofino has lots of room to grow in order to keep up with Alberni-Clayoquot, which could develop in terms of aquaculture. Seeing other services low differential shift, may be due to the explanation of tourists leaving the community of Tofino for lower priced goods.

**Development Plan**

The major strengths of Tofino are considered:

- Their main source of income being tourism
- Aquaculture offering year round income
- High density of population between 25-64 years offers lots of entrepreneurship

Tofino's economy is already reasonably stabilized, but may want to further diversify their community to create stronger community health.
Recommended Goal

- To diversify the economic base through a narrow scope; focusing on building a research and development center for the Biosphere Reserve in the community of Tofino, this in turn should create spill over effects into the Regional District of Alberni-Clayoquot.

The Biosphere consists of 2600 sq km of protected land, 900 of which are protected for life and 700 that are considered historical temperate rainforest. There are eight communities situated in the Biosphere Reserve, most of which are First Nation communities. The two major communities in the area are Tofino, which is within the Reserve, and Ucluelet, which is just on the outside of the Reserve on the southern end. As the village of Tofino is already a developed community and lies on the southern prominent of the entrance to the sound, Tofino may make the perfect place for a research and development center in the area.

Expansion of Research and Development Center

The following is a list of categorized objectives to expand specific sectors of science, culture and education, for the research and development center:

Science

The research attained from ecology creates advancements in works of academics towards a more sustainable future. It outlines what is changing in the environment and what impacts the communities are having among the current habitats. Although there have been some conflicts between humans and the wildlife, such as bears and cougars, collecting and researching data could help reduce these interactions. Having such information could give insight towards protecting rare and endangered species.

To expand the science sector such incorporations could be included:

- Veterinary Clinic
  - Works of rehabilitation, laboratorial work, reproduction, & wildlife medicine could help protect the rare and endangered species in the area

- Housing Accommodation
  - As there are already some scientists in the area, accommodation may reduce frequent mobility and attract scientists to stay in the community
  - Workers could live on site with their work and be surrounded with people who are working towards the same cause. The increased amount of human capital in the area, will give the community a comparative advantage in ecology
  - Condensed talent in a specific filed creates a support network and collision of knowledge

  Problem: There is a restriction on housing developments in a tourism related community
Environmental Practices

- As Tofino is famous for storm watching, integrating a high efficiency structure for the reuse of grey water and rain water collection may work well and will upkeep with their current values of being environmentally friendly
- Integration opportunities for community gardens; plants enjoy small bits of compost that comes from grey water and harvested rain water
- Allow for lower fresh waster use and less energy and chemical use

Culture

Communities within the Biosphere Reserve offer a wide range of unique cultural experiences. Most of these communities are First Nation which are historic and traditional. On the other hand, Tofino and Ucluelet have become a home to many from around the world. These communities share and celebrate the fine art, maritime heritage and great food, sustaining their culture for the future.

- Rooftop Community Gardens
  - Expand root gardens for elders to pass on their traditional and cultural knowledge about growing local food to the next generations
  - Ensures continuation of First Nations traditions
  - Incentive to access and eat fresh produce locally to keep profits within the community and give a greater personal connection to food
    
    Problem: Testing the feasibility of environments capability to produce a rooftop garden in order to maximize use of space
  - Job creation of Native culture
    - Labour Intensive and spill over effects into rural native communities
    - Responsible management of natural resources
    - Diversification of economic employment base
      
      Problem: Transportation for rural community members

- Farmers Markets and Produce Stands
  - Reduce middle man and increase the producer share of revenue for the R&D center, as well as keeping profits in the community

Education

The Biosphere reserve offers some education, in terms of formal and unconventional learning. The objective of the education sector is to encourage surrounding community members to understand and respect their local environment. To teach the youth why it is important to preserve the land for the future; as they hold the cards to shaping the Biosphere reserve in the future.
• Greater Community Involvement
  ▪ Field trips for school children would teach the community to protect their current environment
  ▪ Volunteer and summer employment opportunities for the community gardens
  ▪ As people become more experienced with their surrounding, the people could become more involved with ecology and protecting the Biosphere Reserve
  ▪ Program development of recording bird and blossom sightings for community participation in the Biosphere Reserve

• Teaching Native Traditions
  ▪ Drum and Basket making
  ▪ Share First Nation stories and teaching of wilderness skills

• Opportunity for tours and cooking classes
  ▪ Using food sources from aquaculture and community gardens together would link the resource based industries together
  ▪ More opportunities for enhancing tourism
  ▪ Create awareness in the community and outside of the community that may reach out to other land trust models

Other problems that may arise
• Infrastructure is essential and there is limited space to build. An evaluation of the current supply of land would be needed in order to asses where to build. Another viable option would be looking into using an unused rundown building, since land is restricted by ocean on three sides.

• A lot of waste comes from the high concentration in tourism, and as tourism increases of the years, environmental degradation becomes more apparent for the Biosphere Reserve. The sewage system would need to be updated to become more environmentally friendly.

• The main source of income is through donations, volunteer work and some government funding. As this project would be very extensive, it will require long term financing. The Research and Development center should secure revenue in future use.
Conclusion
The main outcome of diversifying the economic base through research and development are:

- Linking tourism, aquaculture, and R&D together
- Job creation for First Nations, community members & scientists
- Sustain the Native Culture through education
- Reduce mobility and condescend knowledge of ecology
- Create advancements in ecology
- Limit dependency on tourism

As Tofino's economy is already fairly stable and resilient, enhancing a Biosphere Reserve could help stabilize Tofino’s community health prominently. It would balance and link economic, environmental and social characteristics together.

Although the tourism is said to be resilient, there is always a risk of depletion. Tofino may be expected to diversify their economic base in other ways, if they expect to sustain themselves through the hardships of the business cycles outside of the community. As land is restrictive, Tofino will want to ensure sustainable high density growth instead of geographical community expansion to create a more self-reliant community.