



**An evaluation report of the Prince Edward
Island Federal-Provincial development plan**

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AN EVALUATION STUDY OF THE PRINCE EDWARD ISLAND
FEDERAL-PROVINCIAL DEVELOPMENT PLAN

by

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THE CENTER FOR REGIONAL STUDIES
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Special acknowledgments are due here to Mr. Gerald Steele, one of our students, in appreciation of his guidance, efforts and talent as an organizer, who made our visit to Prince Edward Island a most profitable experience to all participants.

FOREWORD

Under the terms of an agreement made on the 13th of April 1971, with the Department of Regional Economic Expansion, and with the cooperation of the Government of Prince Edward Island, the professors and students of the Center for Regional Studies of the University of Ottawa undertook to submit an evaluation report on the Prince Edward Island Federal-Provincial Comprehensive Development Plan before 31st of May 1971. The report, drawn up following a visit to the island, was to contain a critical analysis of a number of provisions of the plan under a number of major topics: The Historical Background; The Regional Setting; The Local Context; Agriculture; Fisheries; Outdoor Recreation, and Tourism; Water Resources; Education; Health and Welfare; Urban Affairs; and Citizen Participation.

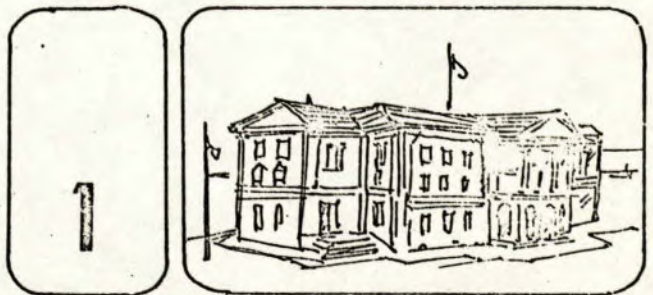
The results presented in this report try, as far as possible, to meet these initial requirements. Each author was given licence to express his personal impressions based on his own perception of the problem in a particular sector and their relationship to the provisions of the plan. It must be remembered when reading this report that it is primarily the work of students who were experiencing their first contact with the real problem facing urban and regional planning today and that this may account for variations in the quality of the assessment. The problems of a limited budget and the constraints of the time available on the island also meant that some of the research could not be pursued to the depth which the professors and students desired.

It is believed that the approaches used, in terms of professional training, were most profitable for all participants and it is hoped that the report will be interpreted in its context. It is also hoped that certain of the elements contained in this report may be of use to those who have received the difficult mandate of implementing the Prince Edward Island Development Plan.

Claude Greffard

Claude Greffard
Coordinator
Center for Regional Studies

May 27, 1971.



1.0 THE HISTORICAL BACKGROUND (*1.1)

by J.P. Marcoux

In 1965 a study to identify the problems faced by P.E.I., the development potential of the Island and barriers to economic expansion was commissioned under the ARDA program. The result of this study was a development strategy for P.E.I. which formed the basis for the present plan. The P.E.I. Joint Federal-Provincial Interdepartmental Steering Group approved the strategy in 1966.

In order to ensure the development of provincial capability to implement the plan and to avoid the imposition of federal plans on P.E.I., it was agreed, by the Steering Group, that detailed programming and planning be conducted by the province.

In April, 1967, P.E.I. established the Economic Improvement Corporation under the direction of Mr. Gallagher. The E.I.C. conducted basic research, aided the development of capability in provincial departments, established communication links with community groups and prepared a complex of programs and projects to implement the strategy.

*1.1 The history of the P.E.I. Development Plan is taken from the following source: "P.E.I. Development Plan" - Historical Review. Internal DREE Document, 1970.

In May, 1968, the FRED advisory board reviewed the proposed P.E.I. Development Plan. There were no objections to the objectives or strategy of the Plan. However it became apparent that several policy decisions were required before approval of the Plan could be given. The FRED Advisory Board requested that the scope of the Plan, especially as it affected reorganization and upgrading of the provincial administration and civil service be carefully reviewed. It also suggested that the priority given to the P.E.I. FRED Plan be considered in relation to all major federal programs within the context of an overall program review. The Treasury Board also questioned the wisdom of committing the federal government to a long-range planning program.

... During the summer, 1968, the Department of Forestry and Rural Development initiated technical discussions with departments specializing in program areas of the Plan.

In P.E.I., during this period, the situation was deteriorating rapidly. The P.E.I. government had reorganized and redirected its budget in anticipation of early agreement on the Plan. There was urgent need for interim action: to give the federal government time to review the Plan before P.E.I. was forced to call upon available funds for projects outside the Plan; to avoid loss of planning momentum in P.E.I. and to strengthen the credibility of the P.E.I. government, the EIC and future federal involvement. Therefore, on 16 August, 1968, Mr. Marchand and

Premier Campbell announced a pre-FRED program package for: the maintenance of the EIC; the improvement of P.E.I. capability to implement the Plan; assistance for local participation in Plan development and implementation; development of recreation facilities at Brudenell and Wood Island; construction of urban recreation facilities and a highway. The total cost of the package was \$2,854,000, the federal share being \$2,284,000.

On October 13, 1968, a request was sent to the Cabinet for authority to enter a P.E.I.-FRED agreement. Approval was given on December 12, 1968.

(1.2)

Early in 1969 Premier Campbell reorganized the P.E.I. public service, creating a Dept. of Development to be the provincial implementation agency and disbanding the E.I.C.

... The first meeting of the Joint Advisory Board (JAB) was held July 2, 1969, in Charlottetown. The board approved a 1969-70 Plan budget of \$28,838,003. The board also agreed to establish a joint working group to examine plan, program and project presentation and to recommend overall presentation improvements as well as specific recommendations.

1.2 Canada - The Prince Edward Island Comprehensive Development Plan 1968-1984, Department of Regional Economic Expansion, Ottawa, 1969.

... On August 6, 1969, a T.B. submission for a 1969-70 Plan budget of \$28,838,003 was forwarded. T.B. minute 691037, August 12, 1969, approved the 1969-70 budget of \$28,537,703. Treasury Board withheld approval of the housing program of \$300,000 until completion of the current policy review and a report from the working committee on housing. On August 29, 1969, a JAB meeting was called to study a P.E.I. request for an additional \$2 million for highway construction and an additional \$500,000 development grant to assist the province in financing its share of the highway program. Due to the need to accelerate plan activities in 1969-70, the JAB agreed to recommend additional \$2 million for the highway program. However the JAB stated that, in future, such requests would be difficult to consider.

... T.B. minute 691588, September 10, 1969, approved the 1969-70 Plan budget increase to \$30,537,703 (additional \$2 million) and the conditional development grant increase of \$500,000.

The JAB met, December 12, 1969, to study amendments and additions to the 1969-70 Plan and to discuss issues raised by the Plan Managers. The board agreed to recommend a decrease of \$151,658, in the 1969-70 budget to \$30,176,015.

Treasury Board has given verbal, but not written, approval to the 1969-70 Plan amendments, additions and budget changes.

On February 20, 1970, the JAB agreed to recommend a 1970-71 budget of \$44,420,203.

2



2.0 THE REGIONAL SETTING OF THE DEVELOPMENT PLAN

by G. Couture

2.1 - Prince Edward Island, New Brunswick and Nova Scotia form a region called the Maritime Provinces. The socio-economic characteristics of this region are similar.

2.2 - However, even though the whole region is fairly homogeneous, the Development Plan takes into account only one province: Prince Edward Island. This situation brings us to ask ourselves if this fact has not played against a development plan in P.E.I. Could this plan bring the Island to take a different orientation from the other Maritime Provinces?

2.3 - The Development Plan of P.E.I. wants to be essentially local in essence. The Island is therefore considered by itself before being fitted into the regional setting. In the Maritimes, P.E.I. runs last in many sectors of activity. To prepare P.E.I. to act effectively on a regional scale, the government thought that it would be better to elaborate a plan concerned only with the Island. We can therefore speak of a make-up plan.

2.4 - The plan was elaborated without fear of obstructing the regional interests. The socio-economic ties that link P.E.I. with the other Maritime Provinces are few and simple. They limit themselves to the

agricultural, fishing and tourist sectors. There are no risks, therefore, than an eventual progress in the Island would come in conflict with the regional or national economy.

2.5 - The P.E.I. Development Plan initially wants to develop the Island resources. This sector seems to offer the most possibilities for increasing incomes. In the regional setting, a strong agriculture would be of great importance.

2.6 - Even if the plan strives mainly to establish strong and numerous socio-economic ties and to exploit the vast agricultural resources of the Island, it also wants to improve the different services of the infrastructure. These services would help the Island to adapt itself easily to change.

2.7 - The P.E.I. Plan is essentially to be the first phase of a development plan destined to help the whole Maritime region. In this perspective, it is of value, because it is a plan that prepares P.E.I. to act adequately on a regional scale. In this regard, it is then possible to validate the argument that says that the plan is to be local in character.

2.8 - Even if the province lags behind in many sectors, as was mentioned previously, it does so in an uneven fashion. This is why the

first seven year phase is adequate for agriculture, but not for fisheries and tourism where it might have been better to think in regional terms, these two last sectors being the most characteristic of the Maritime homogeneity. Post-secondary education could also be better coped with on a regional scale.

2.9 - The regional context does not necessarily imply the Union of the Maritimes, but rather cooperation between the provinces. Such cooperation would eliminate, in part, the obstructive competition between the Maritime Provinces.

3



3.0 THE LOCAL SETTING

by L. Vincent

In order to grasp the ramifications of the P.E.I. Comprehensive Development Plan, it was deemed necessary to situate it in its present local context. In this way, the different programs and sectors can be evaluated according to the present situation, which must be improved. This chapter will be divided into the three following sections: 1) the local physical context; 2) the local social context, and 3) the local economic context.

3.1 The Local Physical Context

Prince Edward Island, one of Canada's Maritime Provinces, is the country's smallest province, but it also has the highest population density. It is situated in the Gulf of St. Lawrence, separated from the continent, i.e. Nova Scotia and New Brunswick, by Northumberland Strait.

This island is part of the physiographic region of Appalachia. Its total area is approximately 2,200 square miles. Prince Edward Island is crescent-shaped, with a length of 40 miles in an east-west direction, and a width varying between 4 and 40 miles. The Island's topography offers little contrast; the countryside is gently rolling or flat, and the province does not possess any large rivers. The northern coast is made up of sandy beaches and wide bays, often hemmed in by sand bars.

The south coast is rugged and studded with cliffs.

The red sandstone, schists and conglomerates of which the Island is composed have been weathered into a sandy loam. The soils originate from this loam, as well as from tills and glacial and marine deposits. The type of soil found on the Island is a podzol, highly leached, very acid, and low in nutrients. But it becomes very productive with adequate applications of limestone and fertilizers, and with good management practices. Sixty-five per cent of the soils are well-frained, stone-free and level or gently rolling. Although 65% of the soil is ideally suited for agriculture, 85% of the soil can be productive.

The Island has a continental climate, which is tempered by the complete surrounding of water, and by the influence of the Gulf Stream. The winters are long and cold, and the summers are cool. The mean annual temperature is 43^oF, with a January mean temperature of 19^oF and a July mean temperature of 67^oF. The mean precipitation is 42 inches, of which 40% falls in the growing season. The number of frost-free days is approximately 150.

Generally, it can be said that the physical aspects of P.E.I. do not hinder the different activities of the primary sector.

3.2 The Local Social Context

In April 1970, the total population of Prince Edward Island was 109,000; one year earlier, the population was 110,000. It appears that the Island is losing many of its inhabitants through outmigration. The Island's rate of participation of 53.3% is below Canada's rate of participation, which is 56.5%. Annual unemployment is from 3 to 7%, and it can go as high as 15-20% during the months of February and March. The province's production is affected not only by this high rate of unemployment, but also by an important factor of unemployment; indeed, the amount of production per worker on the Island is inferior to the national average in all sectors of the economy, but more particularly in agriculture, where it is inferior by 50%. Consequently, the per capita income is 60-70% that of the national average.

According to the Dominion Bureau of Statistics, the ethnic origin of the Islanders is 80% British or Irish, 17% French, with 235 Micmacs. These last come from Lennox Island, an Indian reserve which is part of the province; however, the Comprehensive Development Plan pays very little attention to this reserve.

The specific social problems of the Island are in the field of education, housing, health and social welfare. Primary and secondary education suffers from an overdecentralization (380 schools and 370 school boards),

and generally, the professors are less well-paid and less competent than the Canadian average. Decent housing is hard to come by. In the field of social welfare and health, there is a duplication of efforts; the employees also have very little chance to better their training.

It therefore seems that the Comprehensive Development Plan must try to remedy this situation.

3.3 The Local Economic Context

The Island's economy, which is at the base of the local social context, is also lacking in certain ways. Indeed, even though most sectors have shown a moderate growth from 1969 to 1970, it is still falling behind the national growth rate. The per capita income has risen by \$136 in 1969, which brings it to 62.4% of the national average. The manufacturing industries experienced a greater wage increase than any of the other sectors, but their level of employment did not change.

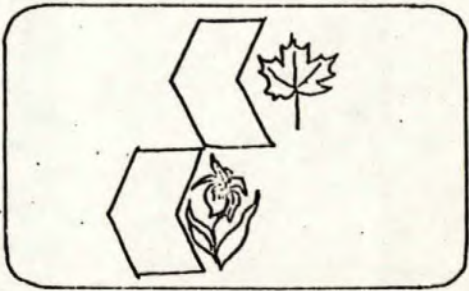
The Island's economy is based on the resources of the primary sector. The basic industry of the province is agriculture; indeed, in 1966, 66.4% of the land was classified as agricultural land, and 6,357 farms are enumerated, of which 3,328 are commercial. The potato is the principal agriculture product.

The fishing industry is also very important. In 1968, there were 3,301 fishermen, of which 90% were lobster fishermen. Other species also fished are oysters, cod, haddock, mackerel, sole, scallops and clams, as well as other less important species.

Tourism is also becoming more and more important in the province's economy.

It is thus in this general context that the different programs of the P.E.I. Comprehensive Development Plan were thought.

4



4.0 THE DEVELOPMENT PLAN

by A. Bendwell

The governments of Canada and of Prince Edward Island decided to formulate a plan to develop the social, economic and institutional aspects of the province. A series of projects and programs were prepared to develop the region. We want to present, in this section, a brief outlook of the objectives, the strategy and the implementation of the programs and projects of the plan.

PROGRAM 1 - RESOURCE REALLOCATION AND DEVELOPMENT

1.1 Integrated Management of the Land

- a) Detail survey of the characteristics of property and land use.
- b) Intensive program to survey land titles.

1.2 Development of the Agricultural Resources

a) Objectives

- 1) Net added value of \$48 millions in 1976.
- 2) 2,500 commercial farms.

b) Strategy

- 1) Reorganization of the Provincial Department of Agriculture.
- 2) Management courses for the farmers.
- 3) Aid to land reconsolidation.
- 4) Diversification of the production.

c) Implementation

- 1) Improvement of the efficiency of the Dept. of Agriculture.
- 2) Program to form agronomists and technicians.
- 3) Courses for farmers and establishment of 150 model farms.
- 4) Land consolidation and implementation of an anticipated pension plan for farmers that want to sell their farms.
- 5) Effective system of agricultural loans.
- 6) Implementation of an agricultural research fund of \$3,375,000 for 15 years.

1.2.2 Tourism and recreation

a) Objectives

- 1) Help to expand the tourist industry.
- 2) By 1980, to have the tourists spend \$18 millions. This can be done by having a longer season and new facilities.

b) Strategy

- 1) Stimulate private investments in varied facilities and services.
- 2) Zoning and control of the quality of the facilities.

c) Implementation

- 1) Formation of five integrated recreative complexes.
- 2) Construction of 6,000 new lodging units.
- 3) Creation of a credit fund to help finance the lodging units for tourists

1.2.3 Forestry

a) Objectives

- Establish guidelines of development that are conform to the concept of optimum use of the land.

b) Strategy

- 1) Long term forestry development program.
- 2) Planting of trees and development of forests.
- 3) Grouping of sawmills in order to get a scale economy.

1.3 Fisheries

1.3.1 Coastal fisheries

a) Objectives

- Net production of \$9,000 by fisherman in 1980.

b) Strategy

- 1) Decrease the number of fishermen.
- 2) Insist on the transformation of the raw product.

c) Implementation

- 1) Concentrate the operations in 14-20 ports.
- 2) Improve the warehouses and repair services.
- 3) Limitation of the number of lobster fishermen by emitting fishing permits.
- 4) Help the fishermen that want to retire.

1.3.2 Sea fisheries

a) Objectives

- Increase the expansion rate by 4%.

b) Strategy

- Modernize the transformation factories.

c) Implementation

- 1) Modernization of the factories.
- 2) Formation courses for sea fishermen.
- 3) Vulgarization courses.

PROGRAM 2 - SOCIAL DEVELOPMENT

2.1 Education

2.1.1 Primary and secondary levels

a) Objectives

- Improve the quality of the teaching and double the percentage of students that finish grade 12.

b) Strategy

- 1) Reorganization of the financing and the administrative integration.
- 2) Formation of a highly qualified teaching staff.
- 3) Modern teaching methods.

c) Implementation

- 1) Reorganization of the Dept. of Education.
- 2) Transfer to the Provincial government the financial responsibilities of the local school boards.
- 3) Formation of a polyvalent schooling system.

2.1.2 Post secondary education

a) Objectives

- Elaborate effective programs.

b) Strategy

- 1) Amalgamation of the two universities into one.
- 2) Formation of a technical college.
- 3) Integration with the schooling system of the other Maritime Provinces.

c) Implementation

- 1) Creation of only one university.
- 2) Improvement of student aid.

2.2 Education and Professional Formation of Adults

2.2.1 Adult formation

a) Objectives

- Provide a general education to everyone.

b) Strategy

- Provide a great number of occasions to perfect oneself.

c) Implementation

- 1) The Manpower and Immigration Dept. will expand its formation program.
- 2) Offer part-time courses.
- 3) Counselling services for adults.

2.2.2 Professional formation

a) Objectives

- Raise the degree of mobility of the man power.

b) Strategy

- Reorganize the actual system of professional formation.

2.3 Housing, Urban Services and Planning

2.3.1 Housing

a) Objectives

- 1) Offer low rent housing.
- 2) Preserve the picturesque of rural dwelling.

b) Strategy

- 1) Concentration of housing in 20-25 localities.
- 2) Aid to rural regions.

c) Implementation

- 1) \$3,500 subsidy for 7,000 new constructions.
- 2) Subsidy to renovate 2,000 dwellings.

2.3.2 Urban services and planning

- Wants to improve living conditions.

2.4 Health Services and Social Assistance

a) Objectives

- Offer better services

b) Strategy

- 1) Creation of an integrated complex for services.
- 2) Organization of popular health clinics.

c) Implementation

- Creation of health and social assistance programs.

PROGRAM 3 - INFRASTRUCTURAL SERVICES FOR RESOURCE UTILIZATION AND FOR BUSINESS

3.1 Transportation

3.1.1 Access roads to resources

a) Objectives

- Make resources accessible.

b) Strategy

- Infrastructural services to economic activities.

c) Implementation

- Construction of 479 miles of road.

3.2 Energy

a) Objectives

- 1) Overcome the difficulties of a small market.
- 2) Improve transmission of energy and intensify the electrification of farms.

b) Strategy

- Achieve scale economies by linking up with the electrical network of the Maritimes.

c) Implementation

- Distribution of the triphase current.

3.3 Elimination of Industrial Wastes and Water Supply

3.4 Manufacturing

a) Objectives

- 1) 10% growth to 1980.
- 2) Production of \$37 millions in 1976, of \$66 millions in 1983.

b) Strategy and implementation

- 1) Technological improvements to existing industries.
- 2) Integrate industry to the plan.
- 3) Multiply industrial diversification.
- 4) Industrial financing helped by a \$9.7 million fund.
- 5) Aid to industry in matters of technology, engineering, training and management.
- 6) Setting up of an industrial park in Charlottetown.

3.5 Marketing and short-term credit development.

3.5.1 Credit and industry

a) Objectives

- Facilitate credit.

b) Strategy and implementation

- Formation of a provincial trust organism.

3.5.2 Improvement of the quality of the potato.

3.5.3 Product marketing and development

a) Objectives

- 1) Research on commercialization and promotion of products.
- 2) Development of new products.

b) Implementation

- Formation of a research center.

PROGRAM 4 - IMPLEMENTATION

4.1 The Management of the Plan is the Responsibility of the Prime Minister of the Province

4.2 Hiring of Staff and Improvement of Provincial Civil Servants

4.2.1 Administrative development

a) Objectives

- Personnel training.

b) Strategy

- Financial assistance and improvement of civil servants.

c) Implementation

- 1) Leave of absence for post graduate training.
- 2) On the job training of civil servants.

4.3 Public Participation

a) Objectives

- Arouse public interest in the social development of the province.

b) Strategy

- Help the voluntary organizations in explaining the plan to the citizens.

c) Implementation

- 1) Public information, community orientation and participation.
- 2) Formation of two animation teams.
- 3) Auxiliary services of the voluntary associations.

4.4 Evaluation

a) Objectives

- 1) Evaluate whether or not the expenses are in accordance with the objectives.
- 2) System of adjusting the programs and projects.

b) Strategy

- 1) Signal of degree of fulfillment of the plan.
- 2) Reports the advantages of the plan.
- 3) Finalizes the sectors in which a bigger effort is necessary.

c) Implementation

- 1) Critical paths of the project.
- 2) Evaluation of programs and projects.
- 3) Evaluation of the plan as a whole.

On April 1st 1971, only a small part of the budget of the 15 year plan was spent (see table 1). Nearly 80% of the allocated sums will be spent in the coming years.

SUMMARY OF THE BUDGET, MONEY SPENT DURING THE TWO FIRST FISCAL YEARS, AND BUDGET BALANCE ON THE 1st OF APRIL, 71

TABLE 1, 1st part

General Structure	Total Budget (\$1000)	Money spent March 31st, 1971		Balance	
		(\$1000)	%	(\$1000)	%
THE LAND AND THE RESOURCES					
Integrated Management of the Land	4,504	1,226		3,278	
Agriculture	34,997	2,248		32,749	
Forestry	1,472	309		1,163	
Fisheries	8,173	247		7,926	
	<u>49,146</u>	<u>4,030</u>		<u>45,116</u>	
SOCIAL DEVELOPMENT					
Education	105,059	38,043		67,016	
Housing	7,000	843		6,016	
Urban and community development	17,763	1,246		16,517	
Energy	200	95		105	
Health and welfare	6,000	--		6,000	
Animation and participation	10,082	995		9,087	
Roads	14,875	7,294		7,581	
	<u>160,979</u>	<u>48,516</u>		<u>112,463</u>	

TABLE 1, continued

THE MARKETS

Tourism and recreation	12,706	1,508	11,198
Market development	8,750	1,424	7,326
Management and financial development	4,310	197	4,113
	<u>25,766</u>	<u>3,129</u>	<u>22,637</u>

IMPLEMENTATION OF THE PLAN

Management	7,072	1,554	5,518
	<u>7,072</u>	<u>1,554</u>	<u>5,518</u>
	<u><u>242,963</u></u>	<u><u>57,229</u></u>	<u><u>185,734</u></u>

Source: "Action - The Prince Edward Island Development Plan", The P.E.I. Dept. of Development, Charlottetown, 1971.

The source for this section is: "The Prince Edward Island Comprehensive Development Plan 1968-1984", Dept. of Regional Economic Expansion, Ottawa, 1969.

5



5.0 AN ECONOMIC PROFILE OF THE PROVINCE AND THE PLAN

by P. Chen and C. Dudley

5.1 The General Situation

In analyzing the economic profile and finances of the Comprehensive Development Plan for Prince Edward Island, several factors must be borne in mind. The first and foremost of these is that any cursory analysis of such a complex plan can only touch upon general trends in economic development. Secondly, economic analysis and evaluation of results cannot be divorced from the analysis of individual projects which are constantly being modified in substance, timing and monetary input. Economic analysis is, on the one hand, an integral part of the evaluation of each individual project, and on the other hand, in an overall plan framework, it is the study of the allocation of funds between projects, and the timing of their expenditure. At both the micro and the macro level there is a lack of sufficiently detailed information available to enable any critical evaluation to be made in this report in line with the importance and magnitude of the undertakings under the plan.

Because the plan has been in effect for only two of the projected total of fifteen years, an evaluation of results of individual projects or of the plan as a whole would be premature at this time. This is not to deny, however, the propriety of continual reevaluation of the plan and its projects and their modification due to either changed conditions

or to political necessities. Finally, there are further constraints to effective evaluation to be found in the economic process itself. There are many largely unrecorded economic transactions that are not only difficult to analyse because of their great variety, but also because their effects are not easily definable in the simple macro indicators used in economic planning. Examples of such activities are private land transactions and the operations of many small and/or marginal manufacturing industries, including associated service activities.

5.2 Size and Location

Prince Edward Island presents a paradox. With approximately 110,000 people it is the smallest of the provinces. It is the most densely populated in terms of population per square mile of area. At the same time, it is the most rural of the provinces with very nearly 2/3 of the population being approximately evenly divided between rural farm, and rural non-farm categories. More than 15 metropolitan areas in the country have a larger population in the central city proper. As an island, communication with the mainland is via ferry across a minimum of nine miles of open water, or by air with a few flights daily. Economically, there is only a small market at home. The Province is located at one end of the country and is further isolated by the sea. All of the surrounding areas are also classified as underdeveloped or depressed in an economic sense. The net effect of these conditions is to render

the development of the Island as a major industrial area as highly unlikely.

5.3 Natural Resources

As noted above, Prince Edward Island has the greatest population per square mile. It also has the highest proportion of land under cultivation and the most coastline for its area, of any province in Canada. Taken alone, these are major assets. The factors of size and location, as described above, however, present serious limitations. And these simple statistics need careful evaluation for quality as well.

- 1) The population has one of the lowest levels of education in Canada. Using 1961 census data, 52.7% of the male labor force had no secondary education, a figure exceeded only by Newfoundland (53.9%) and New Brunswick (56.8%) (5.1).
- 2) The land is rated good for cultivation and is widely used for this purpose. It is not prime agricultural land, however. The growing season is relatively short and continuous use and application of chemicals is required to maintain productivity.
- 3) The waters around the Island provide opportunity for fishing as a source of income. From the location of the province, deep

5.1 PODOLUK, Jenny, Income of Canadians, (Ottawa: DBS, Queen's Printer, 1968), p. 155.

sea fishing, which is most competitive, is not economical in a major way. Inshore and gulf fisheries, however, offer prime products in lobsters and oysters. The high prices available for these items are offset, however, by limited seasons and supplies relative to demand and the available labor force. The natural result, as predicted by economic doctrine, is the influx of a large number of potential fishermen, production in excess of the natural rate of reproduction of the species, and the consequent need for sharp control of allowable seasons.

- 4) The waters and beaches of the Island also offer prime opportunity for the attraction of tourists. They are reported to be among the best in North America. The insular character of the province is both an attraction and a disadvantage for this purpose, tending to increase the length of a stay, but reducing the number of visitors. The optimum balance and the possible effect of a causeway to improve communication with the mainland is unknown.

5.4 The Economic Implications

1) Agriculture and Fisheries

These topics will be discussed in more detail in separate sections of this report. From an economic point of view, it should be

observed that neither of these sectors is considered to be prosperous and stable in Canada or elsewhere on the continent - with some notable exceptions dependent on size and technology. Incomes and return on investment are markedly lower than in other economic sectors. Prince Edward Island suffers from these industry problems as seriously as anywhere in the country.

Modern development and technology imply larger size and mechanization, with attendant heavy investment, to remain competitive in these industries. The low levels of education, the insular and independent character of the people, the necessity to provide employment and income to the populace, and a predominantly rural background and outlook are inhospitable to the changes implied by modern competition.

A region with predominantly agricultural and fisheries sectors of employment, i.e. a predominantly rural economy, as exemplified by Prince Edward Island, can also have a sizeable "subsistence population", i.e. a population that may do some farming, some fishing, some odd jobs, but engage in none of these on a full-time or professional basis. Statistically, this group is difficult to identify, yet it is assumed that they are a major cause of the low level of rural per capita income. It is also commonly assumed that their level of formal training and skills

are amongst the lowest in the population. Prince Edward Island appears to have its full share of such population - and maybe more. One indication of this is the marked improvement in average incomes of males when standardized for age, level of schooling, and rural and urban distribution as reported by Podoluk, based on 1961 census data (5.2). However, other data on average income from employment show much less effect than might be expected from standardization for occupation, rural/urban distribution, age, or schooling, based on the same data (5.3).

2) Tourism

Unquestionably, the Island offers the opportunity to develop a substantial tourist industry. There are two severe limitations from an economic standpoint. One of these is the extremely short season, partly due to weather conditions and partly due to conventional holiday scheduling. There is little time to generate income and thus earn a return on an investment that must be underutilized, if not completely unused, for perhaps three quarters of the year.

The same short season is also a problem in employment, with a large part of the staff of personnel needed for only a brief

5.2 PODOLUK, Jenny, R., op. cit., p. 164.

5.3 PODOLUK, Jenny, R., op. cit., pp. 166-67.

period in the summer. University students on vacation are a common source of such labor, but this may contribute little to the permanent population. There is, however, a second limitation in tourism as a means of social and economic development. A large part of the employment generated is of the low-wage menial labor category often staffed with female help. This can contribute to social imbalances if there are not sufficient alternate male employment opportunities.

3) Industry

As indicated above, the size, location, and sense of isolation of the Island are important hinderences to the development of major secondary industry. There is opportunity for specialized processing industry for agricultural and fisheries products. There should be opportunity for the manufacture and service of specialized equipment for these and the tourist sector. And there is opportunity for production of many types of specialty items emphasizing craftsmanship, quality, special design, or specialized markets, e.g. catering to the tourist trade as well as to distant markets.

This form of activity requires a degree of initiative and some management skill that is also essential for adequate performance in the agricultural and fisheries sectors. There is indi-

cation that these characteristics are in short supply in the present population. There is also a substantial need for small scale, high risk financing for many of these activities. It should be anticipated that the failure rate might be high. This aspect of financing is particularly difficult for both the usual private lending intermediaries and governmental agencies. The former are conservative by nature and regulation. The latter find that backing a loser is a serious political liability. A possible alternative is an independent financing institution, partially publicly supported and partially in the nature of a cooperative, but being involved in the operation of undertakings to as small an extent as possible.

4) The Post-Industrial Sector

The semi-academic literature is fond of the idea of a post-industrial society. This stems in part from the assumption of changing tastes and desires - away from the materialistic - a possibility that is open to question. In part, also, it stems from rapid increases in the efficiency of production in the primary and secondary sectors of the economy. (It is precisely this situation that plagues the primary economy of the province. The rural population resists the implications of increasing efficiency and decreasing need for individual participation.) Thus, there is more demand for, and opportunity

to produce, services of one sort or another. Often, such services, however, have the same locational requirements as does secondary industry: the need for large markets to serve, or, alternatively, the need for the industries that serve these large markets. There are, however, some activities, particularly those that may be related to or that can make use of the facilities of the tourist industry. These include specialized training schools, convention facilities, and the like. It may be difficult, however, to fulfill the professional labor needs for such activities from the present Island population.

5) Education

Behind all the observations made above is the importance of the quality of the local population in skills, general knowledge, and outlook. There are opportunities for the province, but there are limited prime natural assets. There is substantial competition from other regions, often better located. It is essential therefore that the efforts expended on the Plan for Development of P.E.I., be of a better caliber than the competitive average. In part, on a macro scale, this need is reflected in the major emphasis given to education in the plan. On the micro scale, a close attention to the detail and quality of each decision is important. An evaluation at this level is difficult

since information is not readily available. The macro tools of econometric models and input-output formulations are of little help at this micro level. One can question, however, the rate of expenditure shown to date for education and highway construction. That the latter can be easily implemented, given the prior availability of plans, and should precede and aid later developments in other sectors is unquestioned. The longer range plan, by time period is not indicated, however.

In the educational sector, there is an added difficulty. It appears that all of the routine provincial expenditure for the operation of the educational establishment is included in the development plan. This makes it difficult to evaluate the specifically temporary developmental effort. It is also not clear as to whether the local collections and expenditures on education are in addition to the amounts shown in the plan. It is assumed here that they are. If so, expenditures in the first two years of the plan's operation have been at a rate in excess of twice what it was for the province in the preceding years. In the fiscal year 1968-69, it is reported that provincial expenditure on education amounted to approximately \$9 million dollars. Local collection and expenditure of funds on education added one third again to this figure for a total expenditure of approximately \$12 million dollars. For the first two years under the

plan for development, the average rate of provincial expenditure on education has been in excess of \$19 million dollars per year, a rate of expenditure which will exhaust the allocated funds for education in less than three more years. It is not clear that sufficient funds are available to maintain this rate of expenditure, particularly as the heavy demands for capital construction should be some way into the future.

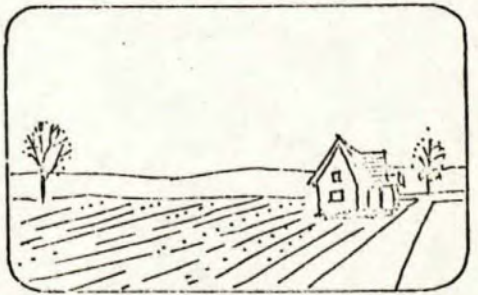
6) Other Finalcial Matters

It is our understanding that there have been revisions in the details of the plan and some substantial shifts of funds in some areas. This is not only natural, but is a highly desirable result of experience and changing conditions. Unfortunately, the recent report on the state of the plan does not reflect these changes nor make any reference to this likelihood. It is suggested that one aspect of developing and maintaining public confidence, acceptance, and, even, social development, would include the open reporting and the justification of changes as they become necessary.

7) Other Recommendations

It has been noted above that it is particularly difficult to obtain precise or current information on the distribution and status of various parts of the population. The fact that the

census of Canada is to be taken this year should provide opportunity for a detailed evaluation of the status of the rural population of P.E.I. The intent would be specifically to isolate the part of the population that can properly be identified as being in the productive occupation of farming on a commercial basis, that part of the population that can be considered a full-time and productive fishing sector, and that part of the population that is using either or both of these occupations for subsistence rather than as professional participants. Such information can be invaluable to those who are planning and reviewing plans for the further development of the Island.



6.0 THE AGRICULTURAL SECTOR

by D. Erskine and G. Steele

6.1 The Context of Agriculture

The position of agriculture in P.E.I. is that of a traditional primary resource industry of inadequate productivity, situated in a low employment economy, and competing in a market and production environment of rapidly changing technology.

A discussion of its future, then, cannot be made without reference to the social implications pursuant to any change of a technical nature germane to the industry. In other words, the problems of agriculture are broader than production and marketing.

The most obvious and troublesome aspect of traditional agriculture is that it has become the refuge for many people trapped in an occupational dead-end, either through underemployment or the absence of transferable skills. A technical solution to the problem of agriculture is confounded by the social, humanitarian and political implications of displacing a large sector identified as the very basis of society. An acceptable solution is one which respects the reality of agriculture's limitations as a generator of employment and income, and which at the same time, does not leave unattended the serious need for social adjustment.

Farming in P.E.I. is following the overall pattern of increased productivity per unit factor, so that the number of farms has dropped from 11,400 in 1941 to 6,400 in 1966, with the farm population dropping from 46,757 in 1951 to 30,841 in 1966 and the agricultural labor force dropping from 17,000 in 1941 to 9,000 in 1961.

Other aspects of life that are in some degree correlated with P.E.I.'s dependence upon agriculture, are indicated by the following data which are used with the conscious assumption that urbanization and industrialization are expressions of economic growth.

- a) The Island is the least urbanized province in Canada. In 1966, 63.37% of its population was classified as "rural", compared with 19% for Ontario, 32.9% for Manitoba and 26.4% for all of Canada. (6.1)

- b) Partly because of its largely scattered and rural population, in 1968 only 14.5% of its rural teachers had a university degree, compared with 25.4% for Nova Scotia, 20.2% for Saskatchewan, 30.2% for British Columbia and 22.9% for all of Canada. (6.2) The implications of this arise from the fact that these teachers serve the majority of Island students.

6.1 D.B.S. Document no. 92-608.

6.2 Third Report and Review, "Canadian Council on Rural Development", Ottawa, 1969, p. 26.

- c) In 1961, P.E.I. had 26.9% of its labor force in agriculture, compared to 5.2% for Nova Scotia, 7.2% for Ontario and 10.2% for all of Canada. (6.3)
- d) Among provinces where agriculture was a significant industry, in 1964, P.E.I. had the greatest difference between agricultural and non-agricultural income, with a percentage ratio of 303, compared with 167 for Ontario, 202 for Manitoba, 136 for Saskatchewan and 202 for all of Canada. In dollar value, an agricultural worker in P.E.I. received \$1100 while the non-agricultural worker received \$3333. (6.4)
- e) The following table of sectorial distribution of investment for 1969 in P.E.I. shows the relative importance of sectors within the province (and by comparison, with Canada) and indicates the need for investment in other sectors if there is to be a growth of employment opportunities

	<u>P.E.I.</u>	<u>Canada</u>
Primary Industry Construction	29.23%	16.16%
Manufacturing	3.08%	17.05%
Utilities	9.23%	20.57%
Trade, Finance, community services	6.92%	8.92%
Housing, Institutions, Government	51.54%	20.20%
		(6.5)

6.3 D.B.S. Bulletin, 3-1-1 (1964).

6.4 S.E. Chernick, "Interregional Disparities in Income", Economic Council of Canada, Study no. 14, 1966, p. 31.

6.5 D.B.S. Document no. 61-205.

6.2 Strategy of the Plan

The directive statement about agriculture in the Development Plan says it "must form the basis of the economy and give the impetus to further provincial growth". To improve agriculture, two broad approaches are envisioned: one having to do with the personal development of producers, the other with structural improvement of the industry. For the farmer, the plan provides for a more effective Department of Agriculture aimed at better extension work with and training for farmers using several approaches. The second involves a program of land consolidation to permit larger farms and a transfer of workers to other sectors, it sees the need for greater credit extension and market development.

6.3 Agriculture as a Growth Sector

Before coming to comments on provisions of the plan and to recommendations, it would be well to consider agriculture's potential for influencing other sectors.

- a) One way in which agriculture is an agent of economic growth is through its stimulation of other sectors, or by what Rasmussen calls its "power of dispersion". A study of Chinery and Watana (6.6) compares agriculture with other sectors in relative power of dispersion through backward and forward linkages.

6.6 Quoted by Albert Hirschman in "The Strategy of Economic Development", Yale Univ. Press, New Haven, 1958, p. 105.

It is assessed to have in backward linkages a ratio of 31 inter-industry purchases to total production, and in forward linkages a ratio of 72 interindustry sales to final demand, as compared with 66 and 78 for iron and steel, and 16 and 17 for trade.

The implications for growth through an increase in linkages will be treated later.

- b) Increased total returns to farmers would be an indication of growth within the sector itself and an indirect stimulus to other sectors. Assuming constant or slowly growing prices, this increase must come from greater commodity demand, either through more population served, or through increased consumer purchasing power. To consider the second possibility, - increased purchasing power -, agriculture can respond in two ways to the relative inelasticity of demand for food products in a situation of growing incomes: one is to promote those areas of production where elasticity of demand is highest; the other is to influence demand for specific products by improving quality, attractiveness or pre-cooking preparations.

While it is true that income elasticity of total food expenditure tends to fall as income rises, there is considerable difference between products. The following table shows the coefficients of income elasticity of demand for North America as projected for 1970. (6.7)

6.7 F.A.O. Document, quoted by John Mellor, "The Economics of Agricultural Development", Cornell Univ. Press, Ithica, 1966, p. 66.

<u>Méat</u>	<u>Cereals</u>	<u>Starch Foods</u>	<u>Sugar</u>	<u>Vegetables Fruits</u>	<u>Fat,Oils Butter</u>	<u>Milk, Milk Products</u>	<u>Eggs</u>	<u>Animal Protein</u>
.4	-0.5	-0.7	0.0	0.3	0.0	.08	.02	.23

This indicates emphasis should be on meat and meat products, vegetables and fruits, eggs, milk and milk products.

6.4 Comments on Provisions of the Plan

- a) The high proportion of landowners in the province means that a much larger degree of consultative planning in land use by individuals in their own interest would have been possible and desirable. The greater part of these land-holders derive at least some security from their land. More consultation could have prevented some of the opposition and/or apathy to be expected from this scheme.

The land use strategy of the plan appears rather innocent in regard to acreage. The supposed 270,000 acres of unused good agricultural land could be added to agriculture only by forcing all existing improved land out of amenity uses and by clearing forest land as well. Not at its greatest extent - when much poor land was farmed, did agriculture ever utilize a total of 820,000 acres. To improve all this land would be to eliminate soil and water conservation, remove recreational assets and farm amenities and reduce forest land to the unproductive swamps and bogs. This makes nonsense out of the proposal to improve forest management.

The Land Development Corporation, as agent of consolidation, seems to be making slow progress over the usual market mechanisms in the movement of land. Emphasis seems to be mainly on the small farmers who held less than 1/3 of all farm acreage in 1961, about 300,000 acres. The large pool of "abandoned" improved land, over 100,000 acres, in the hands of absentee local owners, contributes to the inertia of the land market. So far, no pressure has been exerted to release this land. If the consolidated plan is to be effective much large acreages have to be made available immediately. When one considers that the LDC is interested only in land with clear title, of a minimum \$2500 value, then it is not surprising that so far, only 120 properties have been submitted for consideration and of these, only 32 have been bought by the LDC. Other aspects of the scheme, such as credit through 6 month notes and leases with 30 day termination, all lead to little optimism that the Land Development Corporation will do much as an agent in the growth and restructuring of Island agriculture.

A further note related to agricultural land use is the growing practice in consolidation, to remove windbreaks and fencerows in the name of efficient use of increased mechanization. In addition to the implications for landscape-character and its effect on tourism, there is the added and serious problem of adverse effect on the micro-climate when protection from the Gulf winds is lessened. Added dangers

are associated with excessive snow drifting, soil erosion, etc.

b) Displacement of farm workers

The plan to increase per capita income of farmers by reducing the number of commercial farms to 2,500, assumes that there will be employment opportunities to absorb replaced workers. Any assumptions about urban labor demand, even if correct, would not satisfy the needs of rural people without a serious program of skill development designed to raise the competitive position of rural people.

While it is true that farmers enlarging their operation and incomes are also required to face higher risk, it does not compare to that forced on the low-income members from rural society who are the least fitted to compete in an industrialized area, but on whom is placed the burden of adjustment.

It would seem that the possible approach now being used will satisfy neither rapid agricultural growth nor the satisfactory assimilation of displaced workers. If it can be assumed that it is desirable to keep replaced farmers within the province, then there is urgently needed more intensive investment to accelerate growth of other employment sectors and/or transitional schemes of labor intensive agriculture.

Examples of the latter would be cultivation of blueberries, strawberries, tomatoes and vegetables. These stop-gap measures could cushion the labor transition and would be compatible with the general direction toward farm consolidation and a substantial reduction of farm workers.

6.5 Structural Limitations of Agriculture in P.E.I.

The degree of integration of an economy is the measure of benefit coming to it from increased linkages. The economy of P.E.I. is greatly lacking in integration. When the Island is considered as an economic unit, an increase in backward linkages or inputs does not mean a stimulation of its economy. In fact, it represents a leakage since all purchases of machinery, chemical nutrients and pest control come from without the province. It is estimated that over 67% of value of final demand has its origin in imports. (6.8)

Since there is no long-range alternative to increased capitalization, the leakage effect will have to be minimized at every opportunity. Island labor will have to figure more prominently in creating inputs, such as in local assembly of farm implements.

Even if agricultural products are by nature very close to final demand,

6.8 Kari Lewitt, "A Macro Economic Analysis of the Structure of the Economy of the Atlantic Provinces 1960", Canadian Economic Association, York University, Toronto, 1969, p. 28.

forward linkages will have to be increased if the local economy is to share in the returns to value added. Island agriculture must fit in the tendency to more pre-processing, individual packaging, specialty preparations, reduction processing and so on.

Both these input and output intrusions are important for the producer, for the displaced workers and for the economy if agriculture is to serve as a basis of growth.

6.6 Conclusions and Directions for Agricultural Growth

- 1) The first requirement for agriculture to be a growth sector is that it provide increased per capita producer revenue. Assuming the relative inelasticity of demand for food, increased income is dependent on marginal product. At the present stage, this implies capital intensive production and the mobility of workers into other sectors.
- 2) The integration of both extended inputs and outputs into the local economy will provide the "dispersion" necessary for growth, but also the balanced growth needed to absorb surplus agricultural population.
- 3) For down-stream linkages in the form of food-processing to influence growth, more efficiency and managerial skills are needed in the processing industry. Unit costs could be lowered, either by a reduction

in the number of plants, or by a shift to combine use of dock side fish plants for both agricultural and marine food processing.

- 4) More investment is needed combined with easier credit if the goals of agricultural renewal are to be met. Between 1951 and 1966, total capital per farm in P.E.I. increased from \$9812 to \$22,614, but in the same period, the increase in Canada as a whole was from \$17,158 to \$50,146. (6.9)
- 5) To help farmers assume prudently the risks of increased capitalization, some of the fluctuations of marketing have to be smoothed out. To this end, the efforts of the Market Development Center have to be directed more intensely to the problems of selling those commodities in the production of which Island farmers have relative competence. One gets the impression that the Market Development Center has but half-hearted support of government and that vested interests have a strong voice in influencing policy.
- 6) While it may not be particularly feasible for a government to overtly favor cooperatives, there are indications that some of the problems associated with marketing would be lessened if a way were found to encourage producer and marketing cooperatives for farmers. We suggest government aid to existing movements which promote the cooperative ideal.

6.9 "The Competitive Position of Maritime Agriculture", ABD document Background Study no. 2, Ottawa, 1969, p. 114.

- 7) In the immediate future Island farmers should further specialize in those areas of production where there is potential and where they have experience. Those products would include potatoes, turnips, and other vegetables, small fruits and dairy products, especially fluid milk for direct consumption. Over a longer range, much research and direction is needed to gain comparative advantage by lowering food costs associated with raising and "finishing" beef cattle, hogs and sheep.
- 8) Part of the marketing problem in commodities where, the Island's product-reputation offers some comparative advantage, lies with quality control. More stringent regulations are necessary - with punitive powers - if any advantage in marketing is to be retained. In spite of the caution that "no subsidies are envisaged" we suggest a partly self-financing and partly government supported program of incentives to promote better quality of exports.
- 9) Related to product quality and price is the problem of volume control. Since these are related problems, outside regulations drawn up and enforced by government, may be necessary until farmers enforce their own rules, perhaps through Commodity Boards.
- 10) More investment and planning is needed for other land-related sectors such as forestry and recreation if objectives are to be met.

Lateral integration between tourism and farming is a definite possibility and will be of advantage to both.

7



7.0 THE FISHERIES

by C. Glasgow and J.M. Morin

7.1 Definition of the Problem

The fishermen of Prince Edward Island are relatively poor although the fishing industry contributes a significant share of the Provincial Product. The reasons for this poverty lie in the many problems which beset the industry. The following is a tentative list of these problems:

1) Organization

a) Operations

- There is a lack of modern and efficient techniques.
- There is a lack of managerial skills.

b) Structure

- The fishermen are an independent people, only 15% of them belong to those cooperatives that exist.
- There is a lack of marketing skills.
- Fishing equipment is very costly.
- There are too many ports.
- Overall, these make the industry inefficient.

2) Limited resource base

Numerically, the fish and lobsters are exploited to a maximum. Ground fish are now absent in some areas.

The regeneration rate for many species is lower than the exploitation rate.

There are too many fishermen.

3) Seasonality

This is of course, related to the weather. Ice interrupts operations from January to April. This idle period extends to the processing plants, resulting in large lay-offs of manpower.

The weather also makes it impossible to guarantee a constant supply of fresh fish to the main markets of Toronto and Montreal.

4) Marketing

Advertising is insufficient.

Proximity is an important factor. Prince Edward Island is far removed from the main markets.

Many people are ignorant of how to prepare fish, therefore they do not buy it.

5) Integration and coordination

There is a lack of integration of the fisheries sector with the overall economic pattern.

There is a lack of coordination between responsible government agencies and of their programmes and policies.

The above results in an overlapping of jurisdictions and wastage of precious man-hours of work and effort.

6) Wages

The fishing industry is a low-paying activity. This is especially true of the processing plants where wages range from only \$0.95 to \$1.15 per hour.

7.2 The Fisheries Within the Plan

It is hoped that with the Development Plan the net value of production per fisherman on P.E.I. will rise to \$9,000 by 1984. This will ensue from greater efficiency in different areas of the fisheries brought about by managerial, marketing and processing research and appropriate transformation of the industry.

By creating attractive employment opportunities in other sectors of the

economy, planners and economists hope to reduce the total number of men engaged in primary fishing and thus further increase the income accruing to individual fishermen. This gradual shift to other sectors would be accompanied by an equally gradual reduction in the number of fishing licenses issued.

One of the main objectives of the Plan is to reduce the number of fish-processing plants and the number of ports. The polarizing of plants and ports on a geographical, functional and economic basis would greatly increase the efficiency of the industry; such a scheme will bring about a regrouping of the population around the poles and the Plan contains provisions to compensate persons moving to these new sites of activity.

An education programme is to be initiated that will allow fishermen to acquire managerial and technical skills. The Plan also proposes a modernization campaign for the processing plants, the creation of a team of experts and technicians who will advise fishermen on various matters and finally, a research programme concerning the ice-breaking capabilities of trawlers. Also, credit is to be extended to fishermen wishing to modernize their equipment.

7.3 Assessment of the Plan

The proposed consolidation of the processing plants is a basically

sound policy: it will place these larger plants in a relatively more competitive position vis-à-vis neighbouring enterprises on the inter-provincial scale. As long as these plants are strategically located on the Island, greater efficiency of production should result, as well as economies of scale and better packaging and marketing facilities.

However, it would perhaps be advisable to fuse the fish-processing industry and the agricultural products processing industry, to permit plants to run at a greater capacity and to allow for a longer active season. We also feel that the number of plants on the Island should not exceed two or possibly three, that they should be cooperatively-owned and that they should be staffed by personnel possessing a high degree of managerial skills. Such an arrangement could conceivably be more effective than a "Commodity Board" arrangement, since it could provide for a more comprehensive approach to marketing and advertising. It is also probable that such an organism could perform better than the Commodity Board from a brokerage standpoint.

We are agreeable to the Plan's objective that aims to reduce the total number of fishermen, but we request that further thought be given to an idea expressed a few years ago by the Atlantic Economic Council concerning the placing of a high monetary value on fishing licenses. The sale of this license, whenever a fisherman retires, could then act as old-age security or as a legacy.

We also agree that much effort must be put into research in the marketing and technical areas. We note particularly, the need for better handling and packaging methods for herring. We feel that it would be worthwhile to investigate the market and food value of other, presently unused species of fish.

Reduction in the number of fishermen is not necessarily the only way to avoid over-exploitation of the resource: greater effort should be put in the research of new artificially-induced or stimulated reproduction for various crustaceous and fish species. It would be interesting to find out which ingredients present in the polluted waters of Summerside, stimulate the growth of clams and oysters: should it be possible to identify and isolate these ingredients, it could then be possible to fertilize oyster and clam beds elsewhere.

In our opinion, one extremely important aspect was left out of the Plan and concerns the coordination and integration of federal and provincial programmes and policies. The lack of such cooperation is revealed by the fact that the provincial programme for the consolidation of processing plants was unwittingly thwarted in the Rustico area by a DREE incentive grant. Indeed, shortly after the closing of the Rustico plant, a DREE grant permitted the opening of a similar plant in nearby Abrams Village. Such a lack of coordination is wasteful. It is very well for DREE to create jobs, but such an activity should

be integrated to the overall provincial development plan.

The Development Plan's objective of keeping certain harbours open year-round is unsound, since ice floes would prevent net-fishing in any case.

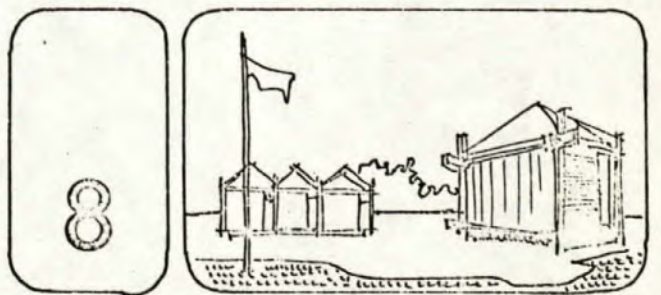
The following are items not touched extensively in the Plan, that we feel need further investigation:

- New advertising techniques aimed at increasing the demand for fish and fish products; this should include a public education programme on the proper way of preparing fish for consumption.
- New marketing techniques: investigate the "auction-method" of selling fish, as it exists in the U.K. and in other countries.
- Direct government involvement in the organization and creation of fishermen's cooperatives and of cooperatively-owned seafood restaurants on the Island.
- Possibility of transforming and fusing the various federal and provincial agencies involved in fisheries into an independent Crown Corporation (Re: U.K.): such a body could conceivably be free of government interference, and would allow greater coordination of programmes and policies.
- Possibility of placing greater emphasis on fresh or chilled sea-products rather than on canned or frozen products; although these methods are more expensive, products processed in this manner command much higher prices and the market for them is excellent.

- Investigation of the damages done to the lobster habitat by the Irish Moss fishery as well as reasearch leading to more effective methods of non-gathering (the present method is only 15% effective).
- Research on the possibility of lobster farming.
- More rational organization of fishing territories.

7.4 Recommendations

- 1) Integration of fisheries in the overall Island economy by coordinating fishing activity and activity in other sectors.
- 2) Consolidation of ports and of processing plants on a geographical and functional basis.
- 3) Involvement of government in the creation of fishermen's cooperatives.
- 4) Coordination of federal and provincial programmes and policies.
- 5) Research into new processing and advertising and marketing techniques.
- 6) Research into techniques of increasing fish stocks or gradual reduction in the total number of fishermen.



8.0 THE OUTDOOR RECREATION AND TOURISM SECTOR

by H. Chapdelaine and C. Greffard

8.1 The General Problem: Supply and Demand

The study of P.E.I.'s potential for tourism and recreation requires the assessment and definition of both the positive and negative aspects of this potential's physiographic, social, economic and organizational characteristics, in the context of the rational development of the affected resources in time and space.

8.1.1 The main physical and organizational characteristics

The very nature of the area implies that water is ever present; this resource is undoubtedly P.E.I.'s most single attractive feature in relation to the North American tourist industry. Not only does the sea completely surround the Province, but because of a highly indented shore-line, it also takes frequent and deep incursions within the territory in such a way that both the settled and natural landscapes are in intimate contact with the sea. These characteristics add up to the scenic panoramas of exceptional quality.

The interplay of the ocean currents are responsible for the creation of the Island's highly renowned sand dunes and beaches that are well adapted to receive the numerous swimmers who seek P.E.I.'s warm coastal waters during the summer (70°F). The best beaches are strung along the

northern coast, oftentimes stretching for several miles without major physical interruptions. Most of these beaches are given the highest possible rating in the Canada Land Inventory, i.e. Class 1 (8.1).

Sand and sea combine to offer a broad spectrum of outdoor activities such as swimming, beach-combing, deep sea fishing (tuna, cod, etc.), scuba diving (aquatic flora and fauna, ship wrecks), boating, etc. Many of these activities represent unusual experiences to the tourist and while they might not serve as outright and primary attractions, they may lead the latter into prolonging his stay in the Province.

The impact of the insular nature of the area as a tourist attraction goes beyond strictly physiographic considerations. The isolation consequent to insularity is also of considerable importance. It can be a liability since it renders access to the Island more difficult, requiring the services of either a ferry or a plane. It makes it necessary to have a rapid and adequate ferry service, shuttling cars and passengers from the mainland to the Island (We do not consider, in this section, the possibility of the construction of a causeway in the near future). However, isolation can also be an asset: for some tourists, the trip by ferry can represent an added attraction. From an administrative standpoint, the fact that access to the Island is controlled facilitates the gathering of data on tourism.

8.1 P.E.I. : Recreation Potential, Canada Land Inventory, ARDA, Ottawa.

This isolation that is consequent to insularity also has a significant socio-economic impact vis-à-vis tourism. Physical separation from the mainland is often reflected in the mentality, customs and usages of the Islanders, and P.E.I. can benefit greatly by its unique landscapes, by its communities of Acadian, English, Scottish and Indian origin; by its small quaint traditional fishing ports. But this is a fragile potential that can easily be spoiled by petty commercialism, unless certain safeguards are implemented.

P.E.I.'s natural potential is further enhanced by man-made attractions, the best example of which is P.E.I. National Park at Cavendish. The latter stretches along the north shore and includes the Province's best beaches. A large selection of recreational activities is offered and statistics show that this is Canada's most frequented National Park after Banff in Alberta. Attractions in this area are numerous but are of unequal quality and importance. Among these attractions, one finds the Confederation Building in Charlottetown, the Acadian Village in Cape Egmont, the Woodleigh Replicas, etc. ...

A study by A.D. Little conducted in 1964 (8.2) revealed that due to the distribution of existing tourist facilities, the natural attractions,

8.2 Arthur D. Little, "Economic Development Opportunities in Prince County", Report to the P.E.I. Department of Agriculture, Sept. 1964.

and the urban and communications network, tourism on P.E.I. was centered around three poles. The Little report emphasized the following nodes: a) Charlottetown: scenic and historic attractions, cultural activities, service center; b) Cavendish: National Park, landscapes, beaches, recreational facilities; c) Summerside: sports events, cultural activities ... These seemed then to be the real poles of tourism on the Island. The same holds true today to a large extent, but important developments in Brudenell and Mill River might tend to disrupt the triangle network formed by Charlottetown, Cavendish and Summerside. Although they offer great potential, the western, north-western and north-eastern sectors of the Island are still not properly developed for tourism.

We have shown thus far those physical attributes of P.E.I. that make it attractive to tourists. We cannot, however, completely pass over some constraints in this area. The Island's potential is seasonal. Summer temperatures are well adapted for intensive tourist activity, but this season is but three months long and there is little hope of extending it, so that individuals who have built tourist facilities have but three months out of the year in which to obtain a return on their investment. Great distances separate the Island from major urban centres: the closest metropolis is that of Boston, 700 miles away, followed by Montreal, which is 800 miles distant. This means that the major urban centres are located three or four days drive from Charlottetown, which represents a relatively

high consumption of time and money in transit to the Island, and can seriously affect the plans of tourists travelling on a low budget.

P.E.I.'s remoteness also means that it must compete with such recreational areas as New England, the other Maritime Provinces and Quebec for the tourist dollar.

8.1.2 Principle economic characteristics

From an economic standpoint, tourism plays an important role in P.E.I. In 1970, more than half a million persons toured the Island, this figure being five times the total resident population. Gross tourist expenditure on P.E.I. in 1970 was \$19 millions, making this activity the second most important item after agriculture in the gross provincial product. Hovering at around 10%, tourism's annual rate of growth has, for quite sometime, been the most dynamic sector of the provincial economy.

Available statistics concerning the tourist industry reveal that by far the most popular way of reaching the Island is by automobile. In 1970 for instance, 93% of all tourists came by car, the remaining 7% coming by train or plane. This underlines the primary role of the provincial road network and of the ferry system in relation to tourism. It also shows the lack of promotional activity in the areas of organized tours, of cruises and of conventions.

Statistics also show that the Island fails to attract Americans to any great extent. The places of origin of tourists on P.E.I. in 1969 were the following:

Nova Scotia	19.3%	Massachusetts	5.7%
Ontario	17.9%	New York	3.5%
New Brunswick	14.2%	Maine	1.8%
Quebec	12.6%	All other USA	4.8%

It would be interesting to classify tourists according to their expenditures and to give a detailed account of this spending, but this is not possible with the data available at the time of this study. Let us simply say that the average stay on P.E.I. is 4 days, and that the average daily expenditure is \$8.54.

While tourism has a considerable impact on P.E.I.'s economy, it fails to generate directly a great number of jobs. Tourism's seasonal character only emphasizes off-season unemployment, and wages paid to Islanders from the tourist industry tend to be low.

The multiplier effect of the tourist dollar depends directly on the degree of integration of tourism, taken as an economic activity, to the other economic sectors of the Province, on the rate of economic leakage (through imports), on the rate of circulation of this currency before it leaves the Island, and finally on the propensity of residents to invest in Island activity.

Tourists consume a broad spectrum of goods and services, all of which are not credited to tourist expenditure. The question that comes to mind is whether tourism supports part of the Island's agriculture, fisheries, industry and services through direct consumption. The answer can only come after a lengthy and complex analysis, but it does seem at first glance that a large part of restaurant and hotel provisions come from outside the province and that the handicraft activity is not well developed. The Island's high volume of imports is responsible for most of the economic leakage of the tourist dollar, this in turn, undermines the multiplier effect. Because of the low wages and financial return generated from tourism and due to the lack of economic opportunity, the propensity of residents to invest or reinvest on the Island is rather low.

In summation, tourism plays and will continue to play an important role in P.E.I.'s economy. The Island enjoys a natural potential for tourism and recreation, an exceptional and original socio-economic background, a healthy growth rate and a numerous and established clientele. P.E.I.'s major problems concerning the tourist industry are the following:

- 1) a potential that is vulnerable if its exploitation is not prudent;
- 2) a potential that is seasonal in nature;
- 3) certain difficulties of accessibility related to insularity;
- 4) the Island's remoteness from major urban centres;
- 5) the average expenditure of tourists is low;

- 6) the average stay of tourists should be higher;
- 7) the lack of organized tours and conventions taking place on the Island;
- 8) the inability to extensively penetrate the American tourist market; (value added to the Canadian economy)
- 9) the lack of proper recreational and other tourist facilities such as lodgings;
- 10) tourists facilities and acitvities are not well distributed throughout the Province;
- 11) Islanders are not tourism-conscious;
- 12) local expertise in matters pertaining to tourism is barely starting to exist;
- 13) a low multiplier effect due to the lack of economic integration, to a high leakage rate, to a low circulation rate and to a low propensity to invest on the part of the private sector.

8.2 Tourism and the Development Plan

The main objectives contained in the plan concerning tourism (8.3) are:

- Financial assistance to stimulate the expansion of the tourist industry in such a way as to be able to meet present and future demand.

8.3 Canada - P.E.I. Development Plan, 1968-1984, Dept. of Regional Economic Expansion, Ottawa, 1969, p. 39-40.

- Control of this expansion so as to maximize profits and benefits accruing to P.E.I.

The secondary objective is:

- To increase tourist expenditure to \$18 millions/year by 1980.

The goals of the plan are:

- To lengthen the tourist season.
- To increase the individual expenditure of tourist by constructing facilities that lead to increased spending and lengthier stays.
- To protect the existing potential by establishing standards - facilities of doubtful quality would then be prohibited.
- To increase the number of possible activities on the Island.

The implementation principles are:

- The formulation of a comprehensive concept for all of the tourist installations on P.E.I.
- The conceptualization and application of an effective zoning scheme.
- The centralization of tourism-oriented enterprises into five integrated complexes distributed strategically on the Island.

- The rational exploitation of the natural potential by the public sector;
- The establishment of privately-owned but government-controlled tourist facilities such as lodgings;
- The attainment of an attractive and comfortable architectural style in the construction of hotels and motels whose cost could be amortized during the brief tourist season;
- The creation of a financing structure to facilitate the construction of adequate lodgings;
- The enlarging of the National Park, P.E.I.'s most important tourist attraction;
- The creation of a federal and provincial counselling group to oversee the proper implementation of the tourism programme;
- The establishment of a more efficient ferry service during the tourist season.

Actual government spending on tourism for the first two years of the plan amounted to \$1,508,000 or 10% of the overall amount destined to be spent on tourism from 1968 to 1975 (8.4). Most of this money went into

8.4 Action - The Prince Edward Island Development Plan, The P.E.I. Dept. of Development, Charlottetown, 1971.

the creation of Brudenell tourist complex (purchase of 500 acres, infrastructural installations), of Mill River (golf course), and of Brookvale (ski); several studies were also undertaken on the feasibility of creating new provincial parks and on land tenure. Unofficial figures reveal that roughly 40% of sea-shore land is owned by aliens. We also underline the fact that for the 1968-1975 period, only 5% (\$12 millions) of the plan's total budget (\$242 millions) is earmarked for the tourism sector.

8.3 Critical Analysis of the Plan

Generally speaking, the tourism plan as we perceive it, seems to be well conceived and we will not at this juncture, dwell on those aspects of the plan that appear to be justifiable. Our analysis will centre on those items that we feel should be reassessed, in relation to the objectives, the principles and the funds as defined in the plan.

8.3.1 Critique relative to the objectives

A conservative economic objective

As defined in the plan, the main economic objective is to attain gross annual tourist spending of \$18 millions by 1978. However, this objective was already reached in 1970, (\$19 millions) before the plan could possibly have had serious effect on the industry. It becomes apparent that the economic objective must be redefined in such a way as to allow for

this sector's rapid rate of growth and that a new development strategy must be defined.

A new goal: the integration of tourism with other economic sectors

Among the third-level goals contained in the plan, we would have liked to see one dealing more extensively with the integration of tourism with the other economic sectors and not only to declare that "one must be sure that the tourist industry will progress the best it can without entering in unnecessary conflicts with agriculture and other sectors". Integration would not necessarily cause a spectacular increase in gross spending, but the economic impact of tourism through the multiplier effect would be amplified and therefore integration of tourism with agriculture, fisheries, industry and education is desirable.

a) Integration with agriculture

In terms of agriculture, integration could mean that the supply of fresh agricultural products to tourists would come from the Island. Without shattering existing agricultural policy, this programme could encourage:

- The creation of a scheme to supply Island restaurants with fresh, local products;
- The diversification of a number of commercial farms to produce

certain products that presently have to be imported from the mainland;

- The creation of a local market or of roadside stands aimed at the tourist market;
- The creation of farm vacations offering original and quaint activities to a selected clientele (re: Ontario Federation of Agriculture).

b) Integration with fisheries

This programme would essentially be the same as for agriculture.

It could consist of:

- The creation of a scheme to supply Island restaurants and the local market with fresh, local seafood;
- To bring about a culinary specialty based on seafood products;
- To encourage the preservation of certain traditional fishing villages (i.e. Miminegash) not so much as economic enterprises, but as tourist attractions;
- To encourage the creation of facilities enabling tourists to partake in deep-sea fishing excursions, especially for tuna.

c) Integration with industry

Integration of tourism with industry would consist mostly of the creation of a handicraft industry based on the Island folklore, history and traditions as well as on the main socio-economic characteristics and on the sea (nets, shells, driftwood, etc.). These aspects have not been particularly well developed on P.E.I. and should be.

A further goal: the creation of tourism consciousness

The success of this objective rests mainly on promotional programmes and educational programmes at the local level. These programmes would strive to instill in the Islanders a certain tourist conscienciousness make them understand the economic importance of tourism, to warn them of the dangers of commercialism and to impart to the Islanders with sound management principles. Community development programmes based on tourism should also be encouraged at the local level (. . Acadian Village in Cape Egmont).

8.3.2 Critique relative to the development principles

The development concept

Not only is the tourism plan conservative in its economic objectives, it is also conservative in relation to the development concepts expounded.

The plan has provisions for the creation of five integrated tourist complexes throughout the Island, but the specific role of each of these centres has yet to be defined. In our opinion, tourist poles or complexes must be conceived and developed as areas within each of which spatial relationships (linkages) between the resources available and the services are such as to attract and hold tourists for a given period (i.e. one day, 2/3 days, one week, holiday season). One could thus arrive at a schematic network of nodes or complexes in which the attractions, the activities and the services would be integrated to the whole, and geared to accommodate a clientele for a given period of time. In this way, one could establish a hierarchy between the nodes or complexes, according to the time allowed (1 day, 2/3 days, 1 week, holiday season). The emphasis placed on the development of the attractions of the services and of the activities would permit the definition of the vocation or of the specialization of each of the development nodes or complexes.

This general development concept does not deny the necessity of consolidating activity and equipment in major complexes, but it allows for a more flexible and integrated tourist network at the scale of the Province as well as a diversification of specific elements of the Island's potentials and of the management requirements. If one were to apply such a concept, one would integrate such developments as the Acadian Village in Cape Egmont into the network. With such a concept, Charlottetown and

Summerside could become primary poles, specializing mostly in lodgings and services, Cavendish could become a primary pole of tourist activity, and Brudenell and Mill River, secondary poles.

Integration of tourist promotional policy

Publicity generally plays an important role in the exploitation and marketing of tourist resources. However, next to no mention of this is made in the plan. In our opinion, publicity and development should go hand in hand. In the Island's interior, more attention should be given to the construction of information booths and to the exploitation of the socio-cultural potentials of P.E.I. Efforts should be taken to consolidate existing markets and to procure new ones. To achieve this goal, perhaps less emphasis should be put on the traditional publicity mechanisms (pamphlets, newspapers, magazines, television) and more on such ventures as establishing promotion agencies in Montreal, Toronto, Boston and New York. Greater effort should also be made to integrate P.E.I. to the national and international tourist circuits. (tours, cruises, conventions ...).

Easier credit for the construction of lodgings

The funding of construction of lodgings appears to be a worthwhile initiative and the scale of this funding should be enlarged and diversified. In addition to classical lodgings, it would be appropriate

to see the creation of such constructions as youth hostels, vacation farms, family lodgings, specialized restaurants, cooperative hotels and motels and any other form that conforms to the objectives of the plan and to the Island's potential, such as secondary residences. In regards to the latter, given the problem of foreign ownership of coastal land, the government should implement legislation assuring safeguards in this area (i.e. the land should remain the property of the public sector).

Creation of a new park

Inasmuch as the federal government would be willing to invest substantial amounts in a new park, we would favour the creation of such a park on the north shore of P.E.I. (national seashore) and the concept of development should be one of "multiple use". Concerning the existing park at Cavendish, we would like to draw attention to the severe and rapid erosion of the dunes and seashore that is taking place along the coast. Erosion control measures should be implemented immediately to protect this valuable natural asset.

Enlarging of the principle to create a team of provincial and federal counsellors overseeing the application of the plan

The idea of having a team of experts should not be limited to the application of the plan. It should go further to include locally the formation of a team of experts who could see to the conceptualization, development, management and promotion of tourist developments. There seemed to

be a lack of personnel in the area at the moment, and the existing team of counsellors and expertise seem to come mainly from the federal government in Ottawa.

Social recreation

The tourism plan, as we perceive it, seems to pay a great deal of attention to the economic development of this industry, but it neglects the recreational needs of the Islanders themselves, as well as the social problems brought about by the tourist industry. It is apparent that the coming of thousands of visitors yearly cannot help but disturb the life and prerogatives of local residents, but if, in addition, access to recreational facilities are denied to Islanders, the resulting social cost could be great. Foreign ownership of land has already disturbed many and this is one of the reasons it is important to see to the creation of social recreation structures that will fulfill the needs of the resident population and that will eliminate as much as possible the conflicts arising from the development of the tourist industry on P.E.I.

8.3.3 Critique in relation to budgeting considerations

Tourism is the second most important economic activity on P.E.I. and one of the few that is showing rapid progress; however, the plan only has provisions for the spending of \$12 millions in 7 years for this in-

dustry, or 5% of the total budget. It is also noted that merely 10% of the funds allocated to tourism has been spent up to now, which seems very little considering the economic feasibility of this sector. In our opinion, all of the allocated budget could and should be spent during the next five years, in a manner determined by the reassessment of the implementation priorities. This would mean an accelerated rate of implementation and would imply the allocation of additional funds to tourism before the termination of the plan (1984).

8.4 General Recommendations

As a conclusion to this preliminary and exploratory survey, we submit the following general recommendations as they should be included in a broader, more comprehensive tourism development plan that would be bolder in terms of its objectives, its strategy and budgets. The following recommendations are derived from our preliminary analysis:

- 1) To formulate, following an evaluation (rate of growth), objectives that go beyond the \$18 millions gross tourist spending projected for 1978 ;
- 2) To integrate tourism in the development scheme planned for the other economic sectors (agriculture, fisheries, industry);
- 3) To instill a tourism consciousness into the local population by a series of promotional and educational tourist programmes;

- 4) To conceptualize, on a provincial scale, a network of tourist poles, nodes or complexes, each specialized and hierarchized according to its resources, activities, services and linkages;
- 5) To integrate tourist promotion and information policies into the overall tourist development strategy;
- 6) To enlarge funding facilities so as to enable the construction of all forms of lodgings, of specialized restaurants, of private and cooperative developments that conform with the spirit of the plan and with the existing resources;
- 7) To enlarge the limits of the national park to include most of the dune-spotted north coast and which would be put into a multiple use development concept;
- 8) To establish local expertise in matters of recreation and tourism;
- 9) To include provisions in the plan for the recreation needs of the local population;
- 10) To accelerate the rate of implementation of the plan and to increase, after evaluation, the funds allocated to tourism, proportionally to supply and demand and the rate of growth of this economic sector.

8.4.1 Specific recommendations

Our brief stay on P.E.I. did not allow us to study in great detail specific projects already in progress. We submit but two recommendations of specific nature:

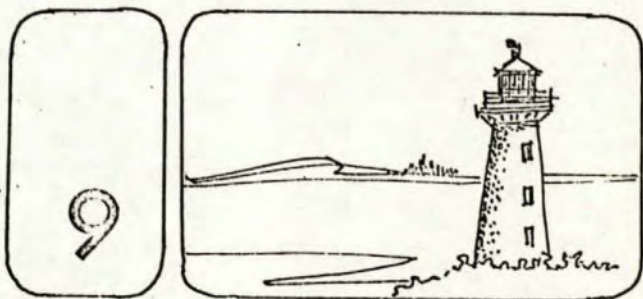
- To encourage, both financially and technically, the Acadian Village cooperative project (Cape Egmont) as a pilot-project on a local scale.

- To adopt erosion control measures immediately so as to reduce the erosional processes taking place on the north shore, especially in the national park.

Appendix 8.1SOME STATISTICS CONCERNING TOURISM ON P.E.I. / 1970

Average number of car/passengers	:	3.2 persons @ group
Average daily expenditure per person	:	\$8.54
Average stay	:	4 days
Total spending per group	:	\$109.34
Number of in-coming vehicles (May-Oct)	:	182,201
% number of foreign vehicles	:	89%
% rate of increase car traffic in relation to 1969	:	10.5%
Number of tourists/car	:	520,307
% of tourists/car	:	93.3%
Number of tourists/plane	:	16,505
Number of tourists/train - bus	:	10,305
Number of tourists/organized tours	:	5,495
Number of tourists/conventions	:	4,700
Total number of tourists	:	557,311
% rate of increase of number of tourists in relation to 1969	:	11.6%
Total spending by tourists/cars	:	\$18,697,687
Estimated spending (tours & conventions)	:	\$347,701
Total tourists spending	:	\$19,045,388
Growth rate of income in relation to 1969	:	11.7%

Source: The P.E.I. Travel Bureau, Department of Tourism, Charlottetown, 1970.



9.0 THE WATER RESOURCES IN P.E.I.

by H. Ghonima

Recognizing that forecasting future demands cannot be made with any degree of accuracy, it becomes evident that the water supply should be presented in a manner such that future planners could make maximum use of the results under changing conditions and for areas outside those studied in detail. The availability of data in certain areas places limitations on the results, although the extent of such limitations will not be known until data in those areas become available.

9.1 General Survey

1) Precipitation

The mean annual precipitation varies from 34 to 43 inches with an average of about 40 inches. Precipitation is highest in the Charlottetown area and lowest in the extreme southeastern portion of the Island. Water resources in P.E.I. are divided into two types.

2) Surfaces water resources

The average surface runoff in the Island is 24 inches or 2,100 Mgd. The peak runoff occurs in April. Floods can occur at any time of the year but have the greatest probability in the spring. The rate of evaporation is low; water loss varies from 15 to 17

inches annually. There is one river (Hillsborough) with over 100 square miles of drainage in the province. There are no natural lakes.

- Quality of the surface water in P.E.I.

Surface water in the natural or unaltered state is clear and chemically of good quality, moderately hard. In many areas, the natural quality is affected by unsanitary waste disposal practices and seepage from farmlands. Pollution of brackish estuarial waters, bays and some coastal waters, despite notable progress in pollution control and abatement in recent years, is cause for concern. Fresh water is used widely by the fish processing industry, and pollution of sea water is due to fish plants themselves; this leads to greater uses of fresh water to avoid the cost of extensive treatment of the sea water.

3) Ground water

Ground water in P.E.I. is an important resource. It is the source of all domestic and municipal water supply for the population and also supplies all the industries in P.E.I. The aquifers of the Island are the reservoirs of water and they play an immense role in water supply and storage. The presence of a continuous affluent yield of cool (42 to 45⁰F), hard ground water to the

rivers of the region is a significant factor in fisheries production. In planning for utilization and conservation it must be considered together with surface water.

Wells located in the Bedrock aquifers may yield up to 500 gpm per well. Forty-one existing wells tapping the bedrock yield a minimum of 200 gpm. Perhaps deposits yield a very small portion of the Island's developed ground-water supplies.

4) Water pollution

The quality of ground water in P.E.I. is generally good. Salt water intrusion has been experienced in many areas and is the major water supply problem. Pollution of wells has been reported in some areas. Excessive and moderate nitrate contents is indicative of the infiltration of sanitary wastes, farmyard seepage, or seepage from fertilized fields into the aquifers.

9.2 General Observations and Recommendations

The water resources of P.E.I. are an important factor in its development and welfare. An abundance of good quality water can play an important role in economic growth, whereas scarcity can be a significant handicap.

The quantity of water demanded for domestic, commercial, municipal

and industrial use at the present time is a small portion of the total supply available. Increased utilization in the future (20 years) will not change the situation significantly, especially if water quality control and management processes are optimally used and developed in the future. Water pollution in P.E.I. has not reached the proportions found in some other parts of Canada, but this does not justify complacency.

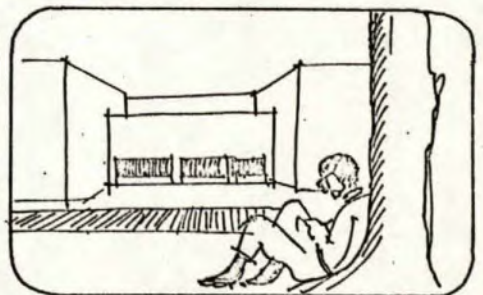
The quality of the natural environment is one of the province's most important assets and one which will assume increasing importance in the future. To improve or at least maintain this situation in the future, we suggest the following recommendations of which some parts are already in effect:

- 1) The cost of waste treatment is closely related to the volume of wastes and consequently well-managed industries will seek to optimize water utilization as a whole by recirculation and process modification.
- 2) Industries causing pollution but have not the economic capabilities to control it, should be encouraged by the authority (in the form of financial and technical assistance) to carry out development into their processing methods, in order to minimize pollution of waters receiving their wastes. (this

item coincides with the P.E.I. Development Plan recommendations).

- 3) Adequate quality control could best be achieved if the authorities were to assume direct responsibility for the construction and operation of all pollution control facilities, including those now privately owned.
- 4) Ground water pollution could be controlled through improved practices in the installation of wells and septic tanks and the siting of solid wastes disposal areas.
- 5) Primary treatment in the future should be sufficient to reduce the strength of the industrial and municipal waste discharges to inland waters to a satisfactory level.
- 6) The full effects of insecticide spraying on the environment, including water resource, must be established.

10



10.0 EDUCATION, HEALTH, WELFARE

by G. Audet

10.1 The Problem

Considering the economic costs implied in the improvement of the education system and of the health and social welfare structure, it seems imperative that the proper authorities define a precise action policy as soon as possible. On one hand, it is the intent of the plan to make available to the P.E.I. population a quantity and a quality of services comparable to those available to the population of other larger provinces. On the other hand, the plan aims to accelerate the socio-economic autonomy of the Island.

To meet these objectives, the authorities have redefined the internal boundaries of the province, so as to have more integrated administrative and financial regions. It is hoped that this action will solve many of the crucial problems associated with the present excessive de-concentration of the social infrastructure.

But this very action could actually initiate a cultural revolution. Although the population does not as yet recognize the future advantages of such an action, it cringes away from the short term inconveniences. Generally speaking, people resent having to support financially a scheme in which they recognize negative consequences but fail to foresee the eventual advantages. The Islanders also fear for the future,

when they will have to sustain increasingly costly services with a diminishing population.

We feel that the Development Plan should have high priority programs for social and economic improvements so that the socio-economic condition of the Island will be comparable to that of other provinces and in tune with the primary resources of P.E.I. Because of the nature of these basic resources, i.e. fisheries, tourism, agriculture, etc., their exploitation requires a dispersed population. The urbanization phenomena characteristic of our era appears in an adapted or modified form in P.E.I.

10.2 The Evaluation of the Development Plan

One of the major objectives of the plan is the integration of the Island's population and of its resources . Some programmes to this effect have already been implemented.

In order to arrive at a universal educational system for the province, the Department of Education has set up the Educational Planning Branch. This body has already accomplished much: a considerable decrease in the number of primary schools, the creation of regional schools, an improvement in the quality of the teaching staff, coordination of study programmes, the integration of transportation services, etc.

The province has been restructured administratively in relation to the education system: it has been divided into five districts, each representative of a particular socio-economic entity. This redefinition of jurisdictional boundaries is to be complemented by an integration of administrative and financial services for the whole province.

The two universities existing prior to the plan, have been fused. The broad outlines of a professional training programme for adults has also been established and a recycling programme for adults was inaugurated.

Provisions have been made in the plan for the creation of an educational structure leading to the participation of the population in the formulation of development programmes. This aspect has not been successful.

Questions asked of many students revealed that they had little or no idea of what was intended by the plan in this respect.

The condition of the health and welfare services is rather difficult to grasp. The plan recognizes the importance of these services to socio-economic improvements and to this end the government plans to erect complexes in each of the five regions to dispense these vital services. However, the role of these complexes is ill-defined. Further studies would be needed to determine accurately the underlying problems. Many implementation concepts have been elaborated recently, but very little has been accomplished concretely.

A costly duplication of certain services exists because of the lack of coordination. This situation could be due to the lack of qualified personnel or because of the Island's insufficient human resources or even to the lack of an adequate statistical base. Further research is needed in some areas, and if nothing else, it is recognized that a common global approach is necessary. The establishment of the federal-provincial Medicare plan was a step in the right direction.

10.3 The General Recommendations

The following recommendations are based on the preceding evaluation:

In relation to post-graduate studies, the least expensive and most realistic option seems to be that of selectivity. Further diversification of study programmes would prove to be too costly. University programmes offered should be intimately related to the province's main economic activity, i.e. fisheries, agriculture and tourism, and to the marketing aspects of these sectors.

The same applies to adult training. These programmes should be oriented toward preparing people for employment in the province's various sectors. Closer communication between university and the Department of Man Power is recommended.

Considering the importance of the Development Plan, it is desirable that all concerned comprehend its implications and discuss its orientation.

Perhaps the plan should be a subject matter in high school curricula, so as to permit the people to become familiar with its content.

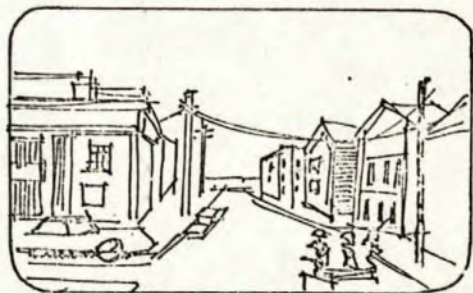
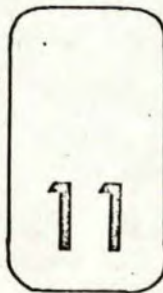
Many of the primary schools on P.E.I. will soon disappear. However, studies should be conducted to find a possible future use for these buildings; they could conceivably become nursery schools. Only 61 children are presently registered for nursery school, compared to 3,035 in first grade.

The modernization of the educational programme will require the modernization of the existing equipment, especially audio-visual apparatus. Inter-provincial cooperation in this domain could be profitable.

In relation to health and welfare services, only one authority should exist. The creation of a planning body in this area would facilitate integration. Greater cooperation should exist between the Department of Education and the Department of Health and Welfare.

Finally, certain services should be provided to the population in isolated areas by means of mobile units.

The various institutional complexes should be integrated and coordinated amongst themselves. A greater concentration of services should be found in Charlottetown.



11.0 URBAN AFFAIRS AND HOUSING

by D.T. McCann and V. Lambert

The state of urban affairs on the Island looks rather obscure from an outsider's point of view. If we consider the city as the seat or the focal point of man's activities, we wonder if our preoccupations as observers do not go too far from the urban reality and the role played by that reality. We feel that the Development Plan of the Island and the sectorial programs would gain in comprehensiveness if we introduced a broader view toward urban affairs, the role of the city, its growth process and government.

11.1 The Reality as Perceived

Hypothesis I :

There are only two agglomerations on the Island which correspond to the definition of a city. Charlottwtown, with a population of 20,000 is considered as an administrative centre and Summerside a service town of 11,000 inhabitants. This leaves a population of 80,000 inhabitants, semi-urban and rural. However, we must go deeper into the statistics to know more about the distribution of population. One observes that the rural non-farm population is more important in number than the rural farm population, and this fact has been accentuated over the years. It would therefore be futile to formulate urban policies on housing based on the tendencies observed for two cities only. To our

knowledge, the problems of urbanization on the Island are spreading to the whole of the Island, and this leads us to our second hypothesis, which becomes the basis of our reasoning concerning urbanism on the Island.

Hypothesis II :

The Island could be defined as a large city of 110,000 inhabitants with myriads of small village communities without formal government, with the exception of perhaps twenty local governments. These organized communities are o'Leary, Tignish, Souris, Goergetown, Alberton, Montague, etc. Each of the small communities seems to have its own school board, but this is changing with the new educational system on the Island. The urban setting of the Island, by this perception, becomes more homogeneous, yet more complex. As far as urban growth is concerned, it is not so different from that which one observes elsewhere in Canada or on the North American continent. We established that there was a tendency of population concentration in the areas already urbanized, as in Charlottetown, or the semi-urbanized areas, as in Alberton. And in rural areas, a transformation from a rural farm population to a rural non farm population was facilitated mainly by transportation. In fact, more and more Islanders have the tendency to come to work in an urban centre and to live in rural or coastal areas. It appears, then, that the urban dwellers are creating a gradual expansion of the city, transforming the outlying rural areas into an urban extension. In short, this is the bridging of

a pre-industrial society and a post-industrial society. This urban fact revealed in our visit that a stronger development policy should be based on the following factors:

- Land policies concerning property and development.
- Economic activities in agriculture, fisheries and tourism.
- Transportation (water, air, road, rail).
- The aging of the population.
- Socio-economic disparities.
- Education.
- Local government or community government.

A governmental planning mechanism should correspond to each of these points. However, the functioning of some of these mechanisms does not always foresee the well being of the Islanders. For example, the inward movement towards Charlottetown by the aging population results in crowding of the facilities in town, leaving virtually empty similar facilities in less important areas on the Island.

11.2 Principles of the Plan

The Development Plan concerning urban affairs covers a number of recommendations which necessitate, at the implementation stage, a coordination of all the mechanisms dealing with urban growth. The recommendations

can be briefly shown as follows:

1. Urban Structure Guidelines:

- Formation of 5 growth poles.
- Pavement of roads and range roads.

2. Housing guidelines:

- Provision of 11,000 new dwelling units within 15 years.
- Price of new d.u. to be within the economic reach of citizens below national average income.
- Concentration of housing activity in 20 to 25 cities.
- Equal housing opportunities for farmers.
- Substantial housing grant system for proprietors and tenants.

3. Urban development guidelines:

- Aid to municipalities for:
 - a) Water and sewer infrastructure construction.
 - b) Urban renewal and renovation.

Is there already a correlation between these recommendations and the evolution of the urban reality? Coordination is already underway, as seen in the following programmes:

Land Development Corporation: this organization offers to buy the farms of Islanders in return for a pension starting at age 60, encouraging a more rapid urban growth.

- Reorganization of the educational system.
- The polarisation of economic activities regroups the population that was scattered.

- And lastly, the Housing Authority facilitates urban growth by programmes of housing construction and rehabilitation.

11.3 Conclusion

We believe that the complexity inherent in the coordination of the programmes can be solved by better communication channels between the various provincial departments and the municipal governments in the development of their own plans. We advise that a mutual understanding must be reached and concentration must be on specific programmes. In the case of Charlottetown, we recommend the following:

- A systematic housing rehabilitation programme.
- A programme of installation of good quality street furniture and urban landscaping.
- A management programme for multiple use of the port and construction of a meeting place or hostel for visitors.
- A sewage rebuilding programme and construction of a water purification plant.

These then are some projects which could be of advantage to strengthen the role of Charlottetown and also stratify the urban structure of the Island by the constitution of growth poles relying directly on the Provincial Capital.

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12.0 CITIZENS PARTICIPATION

by M. Carota

12.1 Problems in Obtaining Citizen Participation

a) Government

- 1) Paternalistic attitude towards citizens.
- 2) Decisions about the plan are being made by the cabinet in secret.
- 3) Lack of understanding of the meaning of citizen participation.
- 4) Lack of faith in the ability of citizen to participate.
- 5) Lack of experience with low-income citizen participation.
- 6) Belief that the citizens have given them the mandate to make all the decisions about the plan.

b) Civil servants

- 1) Professional attitude towards the public.
- 2) Uninformed about plan policy as made by cabinet.
- 3) Lack of experience with public participation.
- 4) Lack of citizens participation in their own department policy making.
- 5) No structure for citizen participation input into their departments.
- 6) Oriented towards deputy ministers and ministers rather than the public.
- 7) Information oriented rather than participation oriented.
- 8) Over reliance on outside consultants and experts.

- 9) No system to handle citizen feedback after informing them.
- 10) No built-in evaluation to determine public participation.

c) Rural Development Council

- 1) Non-representative Board of Directors.
- 2) Lack of member participation in its own policy making.
- 3) Information-oriented rather than participation oriented.
- 4) Has stigma from government funding.
- 5) Programs being coined out by staff rather than the citizens.
- 6) Staff is non-representative.
- 7) Has not obtained confidence of the citizen.

d) Citizens

- 1) Are alienated from and by the government.
- 2) Lack faith in government, civil servants and the R.D.C.
- 3) Lack experience in participation in governmental policy making, planning and implementation.
- 4) Lack accurate information about the plan - especially about the public participation sector.
- 5) Unavailability of resource persons.
- 6) Apathy.

12.2 Progress Thus Far in Citizens Participation

a) Government

- 1) Most of time has been spent in reorganization of departments of government to plan and implement development.
- 2) Up until March 31, 1971, \$995,000 has been spent on public participation with \$540,000 being spent in the last fiscal year.
- 3) Of this, only \$70,000 - \$100,000 was spent directly to assist citizens in direct participation. The remainder was used primarily to disseminate information.
- 4) Citizens have not participated in making policy with the government.
- 5) The government has decided to reduce the amount allotted for public participation from \$10,082,000 to \$5,000,000 without consulting the citizens.
- 6) The government has allocated \$920,000 for 1971-1972, but \$230,000 will be used for traditional adult education which should get its funds from the educational sector. Also, only \$20,000 is allocated to support voluntary organizations.

- 7) The government has not given clear indication to the civil servants about the future to help them implement public participation.
- 8) The government has not formulated plans for the expenditure of funds for citizen participation - with or without citizens.

b) Civil Servants

- 1) Have spent most of the time, thus far, on reorganizing the department for citizen participation and recruiting staff.
- 2) There have been two different directors in two years.
- 3) Have not themselves formulated long range plans for public participation.
- 4) Are relying on R.D.C. to obtain participation.
- 5) Have no citizen participation in the policy-making of their own departments.

c) Rural Development Council

- 1) The greatest part of their \$292,505 budget for the last fiscal year was used primarily for staff and office expansion. Very little was used to directly assist citizens to participate.

- 2) The community school program has failed to produce feedback on the plan by citizens.
- 3) The community development program has been a one to one type of program, largely.
- 4) The counselling program has disseminated information.
- 5) The R.D.C. has held closed board meetings, even to its members.
- 6) The R.D.C. will expend \$400,000 for 1971-1972.

d) Citizens

- 1) Are still alienated from the government.
- 2) Still believe R.D.C. is an agency of the government.
- 3) Would rather participate in the plan without being associated with the Rural Development Council.
- 4) Have particularly not participated in any policy-making decisions in the plan at any level - either provincial or local.

12.3 Resources Available for Citizens Participation

a) The government

- 1) \$9,087,000 in funds.
- 2) Theoretical belief in democratic process.

b) Civil servants

- 1) Have highly qualified and committed people.
- 2) Have good research information.
- 3) Theoretical policy to serve the public.

c) R.D.C.

- 1) Staff that could be used as social animators and resource people.
- 2) Structure that could be used as a public participation model to provide experience and training in policy making and implementation.

d) Citizens

- 1) Long history of self-organized and self-helped citizen organization.
- 2) Great amount of citizen groups.
- 3) Large amount of people with cultural and work experience to make and implement decisions and policy.

- 4) Real problems of economic and social nature are a basis for real motivation.

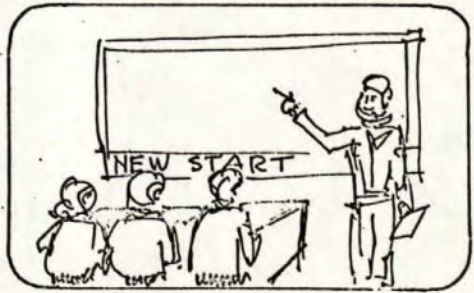
12.4 Personal Recommendations

- 1) Cabinet decision to reduce funds for citizens participation should be reversed to restore the amount to its original level of \$10,082,000.
- 2) Improve the functioning of the Rural Development Council.
- 3) A citizens steering committee should be formed to organize a permanent citizens committee, made up from representatives from existing citizen groups, to decide and plan for the utilization of the remaining funds to obtain citizens participation.
- 4) Civil servants to be utilized to give technical assistance to this committee and R.D.C. staff should be used as resource people.
- 5) This permanent citizens committee should be made a part of the Department of Development with legal power to formulate and implement policy for citizen participation.

- 6) Government meetings on the plan should include representatives from citizens' committees.

- 7) The funds set aside for 1971-1972 for adult education should not come from the citizen participation budget.

13



13.0 THE "NEWSTART" PROGRAM

K. Sayce and G. Steele

13.1 The P.E.I. NewStart Incorporated

Although P.E.I. has been home to one of Canada's six NewStart Corporations for the past five years, there is little evidence that it has been or will be - through its results and/or successor a significant contributor to Island development within the context of the Development Program.

Why it is difficult to relate what it has been doing to the overall strategy of the Plan can be explained in part by its ideological and structural character. Even though it is a Corporation under provincial charter and funded entirely by the federal government, it has succeeded in maintaining a marked degree of autonomy in its direction and work. In the case of P.E.I., this built-in autonomy would be useful - and justified - in preserving the Corporation from contamination by narrower political purpose. Hence it is easy to see why NewStart would not lend itself to the strategy and programs of the Development Program in any direct way.

Furthermore, P.E.I. NewStart, operating in the traditions of other NewStarts, would find itself committed to that level of sophisticated action research and analysis to make it almost a stranger to other Island

development programs, plebian by comparison because of their extreme pragmatism.

This high-risk action research in NewStart has come at a high price and this is another basis for our impression that the NewStart formula - the Corporation's mandate having run out - will not be of significance in the future.

What does NewStart leave as a legacy? After an admittedly superficial contact one has the impression that the Corporation has assumed almost entirely a service function, with little new methodology resulting from its work except an emphasis on a total family and community approach in human resource development.

Unless the Corporation can illustrate to the sponsoring governments by reliable measurement the beneficial effects of a family-oriented development strategy, it will have little else to show for its work.

Again, structural limitations might be a partial explanation. The fact that a NewStart Corporation must phase-in, produce and phase-out within five years, can have a very limiting effect unless it experiences good fortune in handling the elements of its success: personnel, research objectives, community acceptance, team approach, methodology and morale.

Perhaps too, the potential of the Corporation was not taken seriously enough by the provincial government. It could be excused for attaching undue emphasis to the short-term economic stimulation of a depressed County by a generous annual budget of almost one million dollars coming from the federal treasury.

We see as beneficial to the success of P.E.I.'s Development Program an incorporation of NewStart's unfinished work into existing provincial bodies. Since part of the real success of NewStart has been the formation of a competent and highly motivated team of workers, an effort should be made to keep both the program and its developers to complete the task.

We would advocate that the repositories of NewStart's programmes and staff be the University of Prince Edward Island, Holland College, the Departments of Welfare and Education, and the Rural Development Council. In this way, there could be preserved and advanced the Corporation's work in development methodology especially measurement, new learning techniques and skill development, the family approach to human resource development and lastly, a dynamic approach to community development.

In the final analysis, the success of any enterprise involving community development is to be found with the people themselves. If NewStart's

programs can be reborn in the people's institutions, then NewStart can live on. It could be said that the NewStart formula favored a certain elitism; this, in final analysis, may have been an inherent problem.

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14.0 THE COASTAL EROSION

by P.G. Johnson

14.1 The Problem

It has been realised for a long time that the coastal areas of Prince Edward Island are subject to relatively rapid changes in configuration. Most of these changes are of a destructive nature at the present time. The opening up of many areas, particularly the North Shore National Park, has considerably increased the number of tourists taking advantage of the beaches and sand dunes and this increased use is having a number of disastrous consequences.

Along the North Shore National Park areas, the succession of material in the cliffs consists of soft red sandstone with a capping of glacial till of variable thickness. After deposition the till in the area was affected by marine planation prior to the uplifting of the island due to post-glacial isostatic rebound. It is on this till surface that most of the sand dune successions occur and it is apparent from the degree of vegetation colonisation that these are relatively old formations. In the past few years, erosion of these areas has been accelerating. Evidence of this can be found all along the coast in the fact that the sea is now eroding into dunes which have a very well developed vegetation complex on them. Most of the blame for this increased rate of erosion must be placed on the development of tourism. Beach users have eroded paths across the dunes and damaged the vegetation mat exposing the loose

sand to the actions of wind erosion. Blow outs in the dunes of Caven-
dish beach are a fairly common feature and in most areas there is
now only a thin ridge of sand dune left along the coast, the inland
area being basically composed of the marine planation surface of the
till with some blown sand incorporation in the surface layers. There
is no evidence for the regeneration of the dunes behind the present
coastal dunes; that is, there is no evidence for any constructional
effect at present.

At the west end of Rustico Island, erosion has been very prevalent
during the last winter both on the seaward and the lagoon side, where
bench mark 114 has been eroded. At the tip of the Island the winter
storm activity has almost breached the bar 200 yards from the point
and this will almost certainly be eroded fully in the near future des-
pite the considerable coastal defensive works in the area.

The consequences of this rapidly accelerating rate of erosion could
be very far reaching in respect to the tourist and the fishing indus-
tries. The removal of the sand dunes and possible destruction of the
beaches may destroy the new tourist development at places such as Caven-
dish, Brackley Beach and in the Bedeque Bay area. As the North Shore
National Park is one of the main drawing forces for tourism on the island
this could have serious consequences on the island economy. The erosion
of the sand may also result in a greater proportion of the beaches being

composed of material derived from the till which has a much finer composition and would produce a more clayey foreshore environment which is not so attractive to tourists. The finer material is also more easily carried in suspension by the waves, producing a very cloudy and gritty water environment, which is again unattractive to tourists. The effect on fishing would be in the form of the destruction of the sheltered harbour lagoons behind the beaches, changes in the inshore coastal currents and possibly, therefore, silting of harbours and increased necessity of dredging.

14.2 Recommendations

In view of the general erosive environment at the present time along the coast of the island, there is little possibility of being able to stop the erosion of the beaches. Defensive works are costly, slow to be implemented and frequently adversely affect other areas of the coast. It may, however, be possible to decrease the erosion rate to somewhere near what might be normal at the present time, and therefore restore the natural sequence of coastal evolution.

This could best be achieved in the short term by a program of public education along the coastal areas where the tourist industry is important. The education program could be conducted on a number of levels:-

- a) A local level with display signs stressing the dangers of

the coastal erosion and the need for tourist discipline in keeping to paths through the dunes, not destroying the vegetation complex and restricting children's digging activities to the foreshore.

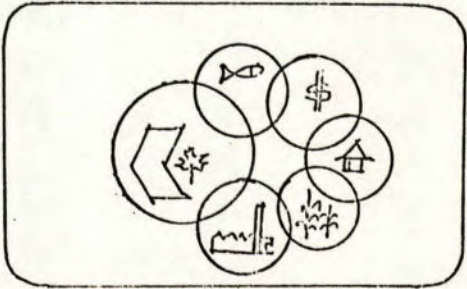
b) At focal points along the coastal areas to establish visual displays of the nature of the problem with photographs, maps and models illustrating the nature of the coast, coastal processes, the amount of erosion which is taking place and the ways in which it can be minimised.

c) To provide as many tourists as possible on entering the island, at the ferries and at the airports with literature outlining the problem.

d) To employ students during the tourist season to patrol the beaches to point out to the tourists the ways in which they are aggravating the problem and to discuss with them the ways in which they could help to minimise the problem.

In the long term viewpoint considerable coastal research is necessary on the processes of coastal development along the coast, particularly in those areas where it is proposed to establish provincial parks and in the present National Park area in order to control the effects of touristic development.

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15.0 GENERAL CONCLUSIONS

The Comprehensive Plan appeared to us to be a means of reducing social and economic disparities through a rational and much more efficient use of Prince Edward Island's available resources in their local context. In this perspective, it was felt that the plan in its general terms was well conceived even if some modifications would have to be made, after reevaluation, to the order of priorities as established, as has been pointed out in some of the general recommendations of this report.

To undertake a detailed analysis would have taken much more time and we would have needed access to more detailed information and data. If our observations are to be based on the official literature available, it is difficult to assess in monetary terms the actual net impact of the plan on the Island's economy, because it is relatively difficult to divide net contributions from ordinary budget expenditures that would have been spent by the two governments involved, during the implementation period. A critical path showing the integration in time and space of the various sectorial development programs and projects, with their own budget and implementation schedule, would also have been useful. The same problem arises if we look at the administrative and management aspects. It has been relatively difficult to make a distinction between the traditional departmental government structures and the administration

and management structures of the plan. As for citizens participation, it seems that most of the difficulties and problems that have emanated from lack of confidence, apathy and distrust, would have been limited if an information and participation effort had been undertaken at the local levels, at the beginning of the operation.

The general remarks contained in this report, try, as far as possible, to provide some answers to some of these difficulties and problems. It is hoped that some of them may be of interest and of use to those who have received the difficult mandate of implementing the Prince Edward Island Development Plan.

APPENDICES

Appendix #1LIST OF PARTICIPANTS

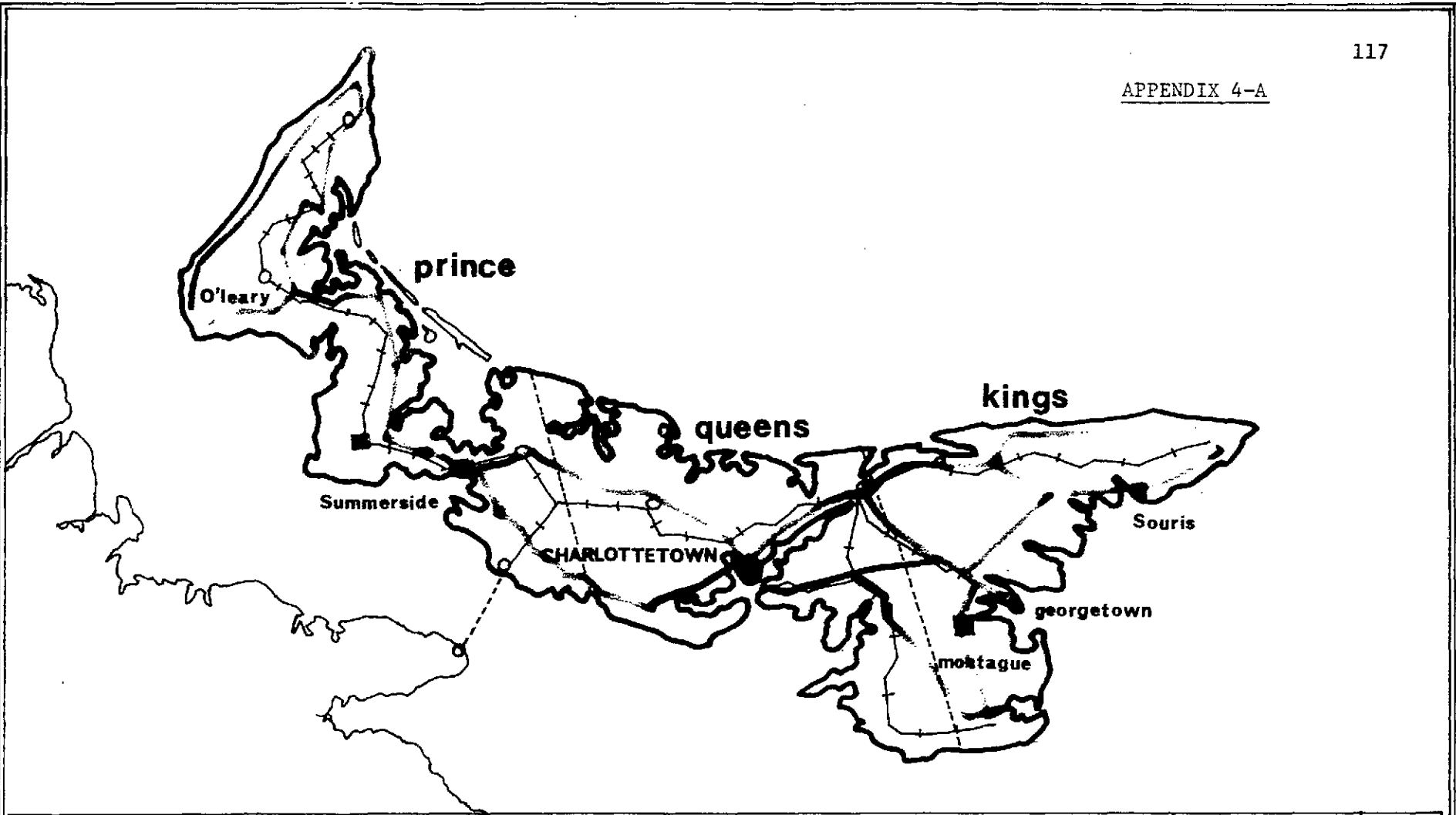
1)	Gabriel Audet	second year student	Center for Regional Studies
2)	André Bendwell	first year student	Center for Regional Studies
3)	Mario Carota	professor	Center for Regional Studies
4)	Henri Chapdelaine	second year student	Center for Regional Studies
5)	Patrick Chen	second year student	Center for Regional Studies
6)	Ghislain Couture	first year student	Center for Regional Studies
7)	Carlton Dudley	professor	Center for Regional Studies
8)	David Erskine	professor	Department of Geography
9)	Hazem Ghonima	second year student	Center for Regional Studies
10)	Carl Glasgow	first year student	Center for Regional Studies
11)	Claude Greffard	coordinator	Center for Regional Studies
12)	Peter Johnson	professor	Department of Geography
13)	Victor Lambert	professor	Center for Regional Studies
14)	Jean-Pierre Marcoux	first year student	Center for Regional Studies
15)	David T. McCann	second year student	Center for Regional Studies
16)	Jean-Marie Morin	second year student	Center for Regional Studies
17)	Ken Sayce	documentalist	Library
18)	Gerald Steele	second year student	Center for Regional Studies
19)	Lise Vincent	first year student	Center for Regional Studies
20)	Jean-Serge Vincent	graduate student	Department of Geography

Appendix #2P.E.I. - THE VISIT PROGRAM

<u>DATE</u>	<u>ACTIVITY</u>	<u>PLACE</u>
April 25	Ottawa - Charlottetown	
April 26	Briefings Dept. of Development Fisheries Agriculture Education Finance Government Reception	Charlottetown
April 27	Agricultural Sector Irish Moss Industry Inshore Fishing Farmers' Development Group	O'Leary Ebbsfleet Tignish Alberton
April 28	Education Sector National Defence Base Recreation/Tourism	Abram's Village Summerside Cavendish
April 29	Marketing Research Group Fish Processing Plant Shipyard	Charlottetown Georgetown Georgetown
April 30	The "NewStart Programme" Tourist Development Rural Development Council	Montague Brudenell Charlottetown
May 1	Synthesis / Summary	Charlottetown
May 2	Charlottetown - Ottawa	

Appendix #3THE BUDGET

1) Transportation (Ottawa-Montreal-Ottawa) 20 persons x \$10.00	\$ 200.00
2) Transportation (Montreal-Charlottetown-Montreal) 20 persons x \$65.60	\$1,312.00
3) Transportation (Prince Edward Island) (bus rental)	\$ 300.00
4) Accomodations (Prince Edward Island) 20 persons x \$50.00	\$1,000.00
5) Report, miscellaneous	\$ 188.00
Total	<u>\$3,000.00</u>



PRINCE EDWARD ISLAND

CLIENT—Dept. of Regional Economic Expansion

Center for Regional Studies—University of Ottawa

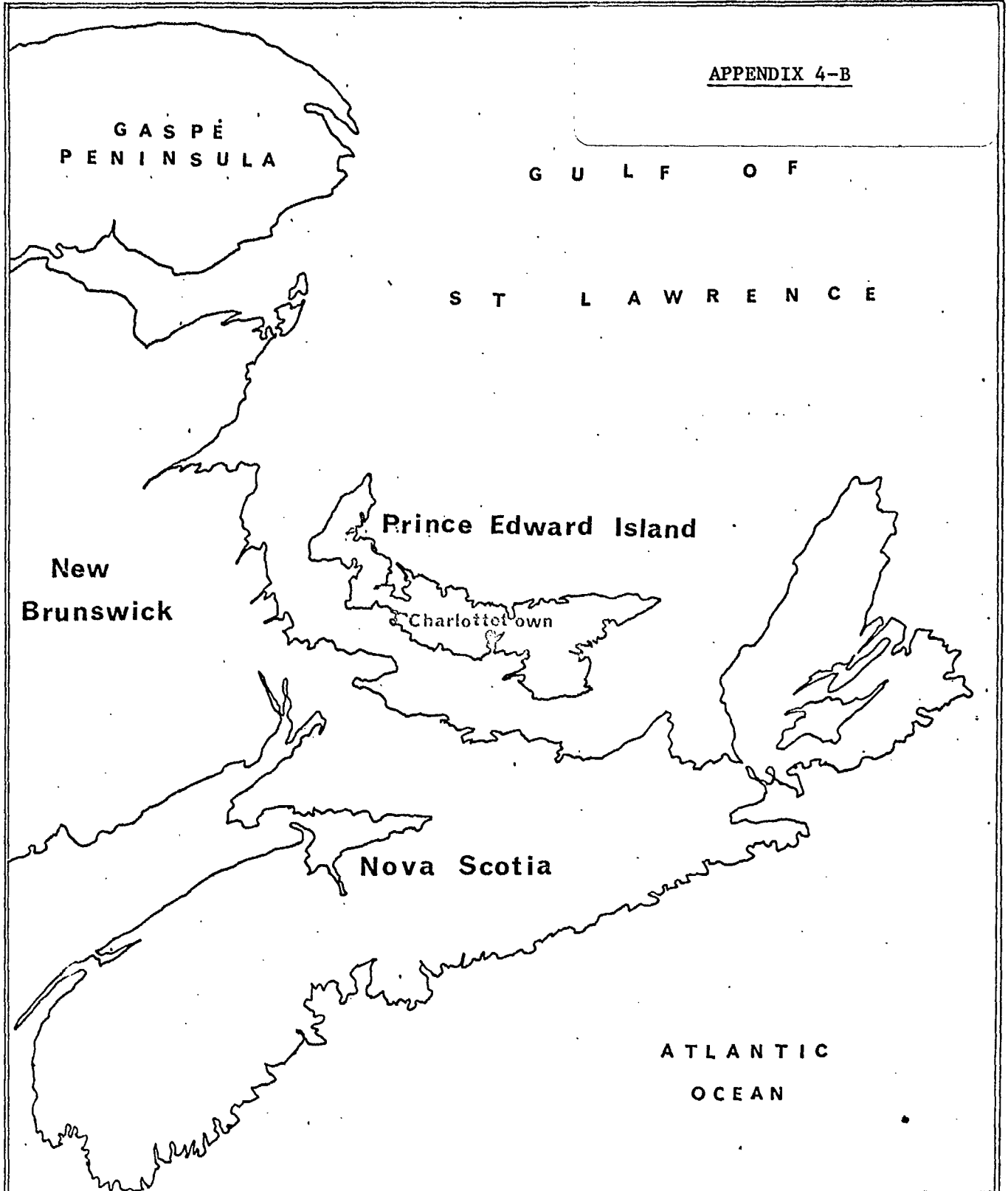
scale
1 inch = 15.7 miles

date
May 1971



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APPENDIX 4-B



PRINCE EDWARD ISLAND
regional context

CLIENT—Dept. of Regional Economic Expansion

Center for Regional Studies—University of Ottawa

scale
1 inch = 47 miles

date
May 1971



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