Comparative Income - Employment and Community Adjustment Patterns in the Burin and Great Northern Peninsulas, Newfoundland.

COMPARATIVE INCOME - EMPLOYMENT AND COMMUNITY ADJUSTMENT PATTERNS IN THE BURIN AND GREAT NORTHERN PENINSULAS NEWFOUNDLAND

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INTRODUCTION

The purpose of this investigation is to provide a comparative analysis of income and employment adjustment patterns among fishermen and fish processing employed in the Burin and Great Northern Peninsulas of Newfoundland. Also for analysis are the variations in the community adjustment patterns of the two regions.

Following upon the comparative analyses the study seeks to evaluate the desirability or non-desirability of some of the observed changes with respect to efficiency and equity criteria, and indicates some directions for future policy.

Chapter I

Socio-Economic Structure of the Burin Peninsula

Perspective

The Burin Peninsula (Census Div. 2, Newfoundland) has a population of around 28,000 as at 1976. The population was distributed over sixty population centres with the 6 major centres of Burin, Fortune, Grand Bank, Lawn, Marystown and St. Lawrence accounting for 60% of the population. Growth in the urban population over the period 1961-76, was strongly associated with amalgamation of small suburban population.

The DFE data indicate 90 fish landing points in the area, but the 4 major trawler ports accounted for 66% of landings.

Fishing and the associated fish processing and shipbuilding together provide the economic base of the area. As at peak periods of employment activity; say June-August, the 3 named activities accounted for around 60% of the employed labour force.

Fish Landings

For the purposes of this analysis, the DFE fish landing data on fishing Districts H and I are taken to be representative of the Burin Peninsula. Fish landings in the two fishing districts increased from around $7.7 million, 1965-68 average, to around $13.5 million, 1973-75 average. The average sums represented 28.4% and 29.6% respectively of all Newfoundland's fish landings, for the two periods.

Historically, groundfish is the dominant specie grouping and its dominance has been strengthened over the period, as the specie grouping increased its share of area landings from around 79% in

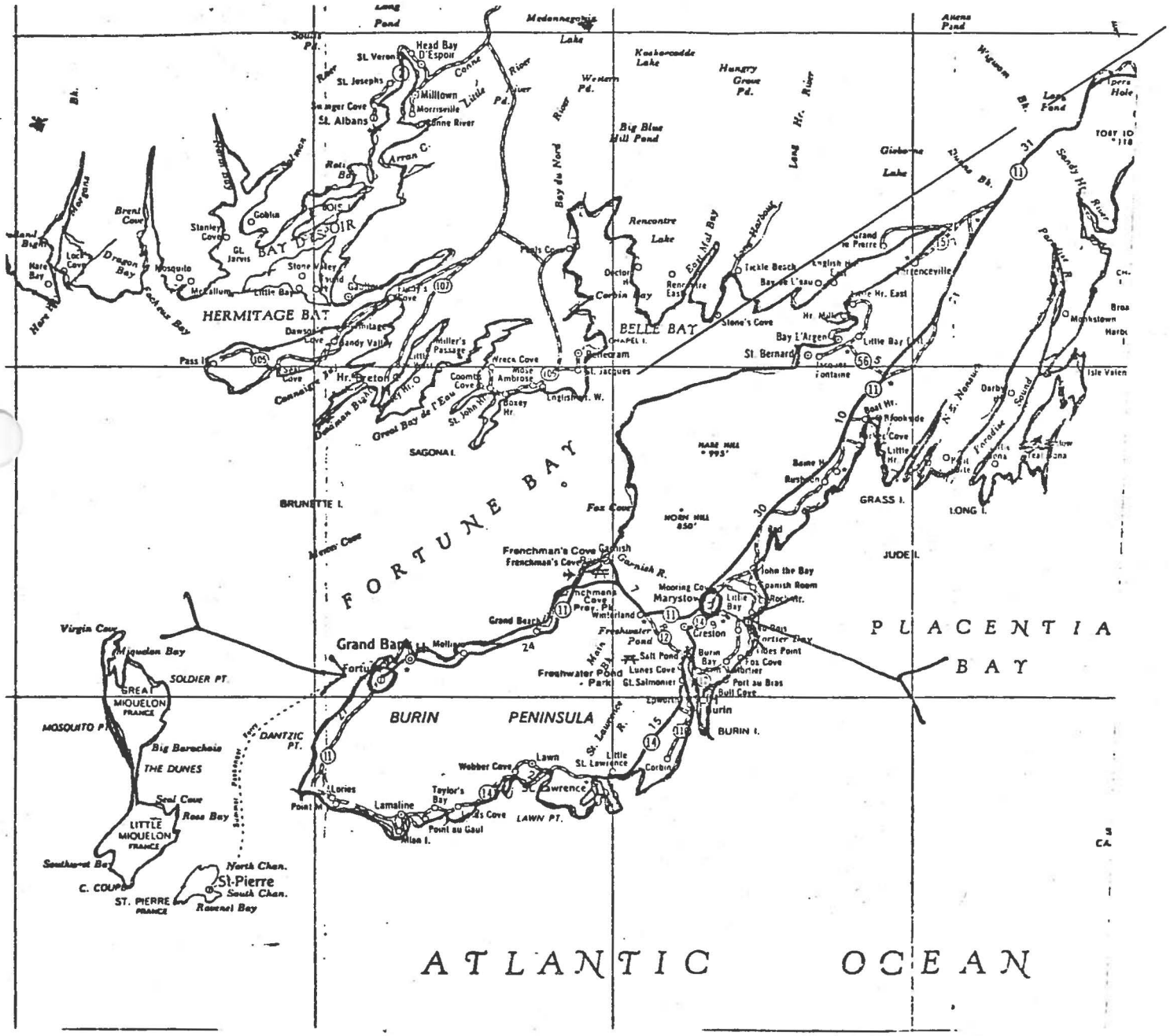
1965-68 period to 88% in 1973-75. In the 1965-68 period, groundfish landings in the area represented around 29.7% of all Newfoundland landings of groundfish, and by 1973-75, the area's share had increased to 36.1%. During the period 1967-68, the pelagic and estuarial group, largely herring, assumed some importance, with value of landings representing roughly one-half of area's groundfish landings. In general, the contribution of the pelagic and estuarial group to area's landing has been minor and declining strongly. The molluscs and crustacean group though minor has shown increasing share of the area's total landings.

The bulk of landings came from large trawler boats engaged in offshore operations on a year round basis. Offshore fishing activity in the area is integrated with fish processing operations of 4 large firms with mult-plant activity in the Atlantic fishery. Plant purchases from inshore fishermen were strongly associated with the Burin port, and has been declining strongly over the recent period, as inshore fishermen landings decline and as salting and pickling operations become more attractive to inshore fishermen.

Capital Inputs

Capital equipment employed in the primary fishing operations in Fishing Districts H and I is estimated by DFE at $33.2 million, as at 1973. The value of these equipment represented around 37% of all Newfoundland level. The area had a relatively high representation of capital equipment levels, and this was strongly associated with high levels of trawler and dragger assets which represented 87% of area's fishing capital equipment compared to 57% in all Newfoundland.

THE BURIN PENINSULA



The comparative data on 1965 show Fishing Districts H and I accounting for 31.4% of Newfoundland's fishing capital equipment. Trawler, dragger and purse seiner capital equipment represented 34.3% of area's equipment compared to 37.9% for all Newfoundland. The strong build up in capital equipment since 1965 (and even earlier) in the Burin has been in trawler capacity. Further, the data indicate an absolute decline in the value of inshore capital equipment for areas H and I, from $7.9 million to $4.3 million (1965-1973) compared to an overall increase of around $14.6 million for all Newfoundland inshore activity in that period.

In the under 10 ton boat category, the most marked reduction in numbers, in Fishing Districts H and I was in the powered craft 20-35 foot category. That boat size category decreased in numbers by 53% but the percentages decrease was roughly parallel to the observed decrease for all Newfoundland. Between 1968 and 1973, powered boats of greater than 35 feet (under 10 ton category) tended to show marked increase in Fishing Districts H and I while declining absolutely in all Newfoundland. Increases in powered boats under 20 feet (and under 10 tons) tended, over the 1965-73, period to be more sustained in all Newfoundland, than in Fishing Districts H and I.

With respect to boats over 10 tons and 100 ft length, Fishing Districts H and I, have consistently had a representation in excess of 50% of the Newfoundland total, and in 1973, the area's share stood at 63%. Between 1968 and 1973, the area showed an absolute increase in these size boats while all Newfoundland showed

an absolute decline. In the boat categories 35 and under 50 feet and 50 and under 75 feet, the Fishing Districts H and I tended to be under represented but showed relative increases in the period 1968-73.

Primary Fishermen

The total number of fishermen engaged in prosecuting the fishery in Fishing Districts H and I,in 1973 (latest DFE estimates) was 2,472, of which roughly 1,000 were described as offshore fishermen. The offshore fishermen of the area represented 48% of the provincial total of offshore fishermen. Between the period 1965 and 1973, the number of fishermen in the area is estimated to have declined by around 600, with the decline in inshore fishermen being roughly twice as large.

As at 1973, roughly one-fifth of primary fishermen in Fishing Districts H and I were classified as full time (over 10 months of fishing activity) and one-third were occasional (five to 10 months of activity). The full time fishermen in Fishing Districts H and I represented 55% of the all province total. There has been changes in the coverage of the duration of fishing employment data in Newfoundland and consequently no comparisons are here drawn with the period 1965-68.

Of an estimated 1,500 inshore fishermen in Fishing Districts H and I, roughly two-thirds were fresh cod fishermen and one-third salted cod fishermen. The percentage of salted cod fishermen in the area was roughly parallel to all Newfoundland, but was lower than for Western Newfoundland (Gulf area).

As at 1973, the average age of fishermen in Fishing Districts H and I was 36 and 37 years respectively, compared to 38 years in all Newfoundland

and a high of 44 years in Fishing District C (Cape Freels to Cape Bonavista). Roughly 16.1% of all fishermen in the area was over 55 years compared to 15.3% in all Newfoundland and 13.7% in Western Newfoundland.

There are the indications that between 1973 and 1977, that the percentage share of inshore fishermen in the area engaged in salted operations would have increased and the average age of participants in all fishery in the area would have declined.

Fish Processing Operations

Factory based fish processing employed in the Burin Peninsula is estimated at 1,400. Fish processing operations in the Burin are more labour intensive than the trawler and purse seiner operations which are characteristic of the area. Therefore, the strong employment impact of fishing activity in the area lies in factory based fish processing and to a lesser extent in the related shipbuilding, repairs and maintenance activities.

The major offshore trawler ports of Grand Bank, Fortune, Marystown and Burin are the major fish processing centres. There is a marked daily commuting of production workers to these fish processing - trawler ports from areas within a 25 mile radius of a particular centre. There is a relatively high representation of young labour force members (20-35 years) and labour union structures are well developed.

The observed locational concentration is, in general, conducive to the achievement of scale economies in production, purchasing and marketing, and in particular to plant economies in areas such as plant scheduling, trucking and collection operations. An observed relatively high degree of concentration of ownership and physical facilities, high

levels of throughput, and an apparent more technically competent plant management,facilitate relatively high incomes and relatively high and stable level of factory based employment. However, given a high degree of product and market specialization of Burin plants, namely, frozen groundfish blocks and slabs to large commercial and institutional U.S. buyers, then the situation could have worked against stability in incomes and employment. It is suggested that in the short run - determined by products with "shelf life" of around 6 months - the strongly variable component of plant operations would likely to have been that of inventories.

In general, fishing industrial organizational structures and conduct in the Burin Peninsula, tend to be among the more sophisticated within Newfoundland. Similarly, labour unions and government regulations impact more strongly on these fishing - processing-marketing integrated operations, than they do, in say, the smaller, more divisible and less complicated industrial operations of the Great Northern Peninsula. Further, the characteristic branch plant operations of the Burin Peninsula are constrained in their medium and long term operations by head office directives. Also existing tariff structures impact strongly on Burin plant's depth of processing, restraining, for example, an alleged desirable movement from frozen blocks and slabs to sticks.

Non-Fishing Labour Force Activity

As at 1976, of an estimated labour force in the Burin Peninsula (Census Division 2) of around 8,200 roughly 60% had attachments for various time periods to fishing,fish processing and boat building activities (inclusive of Marystown shipyards). During non-peak periods

of fishing activity, the non-fishing activity employment was of the order of 55-60% of labour force.

As at early, 1950's, roughly one half of the male labour force of the area was seasonal migrants to Stephenville and St. John's (employed in U.S. bases) and as workers on dragger-seiners in Nova Scotia ports (primarily Halifax). Since then, mining development in St. Lawrence, the varied and dispersed government sector activity, retail trade, community and business services, and trawler port - fish processing - shipbuilding developments have made for a more diversified occupational labour force in Burin Peninsula and substantial reductions in seasonal migration levels. As at mid 1970's, seasonal migration flows tended to be localized and confined to smaller population centres such as Epsworth, Terrenceville, Harbour Mille and St. Bernard.

Among the traditional resource sector activities of fishing, agriculture, mining and forestry, the most marked adjustments in the last two decades have taken place in agriculture. Over the period there has been a substantial decline in the contribution of agriculture to income and employment in the Burin Peninsula. As at mid 1970's, only small areas in the southern tip of the Peninsula, such as Lord's Cove, Taylor Bay and Point au Gual and areas in the central part of the Peninsula, such as Frenchman's Cove and Winterland, had representation of commercial agriculture and showed some growth prospects. A strong decline in food production for home consumption and for market gardening is particularly noticeable. The strong decline is associated with increasing and stable wage earning employment, as well as with the continued seasonal migration pattern of some male workers.

With respect to mining activity, a major alternative income and employment source (to fishing activity) in the area is ALCAN FLUORSPAR Works, St. Lawrence, with peak level employment of 350-400. In recent time periods, labour strife and scaled down operations have reduced the impact of the operations.

Urban growth in centres such as Marystown, Grand Bank, Burin, St. Lawrence, Fortune and Lawn has facilitated service sector income and employment growth. With improved transportation linkages, Marystown is developing as a major service centre for the entire Burin Peninsula. There is considerable commuting to work in Marystown and this reinforces the trading area dominance of Marystown for high order, as well as, low order goods and services.

Grand Bank is a major service centre for the Southern half of the Burin Peninsula and a major job market for local residents as well as commuters from Grand Beach, Frenchman's Cove, Point May, Lamaline and Lord's Cove. Grand Bank is only 4 miles from Fortune, and the Grand Bank hospital serves the two towns. There is also joint support between the two towns for VON, fire fighting services and proposals for a joint stadium. Fortune is also the arrival and departure point of the ferry to St. Pierre, and is of some importance as a local tourist centre.

With respect to government funded activities, the indications are that infra-structure schemes, associated with engineering construction work, community and personal services, inclusive of health and education services, as well as protection and administrative functions were major contributors to income and employment growth in the area. However, the crude indications are that the government inputs into socio-economic infra-structure ,

e.g. Canada Works program was not as high on a per capita basis, as in areas such as the Great Northern Peninsula.

Urban growth has also facilitated growth in contractual residential construction and real estate and financial services. In areas such as Marystown and St. Lawrence, there is an increased incidence of residential buildings built for sale on service lots, accompanied by long term mortgage financing. These developments contrast with inshore communities, where own - account residential building (with some sub-contracting out) is the characteristic feature and where there is a strong resistance to the incurring of long term mortgage debts. In general, given a higher and more stable income level in the Burin, there was a higher propensity, among the area's households (higher than among Great Northern Peninsula households) to incur consumer debt. The greater propensity to incur consumer debts would have served to improve business activity for consumer durables and housing.

Community Services and Their Financing

Most offshore and inshore communities in the Burin Peninsula are presently provided with a range, quality, and frequency of delivery of services well above their local taxable capacity. In general, the services which are provided were related to local taxable capacity only in a minor way, as socio-political considerations of senior levels of government assumed primacy.

Connected water, sewage and sewage treatment facilities were the major distinguishing features between small inshore communities and the larger offshore communities. Many small inshore communities are provided with private wells and septic tanks but there has been a strong public policy thrust towards connected water and to a lesser extent sewage services.

The communities of Marystown and Burin were the only ones which paid property tax (Burin as proposed for 1976). This source of revenue was relatively low. There was no locally assessed school taxes as education expenditures were a direct charge to provincial general revenues. Local revenue from business tax was relatively low and large fish processing plants such as Atlantic Fish Processors (Marystown) is alleged to have paid in recent time periods, an annual sum of $2,000 while Booth Fisheries (Fortune) is alleged to have paid $5,000 annually as business tax.

The user costs to households for community services varied among communities with Community Councils, but in general the costs were relatively low. For example households in Fortune, in recent time periods, paid annually $30 service fee and water tax while Parker Cove households paid annually $10 for service fee, $24 for water and $60 for sewages and Baine Harbour households $10 yearly for garbage collection and lights and $6 yearly for water. In general, the local tax burden was relatively low and the major cost of the provision of services was falling upon the provincial general revenues. The relatively low cost of service and unserviced land in smaller communities, as well as, low level of local tax are conducive to the development of "dormitory suburbs" and inter-area commuting to work.

The provision of centralized educational and hospital services was well advanced in the Burin Peninsula and the major distinguishing feature between small and large communities appear to be variations in commuting distances for higher quality health and educational services.

Summary

The Government sector has been a major catalyst to growth and development in the Burin Peninsula. Some major private sector activities eg. fish processing and shipbuilding continue to remain strongly dependent on production subsidies.

The developmental strategy followed worked towards higher levels of monetized contractual arrangements. It encouraged higher levels of a wage earning category and correspondingly the decline of own account workers eg. inshore fishermen. The strategy facilitated relatively high levels of earned incomes for those employed, but was accompanied by higher levels of measureable unemployment. Given the "demonstration effect" of the employed upon the unemployed and underemployed, there were continuing pressures upon the Government sector to increase directly, or indirectly, additional income and employment streams.

It is alleged that the developmental strategy followed has weakened the independence of individuals, and has for example, made workers more susceptible to variations in the market conditions for fish proudcts and shipbuilding. Exponents of this view point, inter alia, to the rapid decline in the area in agricultural products for local consumption; to some decline in cottage based industries and household based fish processing activities, to the higher propensity to incur consumer debts & mortgage debts with their demand for high and stable income levels and to a decline in the willingness to engage in production co-operative schemes and self-help schemes.

There are the indications that the resource sector developments in the Burin which generated higher income and employment levels were not accompanied by comparable levels in local taxable capacities. The crude

indicators are that the overall taxable capacity of the area (municipal, provincial and federal) was relatively low. The evidence is that local tax was low while personal and corporation tax, income tax, sales tax, excise duties, etc. accruing to the federal and provincial governments were relatively low. Consequently, there continued to be a relatively high dependence on provincial-federal government direct and indirect revenue support.

Chapter II

Comparative Analysis of Great Northern and Burin Peninsula Areas

Perspective

The population of the Great Northern Peninsula (Census Div. 9) has increased from 16,038 in 1951 to 23,140 in 1971 and an estimated 23,700 in 1976. Between 1951 and 1971, the population of the area grew by an average annual rate of 1.9% compared to an average annual rate of 0.8% in Burin (and an absolute decline in the 1966-71 period). The urban population namely the populations of the towns of Englee, Roddickton and St. Anthony, represented 21% of the Census Division 9 population in 1971 compared to an urban population of 60% in Census Division 2.

In the Great Northern Peninsula, there are about 75 communities with LGC and LID status. Among these communities, coastal centres such as Norris Point, Rocky Harbour, Port au Choix and St. Lunaire had population,as at 1971,ranging between 800-1,000, and have shown relatively rapid growth over the 1951-71 period. Other smaller centres showing population growth in the 1961-71 period are Port Saunders, Hawkes Bay and Parsons Pond.

As at 1976, of an estimated labour force in the Great Northern Peninsula of around 6,500 roughly 40% had employment attachments to fishing, fish processing, fish buying activity and boat repair, during peak periods June - August. The indications are that the area was less dependent than Burin on fish and fish related activities.

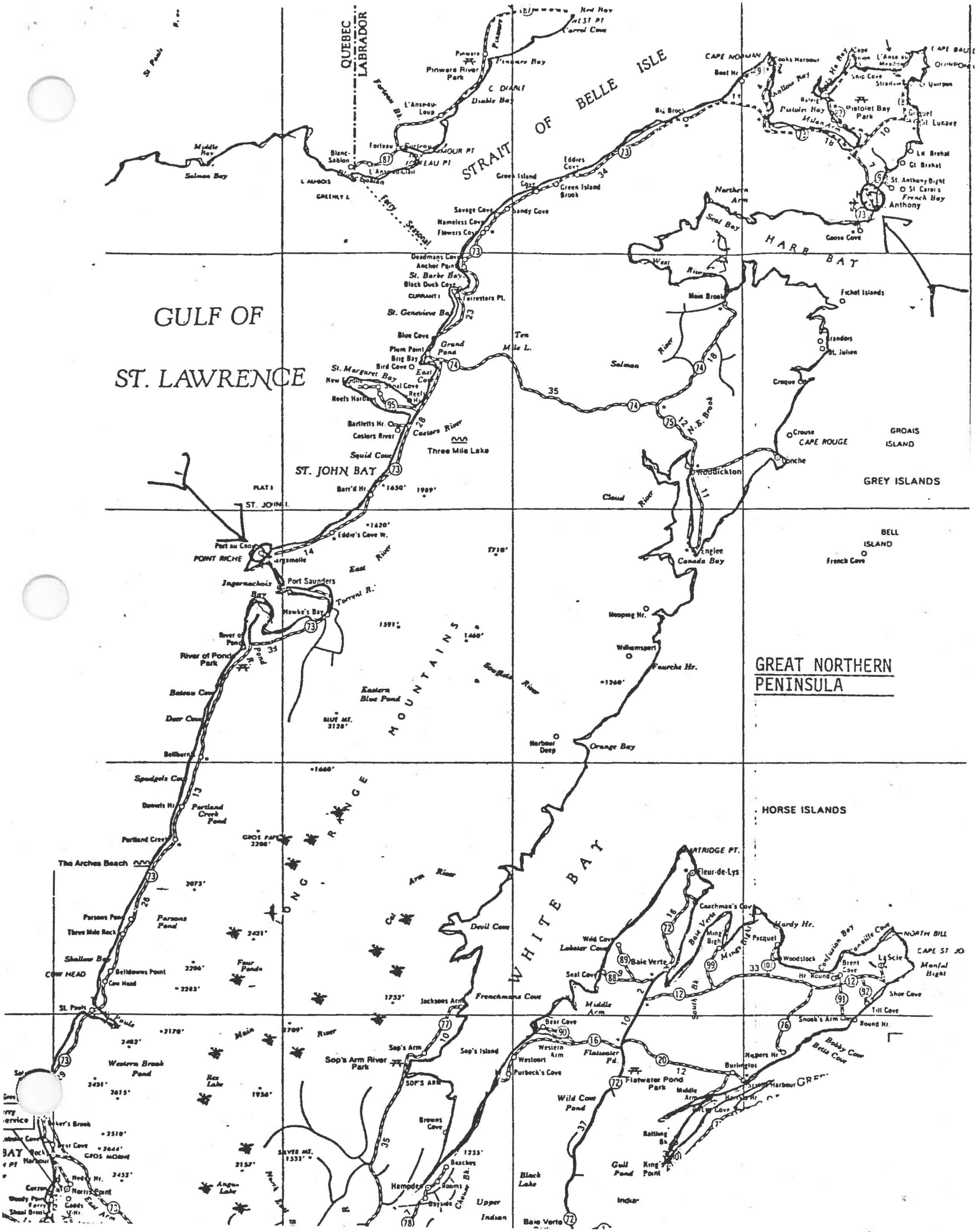
Fish Landing, Fish Processing ~~and~~ Employment and Capital Inputs

For the purposes of this analysis, the DFE fish landing data on Fishing Districts M, N and A are taken as representing the Great Northern Peninsula. The value of fish landings in these three districts increased

from around $4 million annually, 1965-68 averages, to $5.2 million annually in 1973-75 averages. As at 1975, the value of fish landings in the area was roughly 39% of landings in the Burin. The bulk of the landings was in the inshore fishery, compared to Burin Peninsula where it was the offshore fishery.

Like the Burin Peninsula, groundfish specie grouping has been the major grouping. In the 1965-68 period, the grouping represented 56% of area landings compared to 49% in 1973-75. However, while groundfish specie grouping rose relatively in the Burin it declined relatively in the Great Northern Peninsula. The decline in groundfish share in the Great Northern Peninsula was strongly associated with improvements in the molluscs and crustacean group (largely lobsters and shrimps) in Fishing District N (Pointe Riche to Cape Norman).

The number of fishermen engaged in Fishing Districts M, N and A in 1973 was 2,600 and the value of landing per fishermen in the area was around $1,960. The latter estimate represented 32% of the level of the Burin Peninsula. As at 1973, 74% of the fishermen in the Great Northern Peninsula was occasional (under 5 months) and 26% part-time (5-10 months). Full time fishermen were unrepresented. The comparable data for the Burin were 47%, 33% and 20% respectively. Only 3% of fishermen in the Great Northern Peninsula was classified as offshore (and part-time) compared to 20% (and full-time) in the Burin. As at 1973, of an estimated 2,500 inshore fishermen in the area roughly 30% was salted cod fishermen, a percentage share roughly identical with all Newfoundland. Since 1973, the promotional and developmental activities of the Saltfish Corporation and the relative improvements in saltfish prices would have served to raise the percentage share of salted cod fishermen in overall activity and in particular in the Strait of Belle Isle area.


QUEBEC
LABRADOR
STRAIT OF BELLE ISLE
GULF OF
ST. LAWRENCE
HARE BAY
GREAT NORTHERN
PENINSULA
LONG RANGE MOUNTAINS
WHITE BAY
GROAIS ISLAND
GREY ISLANDS
BELL ISLAND
HORSE ISLANDS
CAPE NORMAN
CAPE ROUGE
ST. JOHN BAY
POINT RICHE
COW HEAD
Pinware River Park
Pistolet Bay Park
River of Ponds Park
Sop's Arm River Park
Flatwater Pond Park
St. Anthony
Roddickton
Englee
Canada Bay
Conche
Port Saunders
Hawke's Bay
Baie Verte
Fleur-de-Lys
Jacksons Arm
Hampden
The Arches Beach
Three Mile Lake
Blanc-Sablon
Forteau
L'Anse-au-Loup
Ferry Seasonal
Main Brook
Williamsport
Harbour Deep
Orange Bay
Devil Cove
Frenchmans Cove
Western Brook Pond
Woodstock
Burlington
King's Point
Westport
Purbeck's Cove
Plum Point
Green Island Cove
Eddies Cove
Flowers Cove
Bellburns
Portland Creek
Parsons Pond
St. Pauls
Norris Point
Gros Morne

Other than for District N,where the average age of fishermen was relatively low (34 years,as at 1973), the age structures were broadly similar to all Newfoundland and Burin. In general, the average ages of all participants in Newfoundland's primary fishery decreased during the 1973-77 period,as fishing became increasingly attractive to young labour force members and as there was slow growth in alternative employment opportunities.

Table 1 shows the percentage share of fishermen to total labour force by small areas, following specified percentage groupings. The Great Northern Peninsula had a higher incidence of communities which showed fishermen accounting for more than 50% of the labour force. However, the area designations for Great Northern Peninsula tend to be much smaller than Burin. As a general rule, the smaller the fishing area under study, the stronger is the likelihood that fishing will represent a high percentage of the labour force. Consequently the strong representation in Great Northern Peninsula may be over-stated compared to Burin.

In the Great Northern Peninsula there was a relatively high level of small factory based fish processing operations, and household based and community stage operations, as well as, widespread collection and buyer operations. Further, a large number of final processing operations was supported by an array of intermediate (and buying facilities), most of which were independent of final processors. The observations indicate a more complex fishing industry organizational structure in the Great Northern Peninsula than in Burin as well as the wider dispersion of income and employment growth for a given level of landings. Given an observed constraints on growth in alternative income and employment opportunities

TABLE 1

NO. OF FISHERMEN EXPRESSED AS A PERCENTAGE OF AREAS' LABOUR FORCE - 1976 (BURIN & GREAT NORTHERN PENINSULA

	Percentage Groupings					
	Under 10%	10 and under 20%	20 and under 30%	30 and under 40%	40 and under 50%	Greater than 50%
Burin Peninsula						
	Marystown St.Lawrence	Burin Rock Harbour)Beau)Bois Lawn Lamaline Grand Bank	Fortune Garnish Molliers		Lords Cove	
Great Northern Peninsula						
		Parsons Pond Portland Creek Hawke's Bay Pond Cove St.Anthony Roddickton Goose Bay	Daniels Harbour Bellburns Bird Cove Green Island Cove Plum Point Englee	Cow Head Flowers Cove Reefs Harbour	River of Pond Port Saunders Sandy Cove Brig Bay Eddie's Cove Forrest Point	Port au Choix Eddie's Cove W Anchors Point Bartlett Harbour Bean Cove Black Duck Cove Blue Cove Castor River Green Island Brook Nameless Cove New Ferrole Paynes Cove Savage Cove Shoal Cove W. St. Barbe's

Source: Statistics Canada 1971 Census data.
Department of Fisheries & Environment (FMS)

in the Great Northern Peninsula (as well as the Burin) the higher levels of spatial dispersion of income and employment growth, may be considered desirable, following a spatial equity criteria.

With the probable exception of medium size plants in Port au Choix and St. Anthony, labour organization structures in the Great Northern Peninsula were poorly developed compared to the Burin Peninsula. Consequently comparative wage levels, fringe benefits and industrial unrest, etc. impacted less strongly on plant management in the Northern Peninsula than in the Burin. It is suggested that plant management in Great Northern plants had more leeway to adjust labour inputs, (on an hourly, shift or daily basis) to variation in the supply of fish. This should have served to improve relative labour productivity levels.

It is alleged that large fish processing plants in the Burin make substantial purchases from retail-wholesale units in local areas. There has not been an enquiry into this allegation. However, it is observed that the extent of purchase multipliers in particular (and all multipliers in general) upon local area is controversial, and a more detailed enquiry into this aspect is suggested. A purely rational view would be that local-purchase multipliers are low, given low supply capabilities of retail-wholesalers in the area, the low development of business services and the probably economies which could accrue to large branch plants with a tendency to go for bulk purchases, outside the small area, so as to achieve volume discounts. These observations would suggest that the major local impact of integrated Burin plants was with wages and salaries generated by trawler and fish processing plants.

In contrast, there are the indications that the characteristic inshore fishery of the Northern Peninsula accompanied by household, community stage, smaller factory processing operations generate more purchasing impacts on the characteristic minimum convenience centres and hamlets of the area than in Burin Peninsula. It is suggested that inshore fishery demands for boat hardware, equipment and gear supplies, as well as quantity demanded are generally in conformity with local supply capabilities. There is also a higher level of plant purchases of fish from inshore fishermen in the Northern than in the Burin Peninsula.

Table 2 shows a list of factory based fish processing activities by man year equivalents and actual numbers employed for the two areas. The table is indicative and not comprehensive of fish processing employment levels. A comprehensive treatment would include, for example, around 300 persons engaged in the Great Northern Peninsula, in household and community stage operation in salted cod, smoked and pickled herring, bait production and co-operage.

With regard to comparative capital input levels, the DFE data indicate that as at 1975, capital equipment employed in primary operations in Great Northern Peninsula was $7.1 million or roughly 21% of the estimated sum for Burin Peninsula. The representation of trawlers and draggers in the area (public and private) over the period 1973-77, would serve to raise capital sums substantially during the recent period. In general, the area's contribution to provincial capital equipment was relatively low when compared to its contribution to total value of landings.

As is expected, the decline in small inshore crafts in the Great Northern Peninsula, was less spectacular than in the Burin Peninsula. Between 1965 and 1973, the decline in small craft of under 10 tons in the Great Northern Peninsula was roughly in line with all Newfoundland. In the

TABLE 2

FISH PROCESSING FACILITIES ON THE BURIN AND GREAT NORTHERN PENINSULAS OF NEWFOUNDLAND

Community	Fish Processing Plant	Man Years	Employed
Burin Peninsula			
Burin	Fishery Products Limited	260	260
Marystown	Fishery Products Limited	375	375
Fortune	Booth Fisheries Limited	334	334
Grand Bank	Bonavista Cold Storage	359	340
Great Northern Peninsula			
Parsons Pond	Burnt Island Seafoods Ltd	2	19
Cowhead	Cowhead Fisheries	12	57
Brig Bay	Canadian Saltfish Corporation	6	16
Port Saunders	Port Saunders Seafoods	2	3
Port au Choix	Fishery Products Limited	122	191
Bartletts Harbour	Gerry Scanlion	2	7
Castor's River	Canadian Saltfish Corporation	16	62
Blue Cove	Canadian Saltfish Corporation	8	30
Anchor Point	Cowhead Fisheries	26	101
Shoal Cove West	Isreal Coombs	8	30
Flowers Cove	Gaines Brothers Limited	2	23
Black Duck Cove	Steers Limited	2	13
Savage Cove	Harris Colles	2	6
Sandy Cove	Ronald White	6	36
Sandy Cove	Howard White	4	16
Green Island Cove	Mitchell Moore Fisheries	2	9
Green Island Cove	George Mitchell Moore Fisheries	3	30
Green Island Cove	Canadian Saltfish Corporation	4	21
St. Anthony	Fishery Products Limited	36	62

Source: DFE,(FMS - Fisheries Statistics and Computer Division)

under 10 category powered crafts of greater than 35 feet showed increases in the Northern Peninsula, while declining in all Newfoundland. In 1973, crafts of under 20 feet (under 10 ton) represented one-third of the number of under 10 ton craft in the area compared to one-tenth in 1965. This indicates a marked attractiveness, over time, of extremely small boats in the Great Northern fishery. Over 10 ton boats,with overall lengths of 35 feet and under 75 feet numbered 97 as at 1973, and roughly 14% of all Newfoundland's boats of that category. Within the Great Northern Peninsula,these boats had their strongest representation in Fishing District N, and reflected the fishing growth centre developments at Port au Choix - Port Saunders, Since 1973, there has been a representation in the area of boats in excess of 100 tons. This reflects the increasing importance of large boat cod and shrimp fishery associated with the medium sized factory operation - Fishery Products Limited and with provincial government fishery research programs.

Inshore Communities

Port au Choix - Port Saunders

During the period 1955-70 the Newfoundland Government with funding from the federal government and support under DREE programs has actively promoted Port au Choix - Port Saunders as a major fishing growth centre. The major fish processing plant, Fishery Products Limited, at Port au Choix had peak employment of around 300 and yearly average levels of 120. During peak periods, workers commute to the plant from areas such as Fichot Island, Anchor Point, Cows Head and Flowers Cove. The plant makes purchases from around 400 inshore fishermen in the area. The major species handled are shrimp and cod. Shrimp catches are of rising relative importance. There

are around 25 shrimp draggers, 20 longliners (40-65 ft.) and several small boats prosecuting the varied shrimp, cod, perch and scallop resources of the area. Other than the Fishery Products plant, there are located in Port au Choix, a small shipyard, several retail stores and a museum. Port Saunders is basically a government induced service centre for the area and provides nursing, police, forestry and high school services. The Hawke's Bay saw milling developments reinforce the Port au Choix - Port Saunders area as a growth centre.

Other Communities

Most of the communities of the west coast of Great Northern Peninsula are dependent on the:

- inshore fishery;
- wood cutting and saw milling operations at various locations on the Peninsula;
- urban job markets in Cornerbrook and Stephenville;
- far distance seasonal migration to urban job markets in Toronto; and
- mining employment in Labrador.

The major private employers in the area are:

Company	Employment Range	Location
Lundigran Newfoundland Ltd.	1700-1800	Cornerbrook
Bowater Newfoundland Ltd.	1700-1900	Cornerbrook Deer Lake
International Grenfell Assoc.	350-400	St. Anthony.

Many of the fishing communities are strongly dependent on wharfs, slipways and community stages. The straightness of coastline and shallowness of bays make moorage dependent on artificial structures. Communities

such as Anchor Point, Castors Rivers, Bartlett's Harbour, Plum Point and St. Barbe have had wharfs and stages built through Federal Aid, mostly through LIP projects. The communities north of Port au Choix appear very similar in their resource base with the exception of Flowers Cove. Flowers Cove is developing as a service centre similar to Port Saunders. In addition, a nursing station, high school, R.C.M.P., Highways and Power Commission, a local contractor, bank,garages, general stores and clubs add to employment sources. Most of the fish landings in Flowers Cove and Anchor Point come from longliners operating in that area, as service operations are increasingly attractive to previously small inshore boat operators.

In most communities in Fishing Districts M and N, (other than Port au Choix - Port Saunders), lobsters, herring, cod and shrimp constitute the bulk of fish landings. Small fish plants and community stages have increasingly developed from home-based operations as government quality control regulations impact strongly on home-based salting and pickling operations. Salting and pickling operations (cod and herring) in community stages and Saltfish Corporation processing plants or assembling centres are increasingly important;especially on the St. Barbe Coast (Strait of Belle Isle). The operations of the Saltfish Corporation have increasingly impacted on these communities,especially with respect to marketing of cod and herring and the extension services of quality control and small business management.

Communities of the east coast of the Great Northern Peninsula (Fishing District A) have a shorter fishing season than their west coat counterparts due to more severe ice and weather conditions. As a result,

the fishery on the east coast of the peninsula is not as profitable as on the west coast and the numbers involved in the fishery are generally less. Development of forestry and saw mill operations provide year round employment at places such as Roddickton and Canada Bay. The logging operations at Roddickton employ 35 men.

The major urban centre, St. Anthony, initially developed as the headquarters for International Grenfell Association and the Association continues to have a strong impact on the economy of St. Anthony and the Strait of Belle Isle (St. Barbe Coast and Labrador). There are two fish processing plants in St. Anthony with peak employment levels of around 400. Crab is the major specie processed. The bulk of plant throughput comes from around 450 inshore fishermen in the area. Other than fishing and fish processing activities, St. Anthony serves primarily as a service centre to 13 or more inshore communities in the area. It is the centre of higher order health and educational services as well as serving as a minimum convenience centre providing retail goods and personal services in around 40 business outlets. As a result of the developments in the service sector, the population has increased, and new housing subdivisions are planned and have been surveyed for further expansion should offshore oil exploration prove fruitful.

Specific to non-fishing income and employment activities, in the inshore communities in the Great Northern Peninsula, it is observed that food production for local consumption as well as market gardening continue to be widely dispersed. This is in contrast to the Burin Peninsula and it is suggested that imputations for locally produced and consumed grain, root crops, livestock and poultry would represent important additions to real income position in the Great Northern Peninsula.

Logging and saw milling operations are much more important additions to income and employment in the Great Northern than in Burin. Over time, there has been on the Great Northern Peninsula, some movement towards the concentration of logging and saw milling operations in Hawkes Bay but the movement has not been on a sustained basis. In the Canada Bay area forest and forestry products are of increasing importance.

A zinc mine at Daniels Harbour employs about 150 persons with around two-thirds of the employed coming from Hawke's Bay and Parsons Pond. Over time, LIP grants for community stages and waterwork schemes, DREE funded Marine Service Centres, Canada Works programs and other federal-provincial capital works programs have been widely dispersed and have been major alternative sources of employment and income in small communities of the Northern Peninsula.

Given the relatively high dispersion of the population on the Great Northern Peninsula, community and personal services, inclusive of health and education, as well as transportation and communication services are major additions to income and employment in the area, and in particular to small communities in St. Barbe's coast (Strait of Belle Isle). Further, small centres such as Cows Head and Flowers Cove have been provided with centralized high school facilities and have assumed some importance as government induced and service-oriented growth points.

Community Services and their Financing

In general, over 80 organized communities in the Great Northern Peninsula, each has public assets in recent period, at minimum levels, of $50-100 thousand dollars (exclusive of water or sewage systems). Most of these assets are relatively new socio-economic infra-structure, and includes items such as wharfs, slipways, community stages, recreational and cultural

amenities. In communities such as Port au Choix, River of Ponds, Parsons Pond, Cows Head and Daniels Harbour, there were relatively new water and sewage systems with capital cost as high as $2 million in Port au Choix. It is alleged that the rapid build up in capital works in many small communities in the Northern Peninsula, arose from a fear of possible resettlement of some small village communities in the 1960's. The spread of capital works programs in many small inshore communities on the Peninsula was also indicative of the primacy placed on government capital works as support to fishing, forestry and agricultural income and employment levels. However, it is alleged that there is a number of technical problems with water systems previously funded under LIP. This gave rise to questions as to the past appropriateness of LIP for such ventures, given the strong requirements for technical expertise which was relatively low in small comunities.

The bulk of municipal revenues in the organized communities of the Great Northern Peninsula arose from the Provincial Government. In this regard, the area was broadly similar to the Burin Peninsula. As at 1975, only Port Saunders, Flowers Cove and Hawkes Bay showed ratio of government revenues to all revenues of less than 50%. In these areas, the major source of revenue was business tax and service fees. Business tax tended to be relatively low or non-existent and service fees varied among communities. For example, as at 1975, Port Saunder's local taxpayers paid $10 annually for service fees and $5 monthly for water tax, compared to St. Anthony's where taxpayers paid $20 per year for services and $6 monthly for water and sewage.

A major variation among small communities was in their capital debt positions and consequently expenditures for fiscal services. However,

most small community debts incurred as a result of introduction or expansion of connected water and sewage systems, were in the form of temporary loans from provincial government and were below market rates of interest and finance charges and with generous repayment schedules. In general, the local tax burden in the Great Northern Peninsula was relatively low and the major costs of the provision of services was falling upon the provincial government directly and upon the federal government directly or indirectly.

Whether or not the per capita net cost to the government sector of Great Northern Peninsula residents was higher than in the Burin and the extent of the variations in the two areas cannot be answered in this analysis given the existing inadequacy of expenditure-revenue data by small area breakdown, as well as, the complicated nature of government subsidies of varying forms.

Comparative Income Positions

Labour force members in the Burin and Northern Peninsula are dependent upon multiple source of household income. These include own account fishing and home-based processing earnings, crew renumeration under existing lay arrangements ; wage earnings from fish processing, wage based non-fishing - fish processing activity, other earned incomes as well as unearned incomes from a government based personal transfer system (inclusive of U.I.C.). The combined dependence on the multiple sources makes for complex inter-relationships among income sources, and results in controversial assessments of comparative levels of net income positions and the contribution of each source to household income positions.

In general, there was a higher incidence of stable year-round fishing, fish processing and shipbuilding employment within the Burin than in the Northern Peninsula. Consequently the dependence on direct transfers and non-

fishing incomes was less in the Burin than in the Northern Peninsula. The bulk of fishing participants in the Northern Peninsula tended to be in receipt of maximum levels of unearned incomes from U.I.C. and adult training allowances. Family size also tended to be larger in the Northern Peninsula and this was accompanied by higher family income receipt for child allowances and old age pensions.

In general, overall money income levels were lower in the Northern Peninsula than in Burin. However, there are indications, that reported income levels in the Northern Peninsula may show higher degrees of under-reporting, given the higher incidence of own-account fishermen, reporting incomes on a net basis, compared to the Burin where there is a high incidence of wage earners reporting income on a gross basis. Further, there are the indications that non-monetized additions to money incomes, for example, imputations for home produced and consumed food and shelter cost with respect to owner occupied dwelling, would tend to be higher in the Northern Peninsula than in the Burin. Consequently, the variations in real income positions between Great Northern Peninsula households and Burin households may be narrower than those suggested by money income comparisons.

Tables 3A and B show Revenue Canada, 1974 data, on reported money income levels and income class distribution, by small area breakdown, for Burin and Great Northern Peninsula. Also shown, for comparative purposes, are the value of fish landings by small areas. Because there are problems with the coverage of the National Revenue data, the fact that the 1974 data do not specifically refer to fishermen by small area breakdowns and because landing points may vary from residence points, the observations on spatial distribution of activity are indicative and not conclusive. The Revenue Canada data on the Great Northern Peninsula show that average reported income

TABLE 3A

GREAT NORTHERN PENINSULA - REPORTED INCOMES AND FISH LANDED VALUES - 1974

	Total Reported Incomes 1974	Total Fish Landings 1974	Fish Landings and Per Cent of Area's Income	Average Reported Income Levels	No. of Income Tax Filers	Per Cent of Filers	
						Under $4,000	Over $10,000
	$,000		%	$	No.	%	
Fishing District A							
Englee	1,427	152	11	3,998	357	54	3
La Scie	2,449	110	5	5,222	469	46	10
St. Anthony	7,167	81	1	5,982	1,198	38	14
St. Anthony Bight - Goose Cove	3,200	90	3	4,420	724	50	4
Fishing Districts M & N							
Cowhead	1,115	90	8	5,025	222	68	10
Parsons Pond	795	103	13	4,623	172	47	3
Shallow Bay - Portland Creek	103	20	20	4,932	21	29	-
Daniels Harbour	926	75	8	6,018	154	34	16
Bellburns	233	31	13	6,133	38	24	18
Port Saunders	1,322	163	12	4,773	277	51	9
Port au Choix	1,652	693	42	4,061	407	59	4
Eddie's Cove W	307	30	10	4,336	71	61	-
Flowers Cove	1,313	22	2	5,450	241	44	12
Sandy Cove	205	91	44	4,377	47	51	-
Castor River, Black Duck Cove, Big Brook	7,316	907	12	4,665	1,568	51	4

TABLE 3B

BURIN PENINSULA - REPORTED INCOMES AND FISH LANDED VALUES - 1974

	Total Reported Incomes 1974	Total Fish Landings 1974	Fish Landings and Per Cent of Area's Income	Average Reported Income Levels	No.of Income Tax Filers	PerCent of Filers	
						Under $4,000	Over $10,000
	$'000		%	$	No.	%	
Burin	7,164	1,904	27	6,102	1,174	34	14
Marystown	13,238	2,847	22	6,370	2,078	35	19
St. Lawrence	5,679	85	1	7,502	757	27	27
Lawn	1,538	186	12	5,806	265	38	15
Lords Cove	303	146	48	5,732	53	30	11
Lamaline	1,384	44	3	4,824	287	41	6
Grand Bank	9,889	2,221	25	6,098	1,474	33	15
Fortune	5,245	1,928	37	5,589	922	37	13
Garnish - Molliers	2,191	92	3	5,424	404	39	10

Source: Revenue Canada, Special Tabulation 1974 Taxation Year

levels in St. Anthony, Daniels Harbour, Bellburns , La Scie and Flowers Cove were broadly in line with the major offshore points on the Burin. Other communities in the Northern Peninsula were around $1,000-2,000 lower than for the 4 trawler ports of the Burin Peninsula.

In most Burin communities the value of fish landings expressed as a percentage of total reported income levels was substantially higher than in Great Northern communities. The higher percentages reflect the relatively high importance of offshore landings in Burin. Figure 1 shows the comparative average income position of some Newfoundland communities and with respect to the percentages of landings accounted for by offshore groundfish landings.

Most communities in the Burin showed that between 20-40% of the income filers had income levels below $4,000 compared to around 50-60% in the Great Northern Peninsula. Correspondingly there was a substantially higher percentage with incomes in excess of $10,000 in Burin than in the Great Northern Peninsula. It is to be noted that relatively low and high incomes are widely dispersed over both the Burin and Northern Peninsula.

National Revenue data and the numbers of vessels per tonnage class by small areas are compared to determine if any relationship existed between income groups and vessel sizes. Data is available for vessel length, tonnage, owners- all grouped as to the location of the owner. The location of the owner is not necessarily the location of the boat's moorage or site of catch landings and consequently Table 4 is indicative and not conclusive.

This analysis cover only those tax returns of total income of $10,000 or more and compared the number of individuals per tax bracket with the number of vessels (of a particular tonnage) whose owners reside in the same Revenue Canada Census District. Communities with individuals that

Figure.1. The Average Income Positions of Newfoundland Communities with respect to Landed Groundfish Values(1974)

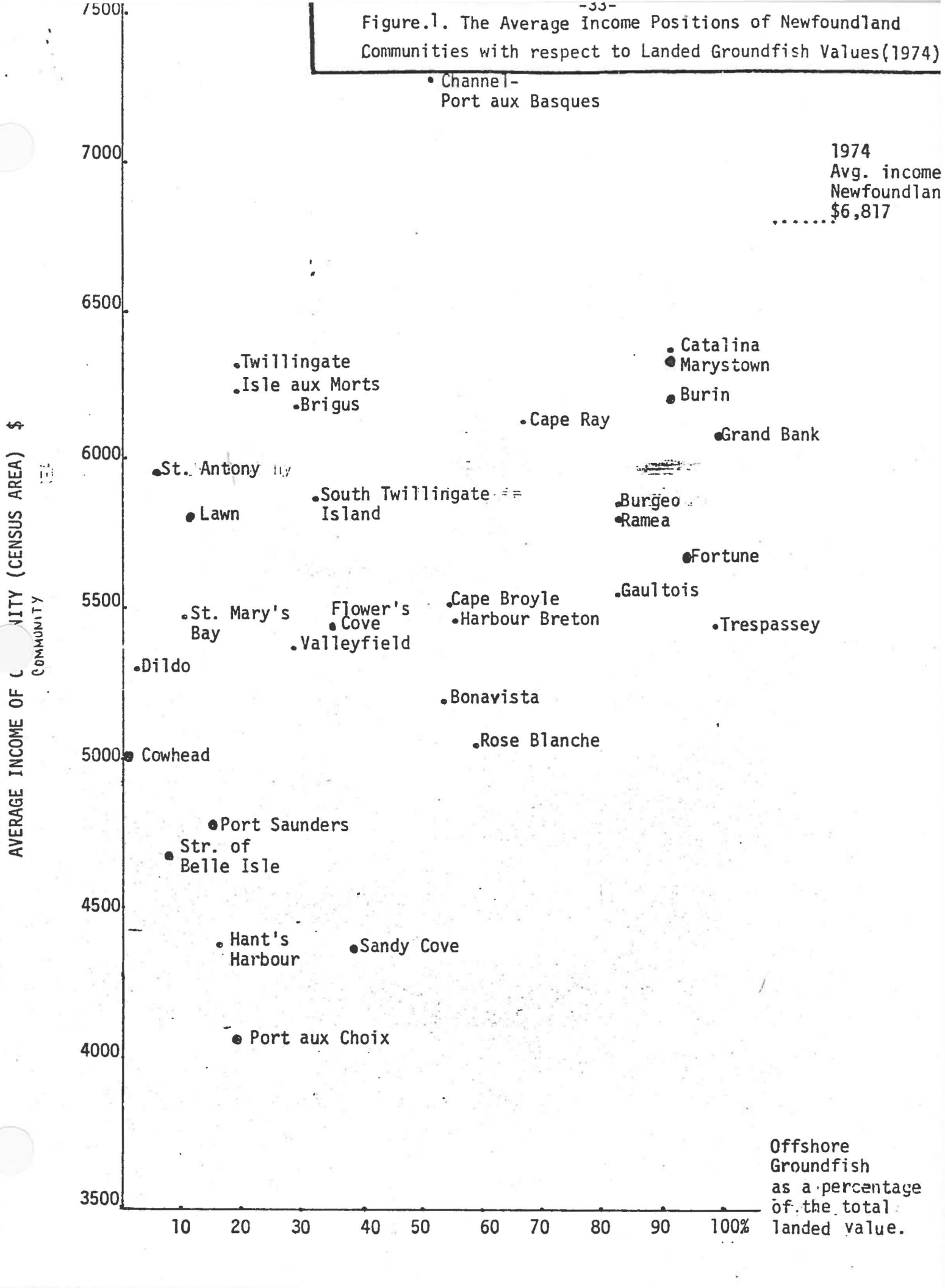


TABLE 4

COMPARATIVE DATA ON VESSEL TONNAGE & INCOME LEVELS -(BURIN & NORTHERN PENINSULAS) 1974

	VESSEL TONNAGE				INCOMES OVER $10,000			
	10-30 (22)*	30-60 (45)*	60-100 (64)*	100+ (463)*	10,000-12,000	12,000-15,000	15,000-20,000	20,000 +
LOCATION								
Burin Peninsula								
Marystown	-	-	-	14	194	123	64	19
Burin	2	-	-	8	76	55	26	12
Lawn	3	-	-	-	22	17	-	-
Fortune	10	-	-	8	67	31	13	10
Grand Bank	-	-	-	8	96	73	27	21
Lamaline					8	7	-	-
Great Northern Peninsula								
Cowhead	2	1	-	-	7	13	-	-
Parsons Pond	1	-	-	-	-	6	-	-
Daniels Harbour	1	-	-	-	20	-	5	-
Bellburns	-	-	-	-	7	-	-	-
River of Ponds	-	-	-	-	-	-	-	-
Hawke's Bay	1	1	-	-	7	9	-	-
Port Saunders	10	5	-	1	15	9	-	-
Port au Choix	17	11	1	1	11	-	5	-
Eddie's Cove W	1	1	-	-	-	-	-	-
Castor's River & N.	28	3	1	-	64	39	13	8
Flowers Cove	7	3	-	-	19	6	5	-
Sandy Cove	5	1	-	-	-	-	-	-
St. Anthony	4	1	-	1	69	41	34	18
Englee	5	1	-	-	9	-	-	-

* Average Tonnages

Source: Revenue Canada - 1974 Taxation Year
Source: DFE (Fisheries and Marine Service)

are represented in the highest income groups (i.e. $15,000 - $20,000 and $20,000 and over) are compared with the numbers of individuals in particular tonnage groups.

For the Burin Peninsula, the indications are that the relatively high representation of large vessels (with average size of 463 gross tons) parallels the relatively high representation of high incomes in each of the specified communities. Trawler port communities such as Marystown, show representation of individuals in the uppermost income range of $20,000 and over. The presence of relatively high incomes in the trawler ports of Burin (and elsewhere) would enhance other high non-fishing incomes in the area, through income and employment multiplier effects.

Other than Castor River and St. Anthony, communities in the Great Northern tended to be unrepresented in the $20,000 and over category. The presence of high incomes and an absence of large vessels suggest that it is unlikely that the primary source of community income is from fishing. An example of this is St. Anthony, where only one large boat owner lives but there is a large number of people with relatively high incomes. The indications are that the main income source in St. Anthony is the large hospital in which the salaries of doctors would contribute to the relatively high income levels.

In the Gulf side of the Great Northern Peninsula there is a large number of small boat engaged in a profitable shrimp fishery. Centres such as Castor River, Flowers Cove, Port Saunders with relatively high representation of small boats showed representation above $12,000 income levels. On the eastern side of the Northern Peninsula, communities such as Sandy Cove and Englee with no representation of boats in excess of 60 tons show no representation of incomes above $12,000.

In general, there appears to be a relation between the number of income earners over $10,000 and the number of vessels over 10 tons. Also there is the indication that high incomes which parallel the small boat fishery of the west coast of the Northern Peninsula, is associated with the higher priced shrimp fishery.

Chapter III

Summary Observations and Some Policy Implications

The Burin economy is more specialized with respect to fishing and fish related activities than that of the Great Northern Peninsula. Consequently, multiple sources of income and employment are less characteristic of the"Burin"than the "Northern". Fishing and fish related industrial organization structures and conduct in the Burin, tend to be among the more sophisticated in Newfoundland. Similarly, labour unions and government supervisory and regulatory structures can be expected to impact more strongly on the large scale integrated operations of Burin than they do in the smaller, more divisible and less complicated industrial structures of the Great Northern Peninsula.

The developmental strategy followed for the Burin has favoured specilization in offshore based fishing and large scale integrated plant operations, as well as, locational concentration of landing and processing points. The developmental strategy appears to have generated higher levels of income and employment. However, it remains questionable, whether or not, improved long term stability in income and employment has been achieved. There is evidence of a strongly variable employment pattern among Burin major employers. This creates continued pressures for increased government inputs into both fishing and non-fishing activities in order to counteract some of the employment variations, and to maintain an observed relatively high level of wage and salary incomes.

In general, an observed locational concentration of landings and processing facilities in the Burin is conducive to the achievement of scale economies in production, purchasing and marketing and in particular to cost reduction in plants from better production scheduling, inventory

control and from tied sales. An observed relatively high degrees of concentration of ownership and physical facilities; higher levels of throughput, an "apparent" more technically competent plant management were also favourable to operational economies. However, an observed separation of plant management from ownership, as well as, size of operations, per se , would have tended to weaken the ability of plant management to speedily adjust capital and labour inputs to the variations in the supply of fish resources. This is in contrast to the Northern Peninsula.

In Burin, capital and labour adjustments to variations in fishing resources and fishing related activities were less marked than in the Great Northern Peninsula. This could have arisen from the observed higher degrees of specialization of capital and labour inputs, a strong adherence to existing levels of technology and ownership and branch plant structures. However, the lower speed of adjustments could also have been associated with the existing financial and fiscal frameworks which impacted strongly on large vessels and plants. These appear to have resulted in increasing cost burdens of vessel and plant operations being heavily passed on to the government's general revenue positions. This would have dampened the need for internal plant and company adjustments. The observations suggest some perverse effects of governments' fiscal and financial assistance in particular, and subsidies in general, and indicates the need for more in-depth study of the cost and benefits of existing subsidy structures to the fishing sector.

Given a historical strong dependence of Burin on fish and fish related activity, it appears that some of the strongest developmental opportunities in the area would continue to lie with this sector.

Conventional wisdom is in support of this view. It is anticipated that the extension of the 200 mile limit and primarily as it applies to ICNAF area 3Ps (as well as 4R,S) will have a marked upward impact on labour income and employment and on vessel and plant profitability,as operational efficiency gains are achieved from increased throughputs and improved yields. However, it is expected that strong variations in income and employment will continue in the short and medium terms, as past depletion of resources, dictate a diminished intensity of fishing effort during the recovery period. Consequently, policy decisions will be necessary on the relative importance and time sequence to be attached to the promotion of fishing vis-a-vis non-fishing activity in Burin Peninsula.

It is observed that there are relatively high levels of Production and vessel subsidies going to fishing activities in the Burin. Hence, the comparative advantages of Burin with respect to fish and fish related activities could be more "apparent" than "real". In the absence of comparative and detailed cost structures, profitability position of Burin operations and comparative analysis of subsidy levels and the incidence of cost and benefit of subsidies, one is unable to say, categorically, whether the area's comparative advantages continue to lie in fishing and fish related activities. There is however the presumption, that given the relatively high dependence on fishing and fish related activities, as well as, an observed strong dependence on the Government sector to counteract the strong variations in income and employment, that new and additional income

streams in the Burin ought to be biased towards non-fishing activity. This suggestion would be strongly biased towards the increased diversification of the area's economic base as a means of ensuring greater stability in incomes and employment. Income growth would be a second order consideration. The observations suggest the desirable increased promotion of agricultural production and light manufacturing to meet local consumer and industrial needs.

The characteristic inshore fishery of the Great Northern Peninsula is much more diverse and dispersed than the major offshore system of Burin. These conditions are evident in the relatively high number of independently operated catching, collection and buying, intermediate processing and final processing units. It is suggested that these conditions make for a greater freedom of entry and exist, increased cost consciousness of owner - operator, an inherent higher capability to adjust to variations in fish resources, as well as, to facilitate the more spatially equitable distribution of income and employment growth and to provide an improved scope for maintaining style and quality of life at a lower social cost. However, following an economic efficiency criteria, the conventional wisdom is that the diversity and dispersion of inshore systems make for excess capacity of capital and labour in the fisheries, and consequently loss in operational efficiencies.

Even without the inherent requirement of policy analysis to "trade-off" efficiency conditions against equity and political considerations, it is to be observed that slow growth in alternative employment opportunities is characteristic of most Newfoundland population centres. It can, therefore, be suggested that the opportunity cost of an alleged excess capital and labour capacity in the inshore fishery of the Great Northern Peninsula (as elsewhere) was likely to be low. There is evidence that the "build-up"

in production capacity (boat, gear and equipment) in inshore fisheries of the Northern Peninsula was strongly associated with own labour inputs with low real cost to participants. Further, the crude evidence is that much of the relatively low "out-of-pocket" production capital cost is at or close to being fully depreciated. An observed relatively high levels of unemployment and under-employment in areas such as the Northern Peninsula imply a low opportunity cost to labour inputs. These general observations suggest that the heterogeneous and spatially diffused structures of the Northern Peninsula may not have resulted in significant operational efficiency losses, annually, and where they did occur, an after tax profitability position of owner-operators in good years, may have compensated (or over-compensated) for losses in poor years.

In the Northern Peninsula, there were substantial adjustments among inshore fishermen to changes in fishing resources, and to policy moves which restricted increased competition for the declining resources. The adjustments were related to fishing, non-fishing and government transfer programs(inclusive of U.I.C.). It is observed that there were increased inter-sectoral, inter-regional and inter-provincial labour mobility flows. Capital inputs into small boat fishery (under 10 tons) showed speedy adjustment to changes in specie mix. Technical and managerial information was widely dispersed and owner-operators increasingly availed themselves of these services. However, the indications are that capital adjustments for boats in excess of 35 feet were dampened as F.L.B. operators and federal and provincial vessel subsidies, as well as a lenient administration with respect to repayment schedules served to offer to operators some insulation from the market cost of funds and reduced pressures for adjustments. The

observations point to the need for careful analysis of the impact of subsidy payments in the achievement of operational efficiencies as well as the appropriateness of the institutional framework and regulatory conditions governing the administration of these subsidies.

It is alleged that U.I.C. payments and social welfare assistance programs have served to maintain relatively high levels of capital and labour inputs in the inshore fishery of the Northern Peninsula (as well as in Burin) and to retard the adjustment process. However, whether or not it is desirable to curtail these personal transfers is dependent upon actual and prospective levels and growth in earned income and employment; the degrees of adherence to work ethics, and comparative cost and benefits of personal transfers to other forms of financial and fiscal assistance. The observations suggest the need for detailed comparative cost benefit analyses of proposals which are favourable to the development of new opportunities in fishing vis-a-vis non-fishing, and vis-a-vis income supplementation.

The issue as to whether or not part-time and occasional fishermen in Newfoundland should be excluded from the inshore fishery is not as prominent as in the Maritime region. Nevertheless in areas on the Northern Peninsula, the allocation of multiple licenses for the prosecution of multiple species is controversial. Given the observed slow growth in alternative opportunities, and constraints upon the major extension of personal transfers, it may be desirable, within a system of quotas, to favour more extensive fishing activity in the Northern. The observation would be favourable to the granting of multiple licenses to individual operators.

With respect to small boat fishery in both areas, it is observed that the more varied the species prosecuted, the higher is the likely incidence of damage to boat, gear and equipment. The Newfoundland Government has introduced gear replacement programs to assist fishermen. These proved unworkable and a fish gear insurance plan is proposed. The insurance proposal would shift the incidence of these costs from the individual to the group and/or to Provincial General Revenue. The provision of an insurance raises the "moral hazard question", namely the actual provision of insurance is favourable to increased riskiness of operations. For public run insurance schemes, the observations suggest decreasing elements of actuarial soundness and increasing subsidy elements. Given an observed high incidence of damage to boat, gear, etc. as slow growth in alternative employment forces more extensive fishing activity, it may be appropriate for the Federal Government to examine in more detail, the efficacy of the promotion of complementary financial assistance to ameliorate the existing problem areas. In this connection, federal-provincial shared cost schemes, federal government grants or loans (forgiveable or non-forgiveable), government acting as a guarantor or lender of last resort, are suggested instruments for more careful study.

The analysis of inshore community structures, indicate that small centres with LGC and LID status on the Northern Peninsula (and elsewhere) were of roughly equal size as well as standing in a hierarchical framework of central place service centres. Also there was roughly comparable levels of socio-economic infra-structure and in the frequency of delivery of services among these small centres. However, there were variations among centres, with Community Councils, in their fiscal debt positions. Local fiscal debt was strongly associated with the provision of connected water and sewage services and was a major distinguishing feature between urban and non-urban

areas. The observations suggest an inherent difficulty in designating particular centres as growth points as many contiguous centres would be competing candidates. There appears to be no substantial economies which would accrue to the government sector to be secured from further centralization of socio-economic services, and no major purchasing linkages favourable to increased income and employment would accrue from community rationalization. Nevertheless, indications are that there may be narrow prospects remaining for implementing community rationalization programs in the St. Barbe's area (Strait of Belle Isle) where social and economic infra-structure are at present relatively underdeveloped to areas further south of the Northern Peninsula. However, even in these probable areas, it appears that a broadly based approach to community re-organization would have a higher level of local and provincial acceptance than one that is specific to fishing communities.

On the evidence that there are narrow limits for effecting community rationalization programs in inshore fisheries in the Northern Peninsula, as well as in the Burin, and arising from the controversy with respect to the net social benefits of such a strategy, the following examines some developmental opportunities within existing community structures.

In the Northern Peninsula, it is observed, that there has been a relatively strong income and employment impact of the Saltfish Corporation, DREE service centres, LIP, Canada Works and Social and Human Development Agencies. There may well be scope for increased communication and collaboration of DFE officials with other government departments and private agencies working in the area. A suggested area for collaboration

is with agencies such as Grenfell Mission, which presently is working towards the promotion of area sensitive and time sensitive supplementary income and employment streams through programs such as cottage based activities. It is suggested that a closer examination of existing cottage based programs, as well as market feasibility studies should be undertaken to determine the viability and required scope of commercial operations in these probable developmental opportunities.

The activities of the Saltfish Corporation have generally benefited the inshore fishermen through improved prices, assured market and extension and quality control services. The Corporation has successfully demonstrated a feasible development strategy, and indicate general directions for future policy action. It is suggested that there ought to be an indepth study on the desirability of a major extension of the Corporation activities to household - community stage and small factory based herring processing operations, etc. It is alleged that there is a weakness in the Corporation's agency system of purchasing, which rewards volume without due consideration to quality variables. The exponents of this view suggest that the desired quality improvements would be facilitated with a differentiated price structure.

Self help schemes, such as LIP, which had a relatively high representation in the Northern Peninsula, have demonstrated the strength and weaknesses of such programs. It is suggested that the federal and provincial governments should explore the possibilities for the re-introduction of area sensitive and community designed programs such as LIP, and to design "checks" to safeguard against revealed administrative inadequacies of past programs.

Historically, government funded capital work program for socip-economic structures has been an important aspect of supplementary income and employment streams in the Great Northern Peninsula. Because such schemes can be made to have high degree of area, time and income class sensitivities, and because they have not been proven to be any less inefficient than say production subsidies, they ought to be encouraged in slow growth areas on the Great Northern Peninsula.

Among a varied list of supplementary income and employment opportunities are tourist trade development, agriculture and forest products development, building material aggregate and some fishery related light manufactures. In the promotional development of these, the increased collaboration of DFE with DREE, I.T. & C and Manpower and Immigration, etc. is indicated.

In summary, the analysis points to the need for the designing and implementation of improved area sensitive and time sensitive programs. A discriminatory nature, would be an inherent feature of these programs. The observations suggest the need for increased levels of decentralization of program formulation and implementation. These conditions could be favourable to increased effectiveness at program delivery levels, but would likely be accompanied by increasing administrative and program delivery costs.