THE SALMON LICENCE CONTROL PROGRAM IN BRITISH COLUMBIA: EFFECTS ON NATIVE FISHERMEN BASED AT REMOTE PORTS

by

John William Struthers

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APPROVAL

Name: John William Struthers

Degree: Master of Arts

Title of Thesis: The Salmon Licence Control Program in British Columbia: Effects on Native Fishermen Based at Remote Ports.

Examining Committee:

Chairman: Dennis R. Maki

Dennis R. Maki
Senior Supervisor

Parzival Copes

Robert C. Brown
External Examiner
Associate Professor
Department of Geography
Simon Fraser University

ABSTRACT

In 1968 the government of Canada instituted the first phase of a licence control program designed to rationalize the chronically over-capitalized salmon fishing industry. If social and economic hardship result from this legislation it would be expected to be most severe for the least mobile low-income fishermen. The remote area Native fishermen would likely dominate this group. Estimation of the importance of fishing to the economic survival of this group reveals that they face few local employment alternatives. However, the data also indicate that the population of most of the remote villages has been declining for at least a decade prior to the licence control program. No conclusive evidence of locational immobility of bands is found; all evidence indicates a willingness of the Indian fishermen to relocate.

The licence control program will likely accelerate the outflow from the remote fishing villages. Unfortunately it does little to protect or compensate the small group of Native fishermen who are immobile and least able to earn even an average income. The program forces this group out of the fishery. Although the problem is both small relative to the overall program and short run in nature, the inequities involved are severe. Policy alternatives open to government must be explored.

It is suggested that the simplest adequate solution involves a grant of lifetime fishing privileges to those fishermen who are currently immobile. As they retire from the fishery the privileges will expire, permitting rationalization without injustice.

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1. Introduction

In 1968 the government of Canada passed legislation designed to rationalize the salmon fishery on the west coast. The means adopted was the reduction of the salmon fleet by phasing out its inefficient vessels. This withdrawal of vessels also necessitates a reduction of the labour force engaged in the fishery. Immediately apparent is the issue of the economic and social impact of this program on the fishermen displaced. For reasons which will be described later it is expected that most fishermen so displaced will not suffer greatly from this imposed change. However, a cursory examination of current employment in the salmon fishery reveals one group of fishermen who might be expected to bear the brunt of the pains of transition involved in the implementation of the legislation.

Some fishermen reside in communities remote from urban amenities and from job opportunities outside the fishery. Coincident with this geographic distinction is a racial distinction: most of these fishermen are Native Indians. Their traditional life style is integrally linked with salmon fishing. Because they enjoy few alternatives their opportunity costs of remaining in the fishery are expected to be low, thereby making the acceptance of low incomes rational. If the low income - low mobility problem is to be found in the west coast fisheries it would likely be concentrated with this group: the Indian fishermen.

Ascertaining if there is a low income - low mobility problem

among the Native fishermen is clearly of primary importance. Only then can the effects of the licence control program initiated in 1968 be weighed, and policy alternatives be proposed.

2. Historical background of the west coast salmon fishery.

2.1 A common property - open access resource.

As the resources of the sea have been viewed as the common property of society and not subject to individual ownership rights, open access to the exploitation of the sea's resources has become almost a tradition. As the commercial fishery developed off Canada's west coast anyone who wished to enter the fishery was free to do so. Only when it was realized that the fish were not an infinitely renewable resource did the individual fishermen begin to face restrictions on his activities.[1]

Depletion of the resource resulted directly from the common property - open access characteristics of the fisheries. Under such conditions:

> "it is unreasonable to expect an individual producer to willingly and one-sidedly restrain his effort; anything that he leaves will be taken by other producers. Furthermore, in the fishery there is no limit on the number that can participate so that as long as there is any profit to be gained, additional producers will enter the industry until all true profit (or rent) is dissipated."[2]

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1. Crutchfield, J.A., and Pontecorvo, G. present a detailed history of the fishery in The Pacific Salmon Fisheries, from the U.S. Government Printing Office.

2. Christy, F.T., and Scott, A., The Common Wealth in Ocean Fisheries, p.7

Because it was irrational for any individual to "invest" in future catches by leaving a portion of the current stock for reproduction, and because profits in the industry attracted others to it, both biological depletion and economic inefficiency resulted.

Part of the problem of economic inefficiency flowed directly from an asymmetric characteristic of open access: entry became easier than exit. When profits realized in the years of big runs attracted men and materials to the fishery, the resulting increased effort led to the reduction of fish stocks, eventually to the extent that catches in subsequent years were affected adversely. By the 1920's such "overfishing" was apparent. Although declining catches tended to reduce profits to the average fisherman, in many cases he would not leave the fishery. This asymmetric behavior possibly resulted from one or more of three forces.

Investment in capital equipment, undertaken in an attempt to capture some of the excess profits evident at the time of entry, would tend to tie the fishermen to the industry. Lack of opportunities outside the fishery would restrict the exit of some men; others would be detained by optimism, ever hoping to achieve one of the big catches that luck and skill bestow upon some fishermen every year. Alone or together, these factors made exit more difficult than entry.

2.2 Early Legislation

As fish stocks were observed to be diminishing, pressure grew for conservation efforts through government control. By the beginning of the 1930's the coastal waters had been divided into twenty-seven management areas. In each of these areas time closures and gear restrictions were used in an attempt to prevent biological overfishing. Then it became rational for the individual fishermen to invest greater sums in vessels and equipment designed to catch more fish faster, to avoid being forced to quit the area (or to quit for the season) before attaining a favorable share of the catch. The result was chronic overcapitalization as both the capacity of the vessels used and the numbers of men involved increased far beyond the amounts that would be needed to harvest the same catches with the best gear and unrestricted time. Clearly, only a limit on the entry to the fishery could be expected to limit (or eliminate) the overcapitalization.

2.3 The Licence Limitation Program

In 1968 the Canadian government attacked the problem of overcapitalization in the salmon fisheries by removing the open access characteristic through licence limitation. The need for the plan, and its objectives have been described as follows:

> "Because of the dual problem of overcapitalization and fixed or declining stocks of fish, especially for salmon, the government of Canada has initiated

> a licence limitation program designed to reduce the number of men and boats operating in the (salmon) fishery. The objective of this program is to increase incomes to remaining fishermen and to generate an economic rent to Canada for use of the resource."[3]

In light of existing income-investment characteristics in the fishery[4], the long run need for such a plan seems clear, and the objectives seem admirable. However, the short run social and economic costs of the rationalization program must also be considered. Of particular importance are the social and economic costs of the displacement of fishermen from the fishery. Alternative uses of the human resources are of critical importance.

3. The licence control program and the fishery's labour force.

3.1 The general impact expected.

If the displaced fisherman can find suitable alternative employment the costs to him of the licencing program may be slight. If he must be trained to fit into another occupation, the short run costs resulting from the program will be borne by the fisherman and/or the government, depending upon the nature of the retraining. In such a case there will be a reduction in

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3. Hedlin Menzies & associates, The Economic Potential of the West Coast Fisheries to 1980, p.31.

4. e.g., A Survey of Vessel-Owner Investment by W. Alan Wilson concluded with: "Average net fishing income (before tax and capital costs) for all British Columbia vessel owners in 1970 was just over $4,100." p.35

the short run net economic gain derived from the program. Implicit in most works on the west coast fishing industry is the view that such costs will be negligible. Low income of the fisherman is the common focus; occupational mobility is implied to be favorable. This is evident in Copes' statement that the higher opportunity costs in British Columbia are "reflected in lower unemployment levels and in higher wage levels that prevail on the west coast and that tend to draw off unsuccessful fishermen into other employment."[5] This viewpoint is supported by the fact that the dominant proportion of west coast fishermen live in urban areas, where expectations of alternative employment would logically be greatest.[6]

3.2 The specific impact on remote port fishermen.

Such emphasis of the characteristics of the majority tends to obscure the condition of the small groups which are less favorably located. It is important to analyze the effects of the licencing program on fishermen based in remote ports when

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5. P. Copes, Canadian Fisheries Problems: Economic Waste and Social Want, p. 18

6. Although The Socio-Economic Background of Commercial Fishing in British Columbia by W. Alan Wilson reports that only 60.8% of the respondents to the Fishery Economic Survey, 1970, were urban dwellers (p.9), this figure is heavily dependent upon the definition of "urban" that was used. Areas like Ladysmith and Alberni, which support major industry other than fishing, were excluded, as were centres within commuting distance of urban areas. Thus fishermen dwelling in "non-remote" areas would form a larger proportion of the total than 60.8%.

evaluating the impact of the program.

When the fishermen of British Columbia are divided into non-remote and remote groups, the geographic distinction will often be coincident with a racial distinction. The coastal Indian bands which have traditionally depended on the sea's resources for their livelihood will likely form a large proportion of the remote area fishermen. (Note that remote area refers to the region the fisherman's home base occupies; the area fished will vary greatly, as the production unit is very mobile.

4. The fishery and the coastal Indians.

4.1 Mobility of the Indian fishermen: conflicting evidence.

The role of fisheries in the life of the coastal Indian has been the subject of some research, but as with studies of fishermen generally, the emphasis has been on low income characteristics; mobility has been viewed as favorable. A Survey of Contemporary Indians of Canada by the Indian Affairs Branch found that "high rates of mobility and out-migration from reserves are major factors contributing to the economic development of most Indian bands in Canada."[7] The inclusion of the qualifications "most" in this statement is significant.

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7. Canada, Indian Affairs Branch, Oct. 1966, A Survey of the Contemporary Indians of Canada, Vol. I, p. 112

W. Sinclair found a high degree of dependency on fishing by particular isolated coastal communities, some of which were populated principally by native Indians.[8] Crutchfield and Pontecorvo note this reliance on the salmon fishery but sidestep the mobility issue by simply stating that "there are more efficient ways to provide better economic opportunity for isolated Indian groups than to maintain them in an inefficient fishery incapable of generating either means or incentive for change."[9] A further complication is noted by the Hedlin Menzies report which states: "Native fishermen faced with this (Lack of alternative employment) problem .... can claim special rights to fishing."[10]

Statistical exploration of the low income-low mobility question with respect to Indian groups is severely hampered by data limitations. These restraints are the result of legislation prohibiting federal departments from gathering such data by any method which distinguishes particular persons or groups by race. Available data from the Indian Affairs Branch is too aggregative in nature to be useful for the purposes of this paper. Employment and income data on specific bands is unavailable. To overcome the data limitations by assuming that all bands are alike (i.e. by assuming the Indians form a homogeneous group) is ill advised.

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8. Sinclair, W.F., The Importance of the Commercial Fishing Industry to Selected Remote Coastal Communities of British Columbia, Department of the Environment, 1971

9. Crutchfield, J.A. and Pontecorvo, op. cit.

10. Hedlin Menzies and Associates, op. cit., p.28

The folly of such an approach is evident when one contrasts the following newspaper accounts:

> Vancouver Province, Dec. 28, 1961: The Timpsean band switched to logging on their reserve from employment in the "hard-hit" commercial fishery.
>
> Vancouver Sun, Oct. 18, 1971: noted the high mobility of the Port Simpson band members who had shifted first from fishing to longshoring at Port Simpson, and then when activity there declined, shifted to longshoring in Vancouver.
>
> Vancouver Times, May 14, 1965: reported the views of Victoria anthropologist Wilson Duff: "Haida Indians on the Queen Charlotte Islands suffer poverty because they won't move where work and opportunity are."
>
> New York Times, Aug. 30, 1964: reported that of four hundred Canadian Indians at Ahousat, twelve have jobs, and implied that the cause was the decline of the salmon fishery and the lack of employment opportunities near their homes.

4.2 The role of employment opportunities outside the fishery.

The importance of employment opportunities near the home of the fisherman was evident in the results of the Fishery Economic Survey, 1970. One conclusion drawn from this data was: "Alternative employment contemplated by fishermen leaving the industry is strongly influenced by the type of non-fishing industries operating in the areas in which these fishermen reside."[11] With this factor in mind, an estimate of the number of Indians who will be most adversely affected if forced out of the fishery

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11. W. Alan Wilson, The Socio-Economic Background of Commercial Fishing in British Columbia, p.33

may be derived from an examination of the geographic characteristics of their residences. Clearly residents of remote areas (where remote is defined as beyond commuting distance from centres of employment outside the fishery) who are engaged in the salmon fishery will face lower opportunity costs of fishing.

4.3 Estimation of the importance of fishing to remote area Indian fishermen.

An estimate of the numbers of Indians who are dependent on fishing and who live in remote areas may be developed in two stages. The first is simply achieved by locating all the coastal bands and then separating those areas which are geographically isolated from centres of non-fishing employment. The second step involves a closer examination of the groups initially isolated to determine the employment characteristics of the surrounding area and the degree of dependence upon the fishing industry of the area's inhabitants.

4.31 Screening the remote Indian bands from the coastal bands.

A list of west coast Indian bands, their population, and their cultural affiliation is produced in Linguistic and Cultural Affiliations of Canadian Indian Bands (Indian Affairs Branch, pp. 28 - 35). Of particular interest is the traditional cultural group designated "Pacific Coast" and characterized

by "reliance on sea foods including salmon and other fish, sea mammals, shell fish, seaweeds."[12] The bands in this cultural group, their populations in 1963[13] and in 1970, and the approximate locations of the bands are listed in Appendix A. The bands which appear to be geographically isolated (stage one above) are indicated by asterisks following the names of the bands.

First stage eliminations of bands from further consideration were based on the following assumptions:

1. Employment available in the Fraser Valley is sufficiently diversified to provide jobs for fishermen living in the area who are displaced from the salmon fishery.
2. Vancouver Island centres with highway access are within commuting distance of at least one industrial or employment centre that could offer alternative employment to persons displaced from the fishery. Squamish and Powell River are similarly treated.
3. The centres of Kitimat (smelting), Hazelton (forest industry), Terrace (forest industry), Port Hardy (forest industry, mining), and Gulf Island centres (forestry, tourism), are also assumed to be capable of providing

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12. Canada, Linguistic and Cultural Affiliations of Canadian Indian Bands, p. 4

13. 1963 population statistics are from The Commercial Fisheries of British Columbia, pp. 85 - 88

employment to local fishermen displaced from the salmon fishery. Queen Charlotte Island centres are assumed to be similar in this respect.

4. Skill mobility is not assumed to be restrictive, or, the displaced fisherman is assumed to be retrainable through Canada Manpower programs.[14]

Using this assumption set the initial list of one hundred nine bands was reduced to thirty-four which, on initial examination, appear to be located in areas where employment opportunities outside the fishing industry would be insufficient to absorb any appreciable exodus from the fishery.

4.32 Use of Household Directory data to determine employment opportunities for remote area Indian fishermen.

The second step in this analysis is severely hampered by the data limitations mentioned earlier.[15] However, there are some data available to test the alternate employment assumptions used in the first stage screening and to develop better concepts

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14. Canada, A Survey of the Contemporary Indians ..., op. cit., makes a similar assumption set: "(A job opportunities survey) would not be so necessary for bands located near large cities or metropolitan areas, for, in this case, job opportunities for Indians could be considered virtually unlimited ... ." p. 186

15. For example, Canadian census data published is limited to incorporated municipal groups of minimum population 1,000 and to other municipal groups of 10,000 or more. The communities discussed in this paper fail to satisfy these criteria.

of the mobility exhibited by the various bands. Perhaps the best source available is the annual Household Directory prepared by the Post Office Department.

The Household Directory lists the names, occupations and postal addresses of the box holders (and in some cases, the persons on rural delivery) of each post office. The post offices are grouped by federal electoral districts; the occupations are divided into one hundred nineteen classifications. The use of the data thus presented in the Directories must be tempered by the following considerations:

1. The data may not be representative of the community as only a particular type of postal delivery is included. (General delivery and local house-to-house delivery are excluded.)
2. Data accuracy may be limited by the local post master's knowledge of the occupations of the box holders. It is probable that the holder need state his occupation only at the time he first rents the post office box, so the post master's knowledge is critical with respect to accurate reporting of occupational changes.
3. Reported occupations may not be indicative of the box holders' major income sources.

For the purposes of this paper the above restrictions are not deemed critical. The small size of the communities involved increases both the probability that box holders will be

representative of the permanent populace (as postal boxes will likely then form the dominant proportion of total deliveries) and the probability that the local post master will have accurate knowledge of the occupations of the box holders.

The main remaining problem is the lack of distinction between Indians and non-Indians in the Directories. Again, the small size of the communities involved, and their dominant native Indian population (a criterion for the initial choice of communities under scrutiny) permits the use of simplifying assumptions. Perhaps the most valid assumption to use must be based on recognition that the proportion of fishing jobs held by Indians exceeds the proportion of non-fishing jobs currently held by Indians in the community. Given the assumption of skill mobility (with or without retraining) the occupation mix reported by the Household Directory is representative of the potential local employment opportunities facing the Indian, although perhaps not representative of current Indian employment.

4.33 Results from the Household Directory data.

Appendix B gives an indication of the importance of the fishing industry to fifteen of the thirty-four communities remaining after the first stage screening. (Post offices representative of the other nineteen bands were not found.) The total number of householders with post office boxes is

followed by the number and percentage of those who are categorized as fishermen. The next column indicates the most frequently appearing occupational category, the number so engaged, and this number as a percentage of total householders. The last two columns report the same information on the second and third most frequently specified occupations.

An overview of the data presented on these fifteen communities permits several general conclusions regarding their current occupational characteristics. They are:

1. Fishing remains the dominant occupation in most of these communities of "Pacific coast" traditional culture. (Fishing is dominant in 12 of the 15 communities - including Kildonan, as "retired" and "housewife" do not denote income earning occupations; 6 of these 12 communities show over 50% of the householders sampled are fishermen.
2. Other types of local employment are clearly incapable of absorbing any large number of persons. (In only 1 of the 15 does the second most important occupation appear for more than 15% of the sample, and even in this case it represents only 11 jobs.)
3. The resource industries, fishing and logging, form the economic backbone of these communities.
4. Only one community (Port Simpson) of the twelve for which data was gathered has experienced appreciable growth over the last decade. This

growth has been accompanied by increased activity in the fishing industry. No major secondary industry is involved. Three others (Kyoquot, Bamfield, and Bella Bella) appear stagnant, and remain heavily dependent upon fishing. The others are declining in population.

5. The data available on Squirrel Cove (Klahoose band) and on Port Renfrew (Pacheenaht band) indicates that the use of remote versus non-remote designation of fishing communities is not sufficient to indicate alternative employment opportunities. Additional information on the local resource base is a further requirement.

6. Location with respect to major transportation routes should be considered, as should the absolute size of the community. The first consideration will indicate opportunities in transportation oriented services; the second will reflect the likelihood that the community is a service centre for outlying districts. Further job opportunities might be thus indicated.

4.34 Data limitations; Possible extensions using Household Directory data.

The data presented are not sufficient to positively support the hypothesis that the existence of employment opportunities outside the fishery serve to insulate the fishermen (and the community) from the vagaries of the fishery. For example, in the case of the Nimpkish band at Alert Bay, the data shows that over the period 1960 to 1971 the number of fishermen fell by twelve. Occupations of secondary importance over this period include labourer, logger, and transportation or government work. However, it cannot be concluded that the lot of the fishermen leaving the fishery was favorably affected by the potential employment opportunities nearby. The data is still too aggregative for this purpose.

The Household Directory data could be used to test this hypothesis if disaggregated, as the data are available by individual person. A more thorough study could follow the temporal occupation paths of individuals engaged in the fishing industry. Then it would be possible to make assertions about the effect of local job opportunities on the fishermen who leave the industry. The Household Directory data are available on computer cards, which would permit the use of the computer to avoid lengthy manual tabulations. The approach used in this paper could also be extended through closer examination of the nineteen bands not

covered here, by seeking postal information representative of these bands. The funds and time involved in such an approach are beyond the scope of this paper. However, the data gathered for this paper should be sufficient to develop general indications of expected and actual mobility of remote area fishermen.

4.35 The importance of the number and type of employment opportunities available.

As noted in the second general conclusion, for communities exhibiting a very limited number of employment opportunities outside the fishery, it is illogical to expect these potential employment areas to absorb a significant proportion of the community's fishermen should they wish to leave (or be forced to leave) the fishery. (Notice that number of employment opportunities refers to the total non-fishing jobs in the area, not to the number of alternate industries.) Also, if the assumption of perfect skill mobility is dropped, some of the potential areas of local employment will immediately disappear from consideration. The main remaining area of alternate employment in most areas is logging. This industry is becoming more capital intensive through technical change, and therefore is of limited importance as a field of work outside the fishery, unless it is either undergoing a period of local expansion or is experiencing rapid turnover of personnel. In many of the remote areas under study it is likely that the local forest industry

is characterized by small or "gypo" operations. This is clearly indicated by the small numbers of loggers reported for many of the remote communities. This type of organization indicates little potential employment for displaced fishermen in the local logging industry. In short, the Post Office data indicates that most of the remote communities do not offer viable employment alternatives to the fishermen.

4.36 Implications for remote area villages for which Household Directory data was not examined.

There is little reason to expect wide deviation from the conclusions drawn when the other nineteen communities designated as remote are examined. A closer look at their locations yields only a few qualifications.

The bands located on the Nass River might be expected to enjoy more employment opportunities, especially in the forest industry, than are available to remote coastal villages. Canyon City, Gitlakdamix, and Greenville bands would then face higher opportunity costs of fishing than the coastal bands face.

Of the coastal bands earlier designated as remote, the Clayoquot band is the only one which would be removed from this category upon closer examination. This band lives on Stubbs Island (near Meares Island) which is only about one mile from Tofino. The Clayoquot fishermen thus have the opportunity of working

in the extensive forest industry of the Tofino - Ucluelet - Kennedy Lake area. Tourist and other service industries are also present locally. Although located on a small island, the Clayoquot band is not remote from a centre offering employment alternative to fishing.

A few of the remaining bands not explicitly considered earlier may be near mining or logging operations, but for most such alternative employment areas will be unavailable. For these communities the generalizations drawn from the Household Directory data should hold true.

4.4 The low income - low mobility trap and the opportunity cost concept.

The evidence presented might be interpreted as indicative of the low income - low mobility trap. Few local employment alternatives are available to the fishermen based in remote communities. Thus their opportunity costs of fishing are low, making it rational to remain in the fishery in spite of low levels of income. Low mobility would thus contribute to low incomes, and the low incomes might prevent movement, thereby contributing to low mobility. Implicit in this argument is the assumption that the opportunity cost of fishing is determined by local employment alternatives. If, in fact, the individuals involved are cognizant of opportunities available distant from their homes, their opportunity costs of remaining in the fishery are higher.

This is one of two separate factors affecting the mobility of the fishermen based in remote villages.

This knowledge of opportunities available over a wider area will likely result in a "pull" away from the remote community. As the fishermen travel widely seeking their catches, they must become more aware of conditions in many ports and urban areas distant from their ancestral homes. Mass media communications will supplement this first-hand experience. In many cases the children of the fishermen leave their remote communities to attend school, and therefore also become cognizant of a wider range of opportunities. As it is unlikely that the remote communities can offer the amenities available in the urban centres this wider knowledge is likely to have a demonstration (or deprivation) effect, resulting in a "pull" away from the remote areas.

Augmenting this force is a "push" induced by both technical change and legislation. Efficiency increasing techniques which are labor augmenting (i.e. capital intensive) permit fewer men to take the maximum catch of fish permitted. Even without the licence control program the declining catch going to the inefficient fishermen should push these individuals out of the industry. As will be shown, current legislation should serve to accelerate this push. The logging industry is also undergoing similar technical change, thus limiting its capacity to absorb those pushed from the fishery. Thus induced

occupational mobility will likely necessitate locational mobility.[16]

One might speculate that the forces of culture, heritage, or tradition will serve to thwart the "push" and the "pull" cited. If these factors are considered when deciding whether or not to leave the fishing industry their psychic value will lessen the level of income necessary to outweigh the known opportunity costs. The importance of such factors remains to be seen.

4.5 Evidence of mobility.

4.51 Data and assumptions used.

If the number of households and the number of fishermen indicated in the Post Office data in Appendix B are plotted against time[17] for each of the communities for which data was gathered, the general decline in these communities over the past decade is readily apparent. A comparison of the rates of decline in the community population so indicated with the increase in the population of the bands associated with these communities[18] yields some information on band mobility. In all cases band population has increased over the same period that the Household Directory data shows a declining

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16. The push and pull cited are analagous to the forces widely held to be acting on the agricultural sectors of under-developed countries.

17. See Appendix C

18. See Appendix A; note that band population is given there.

population is most of the bands' traditional villages. Assuming static or declining average family size over this period the two data sources clearly indicate mobility of the bands under consideration. If it is assumed that each band has an average family size of five persons, the population data from Appendix A can be converted to population in "average families". This can be compared with the number of households (graphically approximated for 1963) indicated by the Household Directory data for the same years.

4.52 Analysis of the data on particular remote area bands.

The Ahousaht band's population rose from 500 in 1963 to 707 in 1970, or from 100 to 141 "average families". Over the same period the population of Ahousaht fell from 88 households to 55 households. Clearly, locational mobility must have been high over that period, and not restricted to non-fishermen. The number of fishermen at Ahousaht dwindled at approximately the same rate as community population.

The Nimpkish band, traditionally associated with Alert Bay, increased in population from 656 to 794 (or from 131 to 159 "average families") over the same period. From 1963 to 1970 the number of households at Alert Bay dropped from approximately 200 to 187, with the number of fishermen based there falling roughly proportionately. Comparison of these figures indicates

mobility of the Native fishermen, but not as strongly as in the preceding example. Implications offered by the data are weakened by the indication that Nimpkish Indians do not make up the entire community served by the Alert Bay Post Office. The data could reflect an outflow of non-Indians, thereby weakening the indication of mobility of the Nimpkish band members. Other information[19] does indicate that the Nimpkish band is locationally mobile.

The case of the Ohiaht band at Bamfield is not so straightforward. The band population has increased only slightly, from 200 to 224 persons or from 40 to 45 "average families". The band is also associated with the community of Sarita, for which Household Directory data could not be found. The rate of growth of households at Bamfield has been low, but the absolute numbers involved show that even if all the Ohiaht band resides at Bamfield, they would make up less than fifty percent of the community. Thus no conclusion regarding their mobility can be legitimately drawn from this data.

Appreciable mobility is evident at Bella Bella. The band population has increased from about 190 to 221 "average familites" over the period 1963 to 1970, whereas the community population fell from 105 to 100 households over the same period. Numbers of fishermen have risen slightly, possibly indicating that they

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19. W.F. Sinclair, op. cit., p.67

are less mobile than the rest of the band.

Data on the Bella Coola band is somewhat ambiguous, again because the Household Directory data is not race-specific. The band population increased from 105 to 119 "average families" while households at Bella Coola fell from about 292 to 276. If the assumed "average family" is even roughly equivalent to the household of the Household Directory the Indians at Bella Coola are outnumbered by about two to one by non-Indians. Again the problem of aggregation appears and prevents the separation of band characteristics. To draw conclusions about the mobility of the Indian fishermen of Bella Coola is even more hazardous, as the number of fishermen has increased while the number of households has declined. Although firm conclusions are impossible, the data reinforces the intuition that the bands are likely fairly mobile as a group, while the fisherman subgroup is slightly less so.

For the Hesquiaht band at Hotsprings Cove and the Tsawataineuk band at Kingcome Inlet a high degree of mobility is evident. In both cases the band population has grown over a period in which both the community population and the number of fishermen in the community has been falling. The Uchucklesaht band at Kildonan appears similar with respect to mobility. Although Kildonan has a significant non-Indian population the decrease in persons engaged in the fisheries has reached a level indicative of mobility

of Native fishermen, even if they were the only fishermen based there. Again, band population has grown as the population of the band's ancestral home has fallen.

Poor data prevents the development of conclusions about the Kyoquot's mobility. The data is suspect because it shows a doubling of the band population over a seven year period.

Conclusions on the mobility of the Klahoose band of Squirrel Cove and of the Quatsino band at Quatsino are somewhat ambiguous, again because the data is not race specific. However, in both cases band population is growing as both the community population and the number of persons engaged in the fishery are declining. Only if the Indians are making up a rapidly increasing proportion of the fishermen in the communities could mobility be considered low in either case.

To this point none of the bands can be said to be clearly immobile, and for several the opposite is true. The remaining community for which Post Office data was gathered is unique. Port Simpson alone showed an appreciable increase in population over the period when the other communities considered were stagnant or declining. Over the period 1963 to 1970 the population of Port Simpson rose by thirty-three percent from 120 to 160 households. However, this alone cannot be considered indicative of immobility because the band population rose much faster, from about 150 to 237 "average

families". Again an appreciable outflow is evident.

4.53 General conclusions regarding the mobility of the residents of the remote ports.

Although the data used is still too aggregative to measure the mobility of Native fishermen, it is sound enough to indicate general trends and to provide some "feeling" about the mobility of Indian fishermen. Much more extensive use of the Household Directory data or the use of a special survey would be required to determine the extent of the mobility indicated here.

Although the evidence cannot prove the existence of mobility of Native fishermen, it strongly indicates such mobility, and cannot be construed as indicative of immobility. It is also important to note that the data does not reflect a sharp change in the direction of population flows, or in the rate of these flows, at the time of the implementation of the licence control program.

Consideration of the coastal Indian culture might serve to support the likelihood of mobility of the bands. The coastal Indians have a tradition linked to the sea rather than to the land. Reserve lands are almost invariably on the locations of former fishing camps at the mouths of spawning streams or at other areas particularly suited to fishing. The bands had few ties with the land, and frequently followed almost a migratory existence, moving with available fish stocks. Perhaps such a

culture is particularly conducive to modern mobility.

The importance of mobility in economic development was explicitly recognized in A Survey of Contemporary Indians of Canada, and British Columbia's Indians were cited as examples of particularly mobile groups: "As of 1965 there were some 400 fewer Indians on reserves than there were in 1961 despite an increase in total Indian population of more than 3500 in the province."[20] This statement supports the findings from the Household Directory data, and is indicative of conditions before the licence control program was implemented.

Clearly, the mobility of band members seems favorable for economic development, but the behavior of the subgroup of fishermen is less clear. The data presented has shown that in most cases fishermen are leaving the communities at approximately the same rate as householders in general. However, the fishermen at Bella Bella and at Bella Coola did not follow this pattern, and at Port Simpson the fishermen are increasing in number as the community grows. There are several reasons to expect fishermen to be less mobile than the rest of the community's populace.

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20. Canada, A Survey of the Contemporary Indians of Canada, op. cit., p. 109

4.6 Mobility reducing factors affecting Native fishermen from remote ports.

4.61 Debt.

Debt is one of the factors commonly cited by the Native Brotherhood of British Columbia and by the United Fishermen and Allied Workers Union as a retardant to the fishermen's mobility. As the industry has become more capital intensive many vessel owners have been forced to borrow heavily to remain competitive. The risk inherent in the industry also leads to borrowing to maintain the standard of living between seasons and between good catches. The Indians face the restrictions of the Indian Act which makes them unable to receive credit from regular lending institutions. The two major sources of loans available to them are federal assistance programs and private loans from the fish companies. A spokesman for the Native Brotherhood of British Columbia indicated the extent of the burden of debt facing the Indian fishermen. His statement that "an estimated 90% (of Indian fishermen on the coast) are in debt" and "many carry to the grave their debts to fishing companies or other organizations" was quoted in the Province newspaper on April 28, 1969. Although debt to the fishing companies for vessels or gear may restrict job mobility it need not restrict locational mobility.

4.62 Welfare payments.

The argument that welfare or relief payments restrict initiative and therefore adversely affect mobility is encountered frequently. For the fishermen supplementary income from relief may reduce the impetus to leave the fishery as the opportunity cost of fishing must be balanced against a combined bundle of earnings and transfer payments. This view of the negative effect of welfare on mobility faces counter-arguments.

The size of the welfare payments is relatively small; at best they yield a subsistence income. The welfare "acts as a deterrent to working for a living only where employment opportunities themselves are limited to arduous, risky or otherwise unattractive types of employment which also yield only a subsistence income."[21] If the fishermen are aware of opportunities beyond the limited horizons of their remote villages, it is unlikely that the welfare will act as a deterrent to working. A Survey of the Contemporary Indians of Canada noted this effect of welfare only in the very poor trapping communities of the north.

As with debt, welfare need not be restrictive with respect to locational mobility. It could be collected in areas offering the urban amenities not available in the remote

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21. Canada, A Survey of the Contemporary Indians of Canada, op. cit., p. 115

communities. The fishing vessel is highly mobile so the fishermen could move, receive welfare, and yet still be seasonally employed in the fisheries.

A further argument put forth by A Survey of the Contemporary Indians of Canada notes that to the extent that welfare payments lead to improvement in health or morale they may even support mobility. Overall, it seems that welfare payments would be mobility reducing only in a few marginal cases where the addition to income so received is just sufficient to balance the attractions of fishing from a remote port with the opportunity costs of this life style.

4.63 Reserve lands.

The special case of the Indian fishermen residing in remote areas is complicated by the fact that they commonly live on communal grounds: the reserves. The major economic advantage of living on the reserve is freedom from land taxes. Other advantages sometimes cited are advantages of belonging to the Indian band, not the advantages of reserve life. "As long as Indian status is not given up by enfranchisement, or membership altered by joining another band, band membership is retained even if the Indian has moved off the reserve.[22]

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22. Canada, A Survey of the Contemporary Indians of Canada, op. cit., p. 271

Communal funds derived from the resources of the reserve are the property of all band members, not just the reserve residents. Thus taxes avoided is the only significant factor peculiar to reserve occupancy that contributes to restriction of the mobility of the Indian fishermen.

4.64 Kinship ties.

The social and economic advantages of living in the same area as one's relatives cannot be ignored. For the Indian fishermen, this factor is likely very significant as the remote villages will offer a concentration of filial and racial ties. However, the associated advantages are declining as the reserve populations are falling. Social change may also be eroding the advantages of living in the communal setting of the remote reserve. The Indian Affairs Branch study notes that: "In the more urbanized bands .... where most families depend for their livelihoods upon the earnings of the family head as an individual wage earner, the family tends to be more reluctant to look after indigent kin, and more insistent on their seeking welfare aid."[23] This study also notes the impact of the "imbalance between the sexes of marriageable age in the home bands"[24] caused by the

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23. Canada, A Survey of the Contemporary Indians of Canada, op. cit., p. 116

24. Canada, A Survey of the Contemporary Indians of Canada, op. cit., p. 111

outflow of well trained young females from the reserve. The result is an increase in the mobility of the young males.

Kinship ties likely contribute to mobility also. The greater the number and the dispersion of relatives away from the home reserve, the greater the chances of others following. They receive more and better information about opportunities beyond the reserve and have a wider range of contacts who may be able to help them find work and accommodation.

Once out-migration from the reserve starts, the social rationale for remaining on the reserve falls, and the ease of assimilation to the "outside" world increases. Beyond some point then, kinship ties will serve to increase mobility rather than to retard it.

4.64 Lack of skill mobility.

It was assumed earlier that the fishermen displaced from the industry were not bound by skill restrictions in their choice of alternative employment. Although this is possibly true if time for retraining is permitted, the assumption is invalid in the short run. However, to adopt the view that the fishing industry is "a reservoir for workers who are ill-suited to other occupations"[25] seems equally invalid. By reason of low education and advancing age some fishermen will face severe immobility due to lack of skills. The value of retraining is for them severely limited by the short work-life anticipated in

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25. W.F. Sinclair, op. cit., p. 32

a new occupation. This is a consideration for only the older group of fishermen; the younger ones expect a longer work-life, and are also better educated. For them, skill mobility through retraining is viable. The problem becomes one of motivation and cost.

The cost of retraining to the younger fishermen is likely more psychological than financial. Manpower retraining programs offered by the federal government provide both free training and a living allowance. Out of pocket expenses to the trainee are minimal. Lack of knowledge of the availability of such programs may be one barrier to the mobility of the Native fishermen. The main barrier is more likely to be the magnitude of the change of the life-style required, either to receive the training or to utilize it later. The positive effect of kinship ties on mobility noted earlier will serve to reduce such an obstacle.

Lack of skills appropriate to jobs outside the fishery should not be a major deterrent to the younger fishermen, but likely form an insurmountable barrier to the mobility of many of the older fishermen.

4.7 Conclusions about the mobility of Indian fishermen based in remote areas.

Evidence cited indicates that the coastal bands living in remote communities have exhibited locational mobility, and

probably job mobility, even prior to the implementation of the licence control program or "Davis plan". Few of the communities can offer an economic base broad enough to prevent the outflow expected. As the production unit involved in fishing is extremely mobile, former advantages of location of the remote villages for fishing have vanished. There seems little rationale for attempting to preserve these ports as population centres. Factors tying the fishermen to the remote communities appear to be diminishing in importance, and where still applicable, they appear to be short run problems at most. The effect of the licence control or "Davis plan" on these factors remains to be determined.

5. The "Davis Plan"

5.1 Phase I

On September 4, 1968, the salmon fleet was frozen in size and composition. Licences granted were designated "A" or "B" depending on the vessel's landed value of any species taken during 1967 or 1968. If this value exceeded $1250, the vessel received and "A" licence; otherwise the "B" licence was issued. The maximum life of the "B" licence is ten years; after this time the vessel licenced must withdraw from the fishery. The retired "B" vessels are not subject to replacement.

To maintain an "A" licence a vessel must be fished at least every other year, and must now maintain a minimum

average annual catch of $5,000 value. Failure to meet either requirement results in a once and for all down-grading to the "B" category. A permanent licence is thus forfeit and replaced by one of ten year maximum duration. When Phase I was introduced, entry to the industry could be achieved only "by purchasing a licenced vessel or bringing in a new vessel and retiring a category A licenced vessel."[26] This latter method was "later restricted to a ton-for-ton formula when vessel numbers declined but gear power increased."[27]

5.2 Phase II

Phase II of the Davis plan is the buy-back program introduced in 1970. The plan was funded by increasing the licence fees for "A" category vessels first from ten dollars to one hundred or two hundred dollars (depending on the vessel's length) and then to a range from one to four hundred dollars in 1971 (depending on both the length and tonnage of the vessel). The "B" licence remained at ten dollars. The licence funds are used to buy-back "A" category vessels by the government. The vessels so retired are later sold by auction but cannot again be licenced to fish for any commercial species.

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26. Canada, Department of Fisheries, Information Fisheries, Vol. 1, Feb. 1971, p.1

27. Canada, Information Fisheries, op.cit., p. 1

Indian vessel owners were granted special privileges with respect to the licence fee increases. Information Fisheries describes the Indians' options as:

> "Indian vessel owners will have the choice of staying in the salmon vessel buy-back program or paying a special Indian licence.
>
> Indians owning commercial salmon fishing vessels will be able to pay a $10 licence fee this year (1971) and retain all the privileges of an A vessel with the exception of buy-back privileges.
>
> This fee cannot apply to company rental or charter boats.
>
> Because a vessel with a $10 licence will not contribute to the buy-back program it cannot be sold to the government for payment out of the fund.
>
> Vessels with this special licence sold to non-Indians or companies would revert to B status unless the new owner repaid all licence fees the vessel had been exempted from since the buy-back program started in 1970.
>
> Indian vessel owners who opt to retain the buy-back privilege will pay the regular scale of fees."

5.3 Phase III

The third phase of the "Davis plan" was introduced in the fall of 1970, and was designed to introduce quality control standards. Regulations on conditions of fish storage areas were to be met by early 1972 if a vessel was to be licenced for that season. Due to a very high failure rate upon initial inspection, vessel owners were given another year to improve the standards on their boats. Attainment of a vessel licence for the 1973 season will be conditional upon passing the quality control inspection.

5.4 Phase IV

The fourth phase of the plan will not be instituted before

the 1973 season. It is known that this phase will be designed to regulate the gear used in the fishery, but further details have not been released.

6. The "Davis plan" and the coastal Indian fishermen.

6.1 The U.F.A.W.U. position

The main criticisms of the "Davis plan" put forth by the United Fishermen and Allied Workers Union (U.F.A.W.U.) and the affiliated Native Brotherhood of British Columbia (N.B.B.C.) centre on the proposition that the fishermen rather than the vessels should be licenced. The U.F.A.W.U. and the N.B.B.C. hold that the licence scheme leaves many fishermen at the mercy of the large fish companies which must cut back their fleets in proportion to the cutbacks in privately owned vessels, under the terms of Phase I of the program.

The U.F.A.W.U. stated their position as:

> "Those who can least afford it will become the victims of the plan - crushed by the burden of heavier taxation and the necessity of maintaining production requirements in an increasingly competitive industry. The compete or die concept will force marginal, but nevertheless, bonafide fishermen to increase expenses thrusting them deeper into the companies' debt and finally extinction. ...A "select club" will indeed be the result but the toll in terms of human rights will be staggering."[28]

The Native Brotherhood states that the brunt of the

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28. U.F.A.W.U., Submission to Minister of Fisheries on Phase III - Licence Control Program, Oct. 31, 1969, p.4

changes are borne by Indian fishermen, especially through company cutbacks of vessels. On Feb. 15, 1972 the Prince Rupert Daily News reported that: "B.C. Packers recently announced the withdrawal of 150 boats from the industry. .... About 225 men were affected by the fleet cutback with 150 of them being Indians."

Subsidiary arguments put forth by the Fishermen's Union and the Native Brotherhood charge that the Natives' aboriginal rights to fish are not being protected, and ask that Natives "presently fishing with Class B boats be allowed to continue fishing those boats as long as they want to."[29] They further charge that a federal promise to create jobs for some of the Indians displaced from the industry has been ignored. Also important to the Native Brotherhood is the closure of nine canneries since 1968. They claim that seven of these closures affected Native workers, "displacing more than 1000 and depriving several villages of their principal source of income."[30]

The U.F.A.W.U. proposal for licence control turns on the licencing of fishermen. The reduction in total licences would be achieved by terminating the granting of new licences for five years. As the turnover rate among fishermen is high this

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29. Prince Rupert Daily News, Feb. 15, 1972

30. Prince Rupert Daily News, op.cit.

method should lead to licencing of only those who are bonafide fishermen. A further criterion advocated to limit licences is the restriction of licences to persons who earn at least fifty percent of their annual income by fishing. The U.F.A.W.U. would attach "production credits" to individual fishermen, including crew members, if the government insisted on maintaining the production criterion.

6.2 The effect of the "Davis plan" on the mobility of the Native fishermen based in remote villages.

Evidence presented by the U.F.A.W.U. indicates that the Natives involved in fishing are suffering most of the pains of transition involved in the rationalization of the fishery. When it is noted that remote area fishermen on the average[31], it would be expected that the Indian fishermen based in remote ports would be hardest hit by the legislation. They would be the persons least able to meet the production requirements. Many of the Indians' vessels would thus be expected to fall into the "B" category and thus face a limited work-life. Clearly the plan is likely to force these remote area fishermen from the industry. It is also clear that those so eliminated will face little opportunity of local employment outside the fishing industry. Thus imposed occupational mobility will also lead to the

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31. W.F. Sinclair, op. cit., p. 42

imposition of locational mobility.

To argue, as the U.F.A.W.U. does, that forcing these Native fishermen out of the industry violates their aboriginal rights and leads to cultural genocide is spurious. The aboriginal rights to fish or hunt have generally been interpreted by the courts as applicable only to fishing or hunting for food, and not to fishing or hunting for sport or for commerce.[32] The cry of "cultural genocide" is, in this case, probably more political rhetoric than substantive argument. The mobility before the implementation of the licence control program (noted earlier) indicates a willingness of many band members to give up that part of their culture which is linked to fishing and to reserve life. The maintenance of cultural purity here will be achieved only at the expense of the standard of living of those so saved from "cultural genocide". The U.F.A.W.U. argument smacks of this attitude.

The first phase of the licence control program obviously limits the period that many Indian fishermen can expect to remain in the fishery. As the "B" boats are retired an accelerated withdrawal from the remote fishing communities can be expected. Such an exodus would further reduce the ties to such ports felt by Indian fishermen with "A" category boats. Most of the remote

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32. Canada, A Survey of the Contemporary Indians of Canada, op. cit. pp. 230 - 231

fishing villages thus seem doomed as viable population centres. However, it seems that the legislation is merely sealing a fate already evident.

Phase II of the program facilitates mobility by choice for some of the fishermen. The value of "A" category vessels is appreciated, thereby permitting the owners of such vessels who have been restricted by debt or capital commitments to retire from the industry if they so desire. If they choose to remain in the fishery in spite of the higher licence fees, the vessel owners should be able to anticipate realization of part of the rent accruing to property holders (licenced rights) in a limited access industry. In the long run improved returns can be expected.

The $10 "A" licence option offered the Native fishermen seems little more than frosting on the cake, as charged by the U.F.A.W.U. To obtain a greater share of the economic rent accruing to holders of fishing rights, the Indian may opt to avoid the government tax on these rights. This is by no means "a free lunch". In exchange, the buy-back privilege is lost, and thereby the value of the vessel is depreciated. (However, the owner may realize part of the rent through improved earnings as the fleet is reduced.) The clause that the vessel reverts to "B" status on sale to non-Indians or companies, unless the avoided taxes are paid, limits the marketability of the vessel and may prevent the realization of a gain in vessel value by the Indian fishermen who opt for the $10 licence.

The main advantage of the licence option is related to the discount rate, or the rate of time preference. The real choice granted by the option is between an annual tax payment or a lump sum payment (or equivalent reduction in the price of the vessel) at the time of the sale of the vessel.

"B" category vessels are excluded from the buy-back scheme and have a limited life span. The remote area fishermen who own such vessels gain nothing from the licence control program and expect removal from the industry without compensation in the form of appreciated vessel value. In fact, the imposed limit on the vessel's life span and the impossibility of conversion from "B" to "A" category likely reduce its market value.

The owners of "B" category vessels who rely on fishing as their sole source of earnings are likely to be the fishermen either most unable or most unwilling to leave the industry. If the vessel owner has remained in the industry in spite of low income it must be concluded that either he faces very low opportunity costs (due to lack of skills or due to other mobility reducing factors), or he places a very high value on the non-monetary returns from the life style involved. When such owners lose their "B" category vessels they can remain in the industry only by purchasing "A" category vessels or by working for other owners as crew members. One alternative is restricted by the financial strength of the displaced fishermen, which is definitionally weak, and the other is restricted both by the different

work regimen involved and by the number of vacant positions. Neither alternative is likely to be attractive to the displaced vessel owners.

The federal Indian Fishermen's Assistance Program is designed to alleviate some of the financial limitations facing the Indian fishermen. However, its value to the owner of a "B" category vessel is questionable. The plan only supplements the Indians' resources; they must still furnish a down payment of twenty per cent of the new vessel's value. Further, only minimal loans are available for older fishermen who, paradoxically, are likely the most immobile by reason of skill or age restrictions. Limitations on the total funds available for the program are also restrictive.

The "Davis plan" thus probably forces mobility upon those remote area fishermen who are least mobile. As remote area fishermen form only a small portion of total fishermen, and because the subgroup of these fishermen who are immobile is fairly small, the magnitude of the problem is small relative to total employment. The problem is important though, because of the inherent inequities apparent, and because the people involved belong to a distinct cultural and racial minority, making the government action politically sensitive.

The government must recognize two problems which have been aggravated by the licence control program. One is the problem of the low income fishermen who are immobile either by choice or because of the restrictions discussed earlier. The other problem

is that of the economic viability of the communities located on remote reserves. The two are interrelated.

7. Potential government policy alternatives.

7.1 The "nil" alternative.

To do nothing is always one approach to a problem. It has been shown that in this case this "solution" is probably unacceptable. The short run toll in human suffering is great, and a disproportionate share is borne by one subgroup. Admittedly, the "nil" alternative will result in a solution over time. The subgroup adversely affected will be forced out of the fishery and will eventually disappear. Efficient production might then prevail. However, for reasons frequently stated earlier, the short run problems must be resolved.

Consideration of the long run effects on the remote communities of the short run approach to the low income - low mobility problem leads to three groups of policy alternatives open to government planners.

7.2 Elimination of the remote communities.

One group of short run approaches to the mobility problem would result in the virtual elimination of those remote communities which are no longer economically viable.

To overcome the immobility of the fishermen displaced from

the salmon fishery the government could provide assistance for relocation to centres of population and industry. Here the opportunities facing the former fishermen would be broader in scope and greater in number. But the factors which make the fishermen with "B" category vessels immobile will limit the value of the diversification of surrounding jobs. Age and skill limitations would still prevent many of these men from achieving employment. To actively support such a shift to "white" society, and to imply the intention to doom the remote communities, would open a Pandora's box of "cultural genocide" charges.

To avoid such charges the government might urge, possibly through assistance, the centralization of the populace of remote Indian communities in the larger coastal centres of predominately Indian population. The problems of band rights and reserve lands would be encountered then, and there is little reason to expect the lot of the fishermen forcibly displaced from the fishery to be apprciably improved.

Only if it is decided that the remote communities are no longer justified could such strong measures be considered to overcome the problems of the fishermen displaced by the new legislation. Although the communities involved already exhibit decay, acceleration of this process by government intervention is distasteful because of the abrogation of individual choice involved.

7.3 Support of the remote communities.

The opposite general approach would be to improve the likelihood of employment locally by diversifying the local economy. Promotion of crafts is one possibility that would also serve to preserve the cultures involved. Alternatives which would offer greater numbers of jobs could include industrial (i.e. logging) or service (e.g. tourist facilities) projects on reserve land. Although of value to band members in general, the effects on the owners of "B" category vessels would still be limited by their skills and age.

Perhaps the most promising alternatives involving the support of remote communities entail exploitation of fisheries other than salmon. The Hedlin Menzies report[33] offers optimistic projections for the potential of the herring, groundfish, oyster, and clam fisheries to the year 1980. The potential of aquaculture was noted by Ron Rose in the Vancouver Sun of Feb. 7, 1972 in an article about experiments carried on by the Lummi Indians of the Seattle area. On April 13, 1972 the Sun also reported the introduction of lobsters to the Alberni Canal had proved biologically feasible.

Such optimistic reports indicate areas that could be subjected to research regarding their potential for the remote communities discussed. If the support of these remote communities is a goal, such research would be helpful. But the problems of the fishermen today are short run in nature, and likely not solvable by such

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33. Hedlin Menzies and associates. op. cit.

long run programs.

7.4 Ignore the remote communities.

If the problems facing the Native fishermen today are to be the central focus of policy, the viability of the remote communities need not be considered. This does not mean that the effects of the short run programs on the long run viability of the remote communities should be ignored; rather the weighting of such effects in policy decisions should be limited. Then three distinct paths are open.

One alternative is simply to pay the displaced fishermen not to work. When the "B" category vessels are retired increased relief payments could be provided to those fishermen unwilling or unable to relocate or retrain. Clearly this will erode the net rental gains of the government from the licence control program. However, this added cost would be of limited duration. Worse is the danger that such an approach could destroy initiative and morale.

A second alternative is to make loans much more readily available to the Indian fishermen, as demanded by the N.B.B.C. To the extent that this permits the control of efficient capital goods by inefficient fishermen this approach is unwarranted. There is also inherent a problem of discrimination against poor non-Indians who might have equal claim to "A" licences.

The third alternative is to permit the Indians with "B" vessels

to fish them as long as they want to. If this N.B.B.C. recommendation is applied to non-Indians also, and restricted to persons earning the major portion of their income by fishing (a U.F.A.W.U. recommendation) it then seems to be the best solution. If the licence is granted to the fisherman rather than the vessel (another U.F.A.W.U. recommendation), and is non-transferable and non-renewable after a specified absence from fishing, the solution is appropriately short run. (Note that this solution applies only to "B" category vessels; the "A" would be treated as in existing legislation.)

The time span involved would be expected to be short, due to the age of the most immobile men, and due to the rapid turnover in other categories. Rationalization of the fishery might be somewhat retarded, but the social disruption and the economic waste of retiring marginally productive men would be avoided. That the progeny of the fishermen not be allowed to live as their fathers did does not seem unduly restrictive. In the intervening time available long run measures to either support the remote communities or train the inhabitants to fit into society elsewhere are possible. The next generation need not fact a low income - low mobility trap.

8. Appendix A

Band Name	'63 pop.	'70 pop.	Approximate Location
Ahousaht*	500	707	Flores Island; north of Tofino
Aitchelitz	-	6	Fraser Valley
Beecher Bay	60	86	West of Victoria
Bella Bella*	948	1103	Campbell Is., about 25 mi. from Ocean Falls
Burrard	-	143	Vancouver area
Campbell River	152	167	Vancouver Is.
Canyon City*	114	136	On Nass River
Cape Mudge	281	305	Quadra Is.
Cheam	-	132	Fraser Valley
Chehalis	-	386	Fraser Valley; Harrison Mills
Chemainus	294	438	Chemainus, Vancouver Is.
Clayoquot*	220	355	Meares Is., north of Tofino
Comox	79	85	Comox, Vancouver Is.
Coquitlam	15	22	Coquitlam; Fraser Valley
Cowichan	1200	1448	Lake Cowichan - Duncan area
Cowichan Lake	-	6	Lake Cowichan, Vancouver Is.
Ehattesaht*	80	94	Queens Cove, near Zeballos
Esquimalt	-	66	Victoria area
Gilford Is.*	188	198	Gilford Is., Queen Charlotte Strait
Gitlakdamix*	-	755	On the Nass River
Glen Vowell	153	159	Near Hazelton
Greenville*	528	652	Mouth of the Nass River
Hagwilget	-	187	Uncertain - Skeena or Nass area?
Halalt	-	106	Duncan, Vancouver Is.
Hartley Bay*	231	326	90 mi. south of Prince Rupert
Hazelton	570	-	Hazelton
Hesquiaht*	220	276	Estevan Pt. and Hotsprings Cove
Homalco*	193	233	Church House; Butte Inlet
Hope	-	133	Hope; Fraser Valley
Katzie	144	168	Hammond; FraserValley
Kincolith*	350	821	75 mi. north of Prince Rupert
Kispaiox	415	518	10 mi. north of Hazelton
Kitamaat	697	848	Kitimat
Kitasoo*	216	277	Klemtu; on Swindle Is.
Kitkatla*	454	703	45 mi. south-west of Prince Rupert
Kitsegukla	293	367	23 mi. west of Hazelton
Kitselas	-	85	10 mi. from Terrace
Kitsumkalum	100	102	Port Essington; Skeena River
Kitwancool	200	234	40 mi. from Hazelton
Kitwanga	276	341	30 mi. west of Hazelton
Klahoose*	63	86	Squirrel Cove, Cortes Is.

Band Name	'63 pop.	'70 pop.	Approximate Location
Kwaw-kwaw-a-plit	-	9	Chilliwack area; Fraser Valley
Kwawkewltk	204	460	Port Hardy; Vancouver Is.
Kwawwaineuk*	14	12	Sullivan Bay; north of Alert Bay
Kwiakah	6	5	Campbell River, Vancouver Is.
Kvoquot*	100	206	West Coast of Vancouver Is.
Lakahahmen	-	94	Fraser Valley
Langley	50	70	Fort Langley; Fraser Valley
Lyakson	-	82	Gulf Islands
Malahat	-	110	Victoria area; Vancouver Is.
Mamalillikulla*	134	142	Village Is.
Massett	800	1015	Massett, Graham Is.
Matsqui	-	48	Matsqui; Fraser Valley
Metlakatla	118	185	7 mi. west of Prince Rupert
Musqueam	296	364	Vancouver
Nakwakto	62	-	Port Hardy
Nanaimo	432	525	Nanaimo, Vancouver Is.
Nanoose	-	86	Nanoose Bay; Vancouver Is.
New Westminster	-	2	New Westminster
Nimpkish*	656	794	Alert Bay
Nitinaht*	100	232	Clo-oose; West coast of Van.Is.
Nootka*	100	232	Nootka Is.
Nuchatlaht*	60	84	Nuchatlitz; on Nootka Is.
Nuwitti*	19	17	Hope Is.
Ohamil	-	48	Near Hope; Fraser Valley
Ohiaht*	200	224	Bamfield and Sarita
Opetchesaht	-	92	Alberni; Vancouver Is.
Oweekano*	128	142	Rivers Inlet
Pacheenaht*	-	133	Port Renfrew
Paquachin	-	138	Victoria - Gulf Islands
Penelakut	300	373	Kuper Is.; Gulf Islands
Peters	-	34	Chilliwack - Hope area
Popkum	-	9	Popkum; Fraser Valley
Port Simpson*	760	1185	18 mi. north of Prince Rupert
Qualicum	27	42	Qualicum; Vancouver Is.
Quatsino*	87	102	Quatsino; Vancouver Is.
Quawshelah*	124	-	Smiths Inlet
Scowlitz	-	138	Harrison area; Fraser Valley
Seabird Island	-	302	Chilliwack - Hope area
Sechelt	361	471	Sechelt Pen.
Semiahmoo	-	24	Vancouver area
Sheshaht	-	346	Port Alberni
Skawahlook	-	35	Harrison area; Fraser Valley
Skidegate	300	352	Graham Is.
Skulkayn	-	53	Yarrow; Fraser Valley
Skwah	-	192	Chilliwack; Fraser Valley

Band Name	'63 pop.	'70 pop.	Approximate Location
Skway	-	41	Mission-Chilliwack area
Sliammon	328	424	Powell River
Songhees	-	139	Victoria area
Sooke	30	40	Victoria area
Soowahlie	-	132	Yarrow; Fraser Valley
Squiala	-	49	Yarrow area of Fraser Valley
Squamish	-	1089	Squamish
Sumas	-	91	Sumas; Fraser Valley
Tanakteuk*	103	97	Harbledown Is.
Toquaht	-	70	Ucluelet; Vancouver Is.
Tsartlip	-	347	Victoria area
Tsawataineuk*	264	278	Kingcome Inlet
Tsawout	-	251	Gulf Is.
Tsawwassen	50	53	Ladner
Tseycum	-	66	Ladner
Turnour Is.*	154	138	Turnour Island
Tzeachten	-	115	Yarrow area of Fraser Valley
Uchucklesaht*	40	77	Kildonan; Alberni Canal
Ucleulet	260	275	Ucleulet; Vancouver Is.
Union Bar	-	41	Union Bar; Fraser Valley
Yakweakwioose	-	34	Yarrow area; Fraser Valley
Yale	-	62	Yale; Fraser Valley

9. Appendix B.

Post Office & Year	House-holds	Fishermen No.	%	Job #1 No.	%	Job #2 No.	%	Job #3 No.	%
Ahousaht									
1961	96	66	69	Fishing 66	69	retired 17	18	n.a.	
1965	78	57	73	fishing 57	73	retired 5	6	n.a.	
1968	61	44	72	fishing 44	72	retired 6	10	teacher 3	5
1971	53	37	70	fishing 37	70	retired 4	8	teacher 2	4
Alert Bay (Nimpkish)									
1950	169	29	17	fishing 29	17	prof'l 23	14	trades 16	10
1960	235	54	23	fishing 54	23	prof'l 33	14	trades 20	9
1965	179	48	26	n.a.		n.a.		n.a.	
1968	167	43	26	n.a.		n.a.		n.a.	
1971	176	42	24	fishing 42	24	trans'n 15	9	gov't 11	6
Bamfield (Ohiaht)									
1950	111	56	51	fishing 56	51	trans'n 12	11	prof'l 9	8
1960	127	68	54	fishing 68	54	retired 13	10	trans'n 10	8
1965	121	60	50	fishing 60	50	n.a.		n.a.	
1968	126	44	35	n.a.		n.a.		n.a.	
1971	127	67	53	fishing 67	53	gov't 16	13	retired 14	11

Post Office & Year	House-holds	Fishermen No.	Fishermen %	Job #1 No.	Job #1 %	Job #2 No.	Job #2 %	Job #3 No.	Job #3 %
Bella Bella[34]									
1950	70	19	27	fishing 19	27	logging 10	14	retired 10	14
1960	107	58	54	fishing 58	54	prof'l 13	12	labour 8	8
1970	100	61	61	fishing 61	61	trades 8	8	gov't 6	6
Bella Coola[35]									
1950	85	46	54	fishing 46	54	labour 8	9	prof'l 5	6
1960	299	78	26	fishing 78	26	logging 72	24	agric. 27	9
1970	276	89	32	fishing 89	32	logging 41	15	gov't 19	7
Hartley Bay									
1971	27	15	56	fishing 15	56	retired 8	30	marine 2	7
Hotsprings Cove (Hesquiaht)									
1961	36	27	75	fishing 27	75	n.a.		n.a.	
1965	17	12	71	fishing 12	71	n.a.		n.a.	
1968	9	7	78	fishing 7	78	n.a.		n.a.	
1971	11	10	91	fishing 10	91	n.a.		n.a.	

34. W.F. Sinclair, op. cit., Table 3.3, p. 62

35. W.F. Sinclair, op. cit., Table 3.3, p. 62

Post Office & Year	House-holds	Fishermen No.	%	Job #1 No.	%	Job #2 No.	%	Job #3 No.	%
Kildonan (Uchucklesant)									
1961	45	18	40	fishing 18	40	n.a.		n.a.	
1965	26	12	46	fishing 12	46	retired 7	27	n.a.	
1968	24	9	38	fishing 9	38	retired 6	25	labour 4	17
1971	16	3	19	retired 4	25	'wife 4	25	fishing 3	19
Kingcome Inlet (Tsawataineuk)									
1961	43	30	70	fishing 30	70	n.a.		n.a.	
1965	38	26	68	fishing 26	68	logging 6	23	agric. 2	8
1968	30	9	30	fishing 9	30	logging 9	30	'wife 3	10
1971	24	7	29	logging 11	46	fishing 7	29	agric. 2	8
Klemtu (Kitasoo)									
1971	57	36	63	fishing 36	63	'wife 5	9	retired 4	7
Port Renfrew (Pacheenaht)									
1971	106	3	3	logging 55	52	machinist 10	9	retired 7	7

Post Office & Year	House-holds	Fishermen No.	Fishermen %	Job #1 No.	Job #1 %	Job #2 No.	Job #2 %	Job #3 No.	Job #3 %
Kyoquot[36]									
				fishing		com'c'n		logging	
1950	71	33	47	33	47	10	14	6	9
				fishing		logging		com'c'n	
1960	79	42	53	42	53	11	14	8	10
				fishing		com'c'n			
1965	72	46	64	46	64	9	13	n.a.	
				fishing		retired		logging	
1971	47	29	62	29	62	3	6	3	6
Port Simpson[37]									
				fishing		retired		prof'l	
1950	114	92	81	92	81	13	11	5	4
				fishing		retired		merch't	
1960	104	73	70	73	70	22	21	3	3
				fishing		retired		'wife	
1971	174	113	65	113	65	20	12	10	6
Quatsino[38]									
				fishing		logging		agric.	
1950	68	15	22	15	22	10	15	8	12
				fishing		retired		gov't	
1960	64	24	38	24	38	14	22	6	9
				fishing					
1965	62	27	44	27	44	n.a.		n.a.	
				fishing		retired			
1968	32	14	44	14	44	9	28	n.a.	
				fishing		retired		'wife	
1970	35	14	40	14	40	8	23	4	11

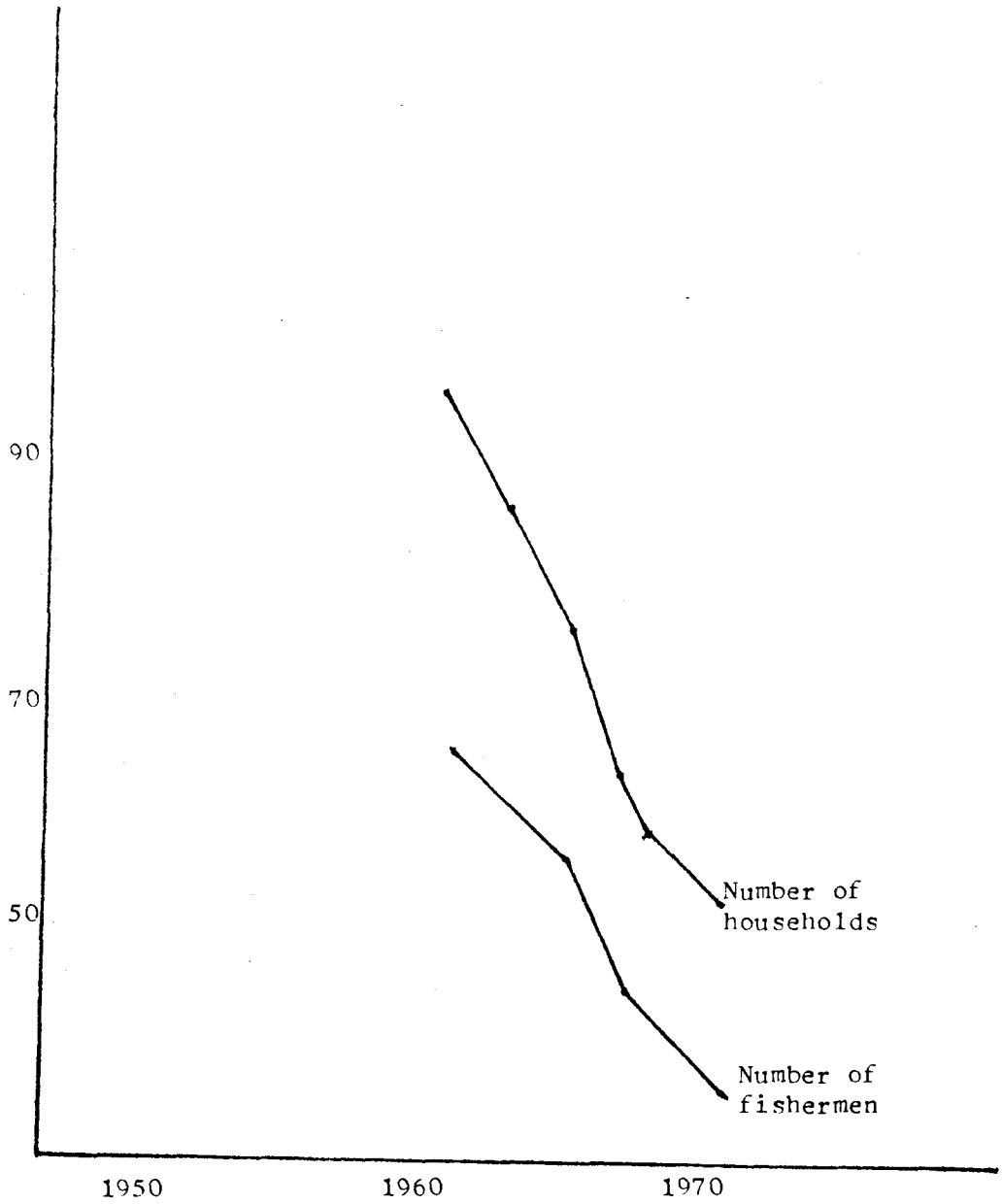
36. W.F. Sinclair, op. cit., Table 3.2, p. 60

37. W.F. Sinclair, op. cit., Table 3.3, p. 63

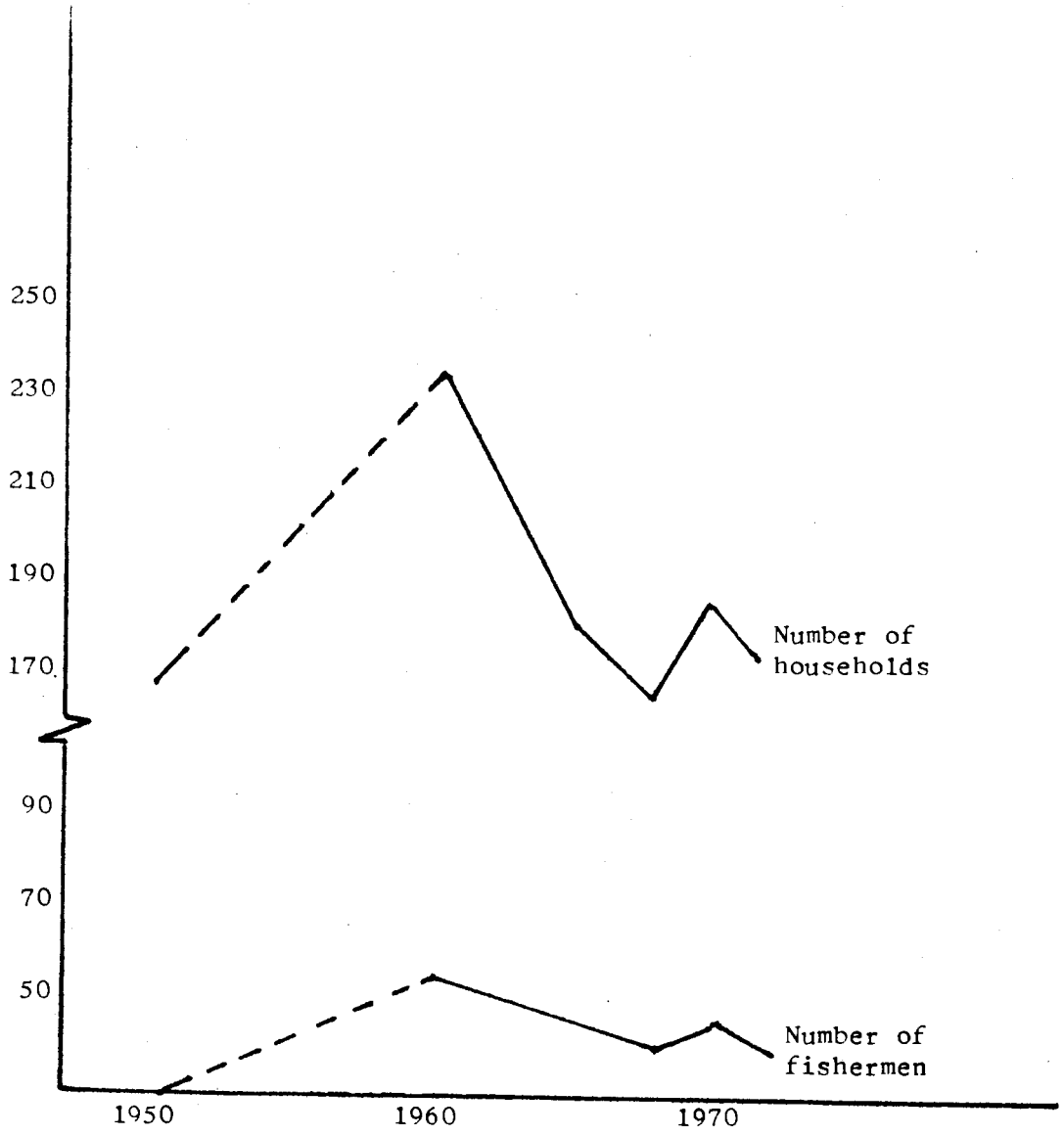
38. W.F. Sinclair, op. cit., Table 3.2, p. 60

Post Office & Year	House-holds	Fishermen No.	%	Job #1 No.	%	Job #2 No.	%	Job #3 No.	%
Squirrel Cove (Klahoose)									
1961	41	14	34	logging 22	54	fishing 14	34	n.a.	
1965	38	3	8	logging 18	48	n.a.		n.a.	
1971	35	2	6	logging 17	49	retired 6	17	merch't 2	6

10. Appendix C.

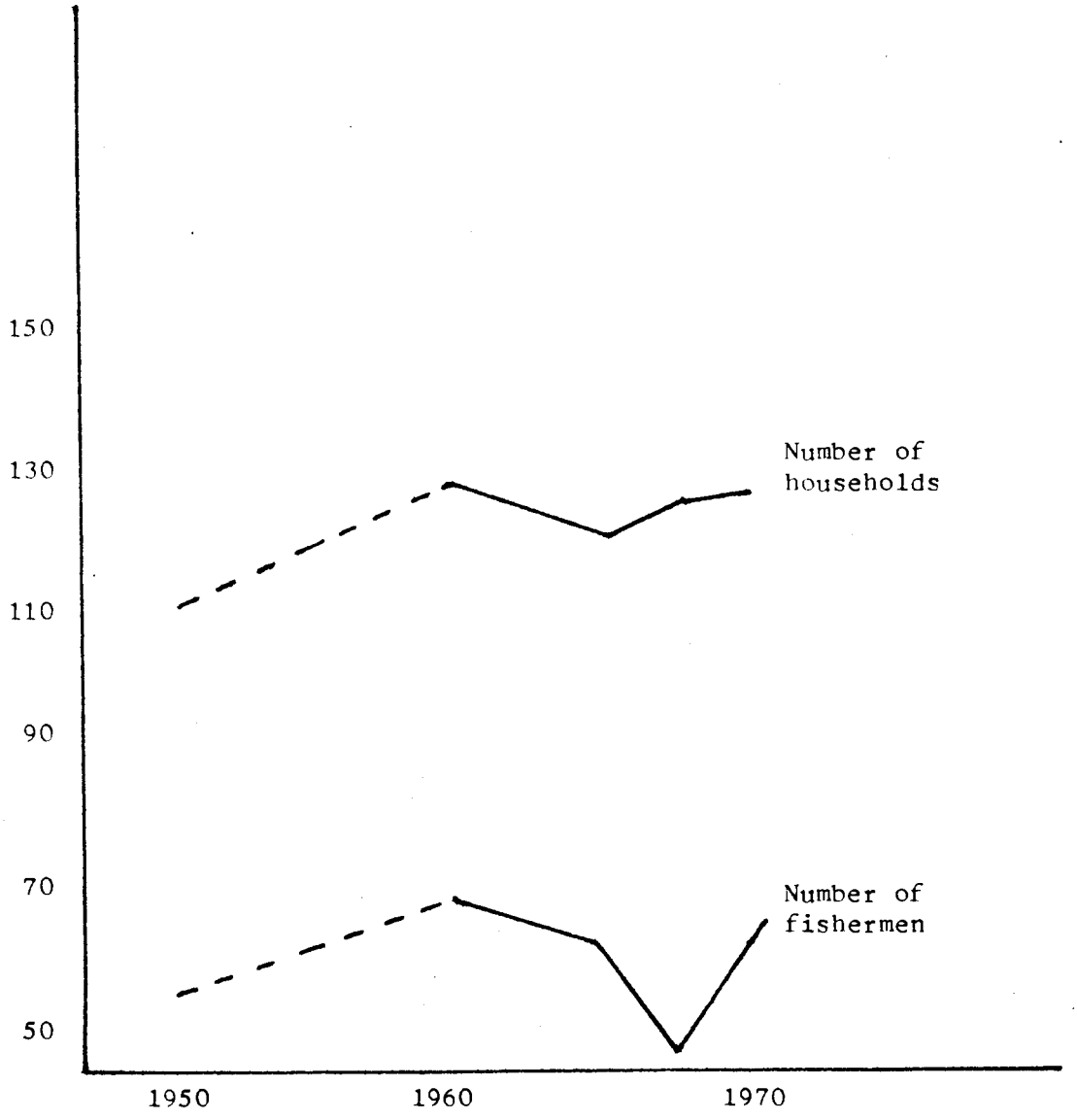


AHOUSAHT



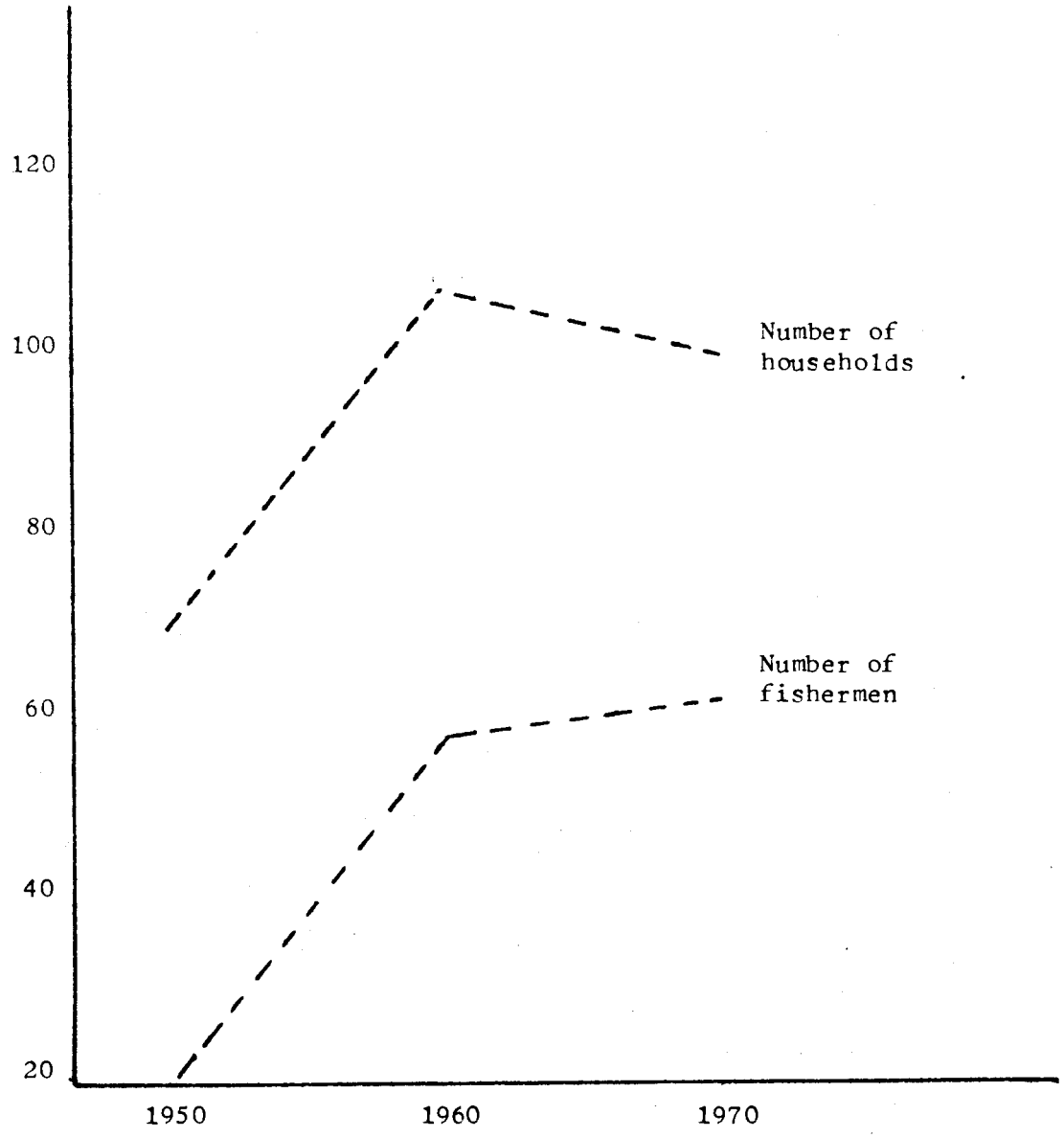
ALERT BAY

(Nimpkish)

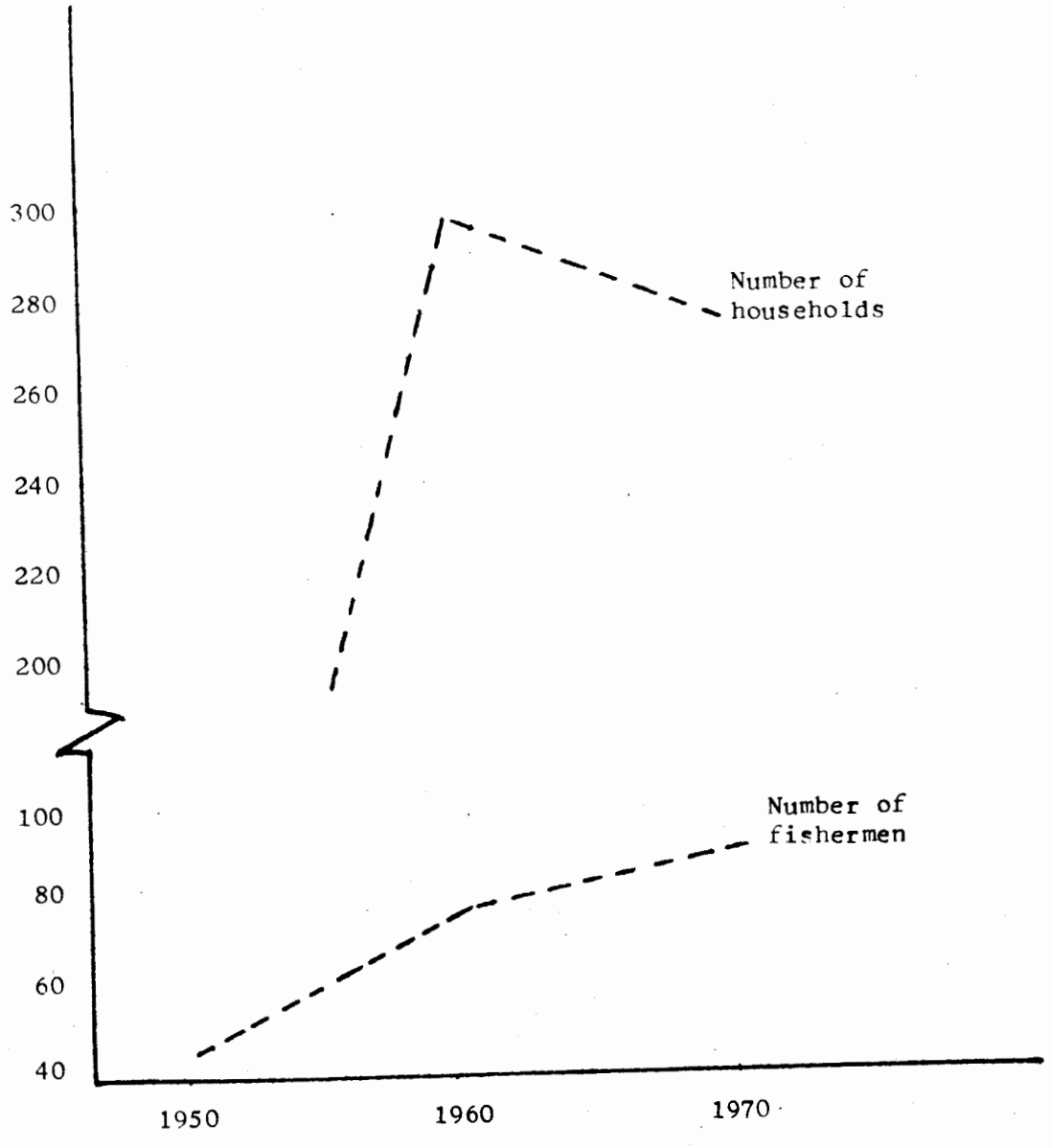


BAMFIELD

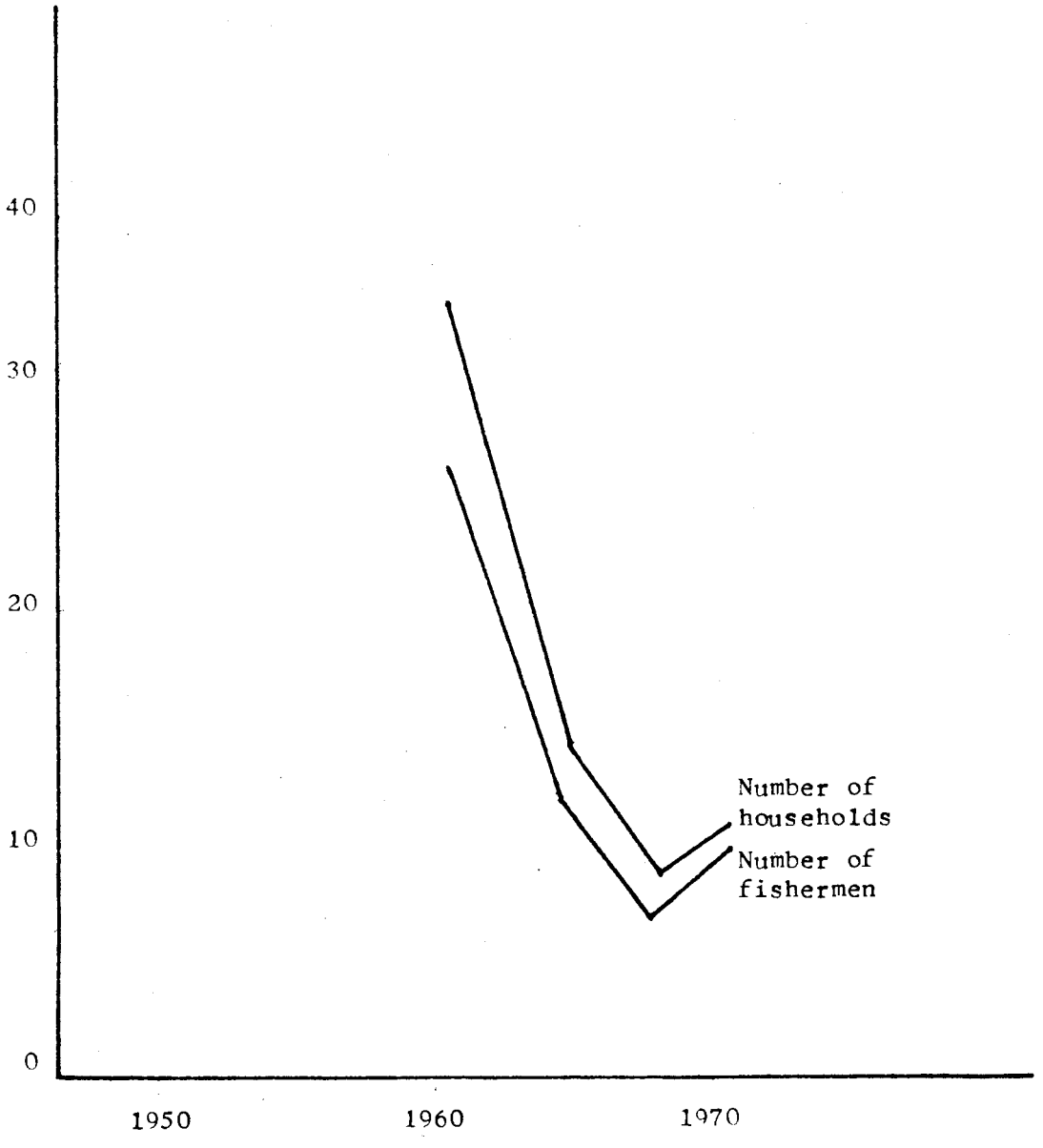
(Ohiaht)


120
100
80
60
40
20
1950
1960
1970
Number of households
Number of fishermen

BELLA BELLA

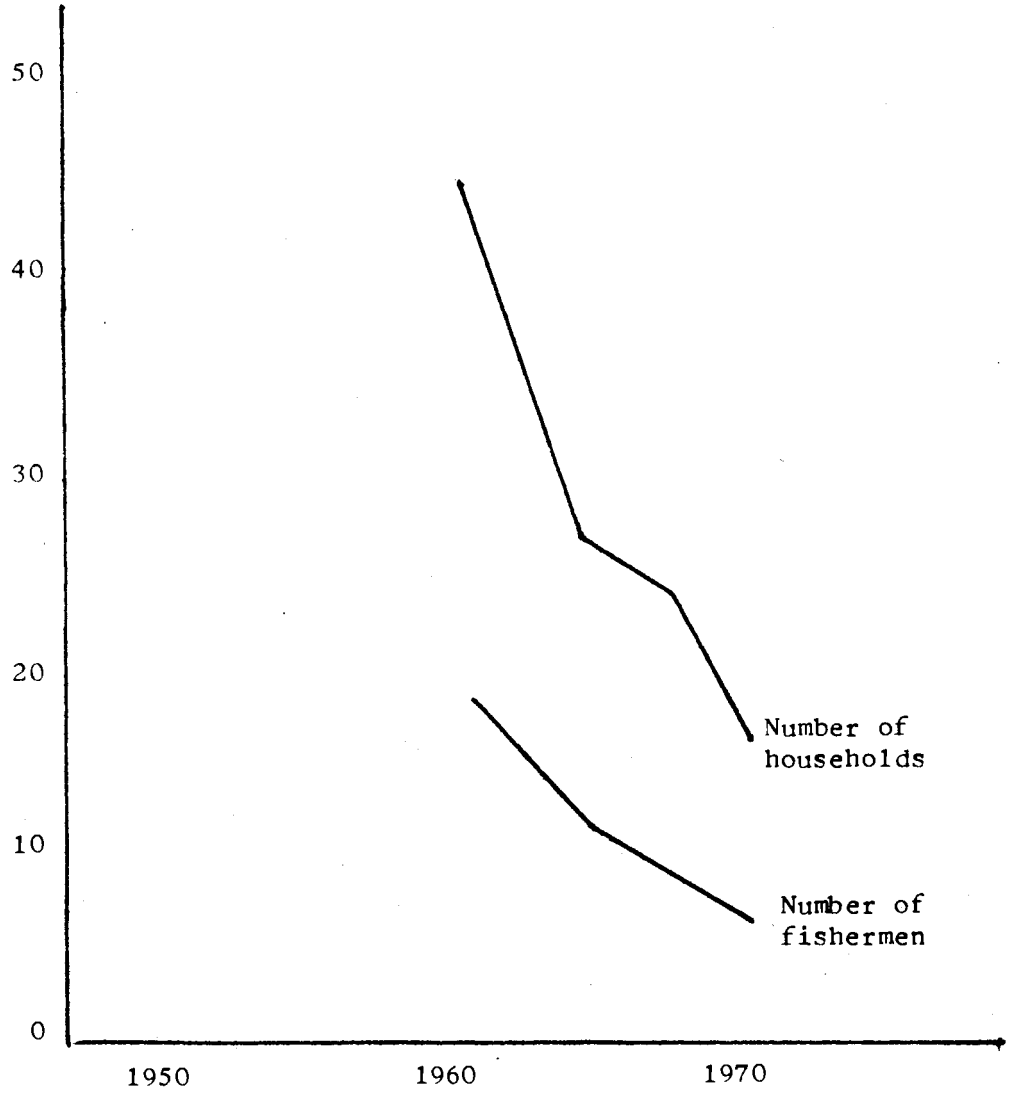

300
280
260
240
220
200
100
80
60
40
Number of households
Number of fishermen
1950
1960
1970

BELLA COOLA



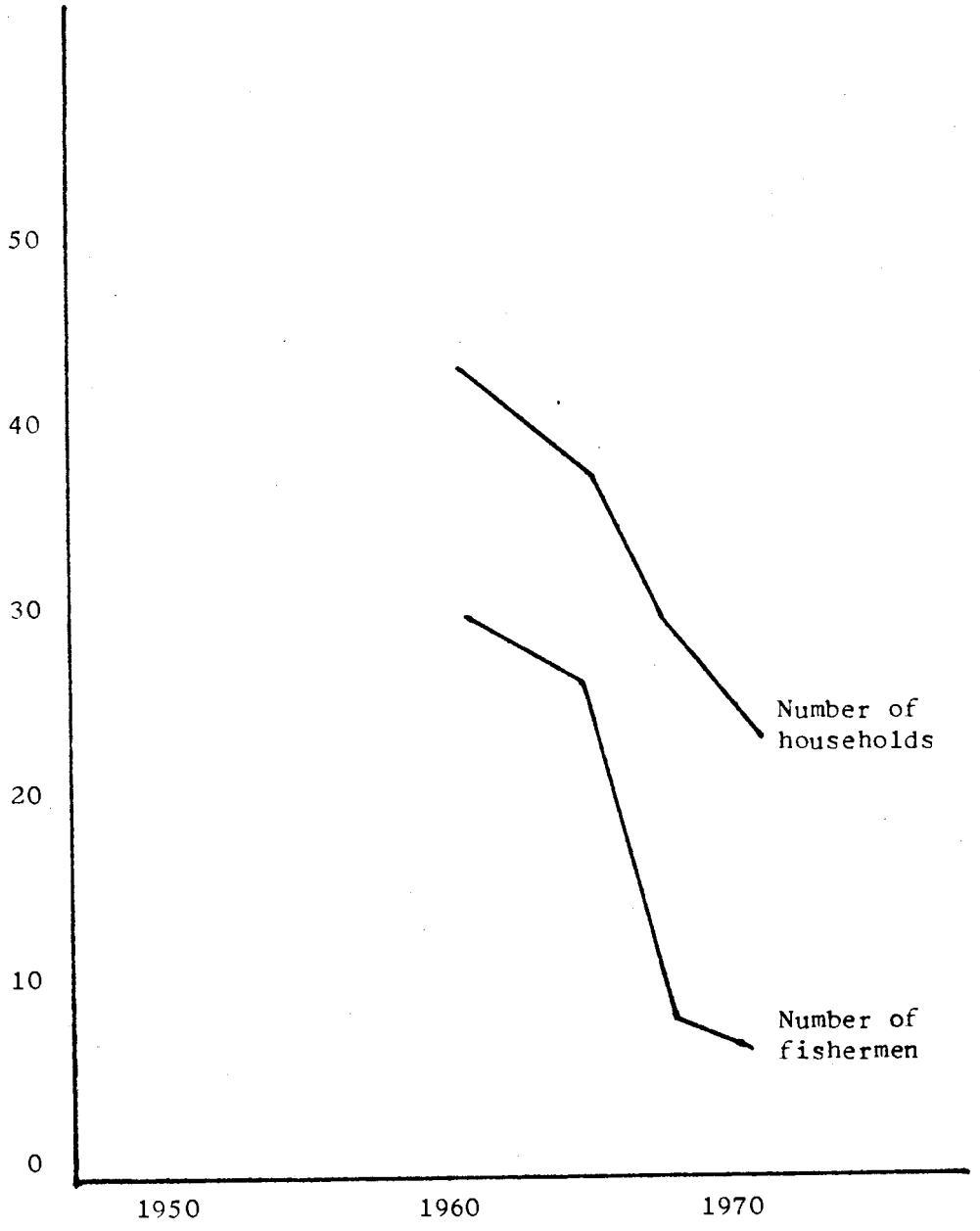
HOTSPRINGS COVE

(Hesquiaht)



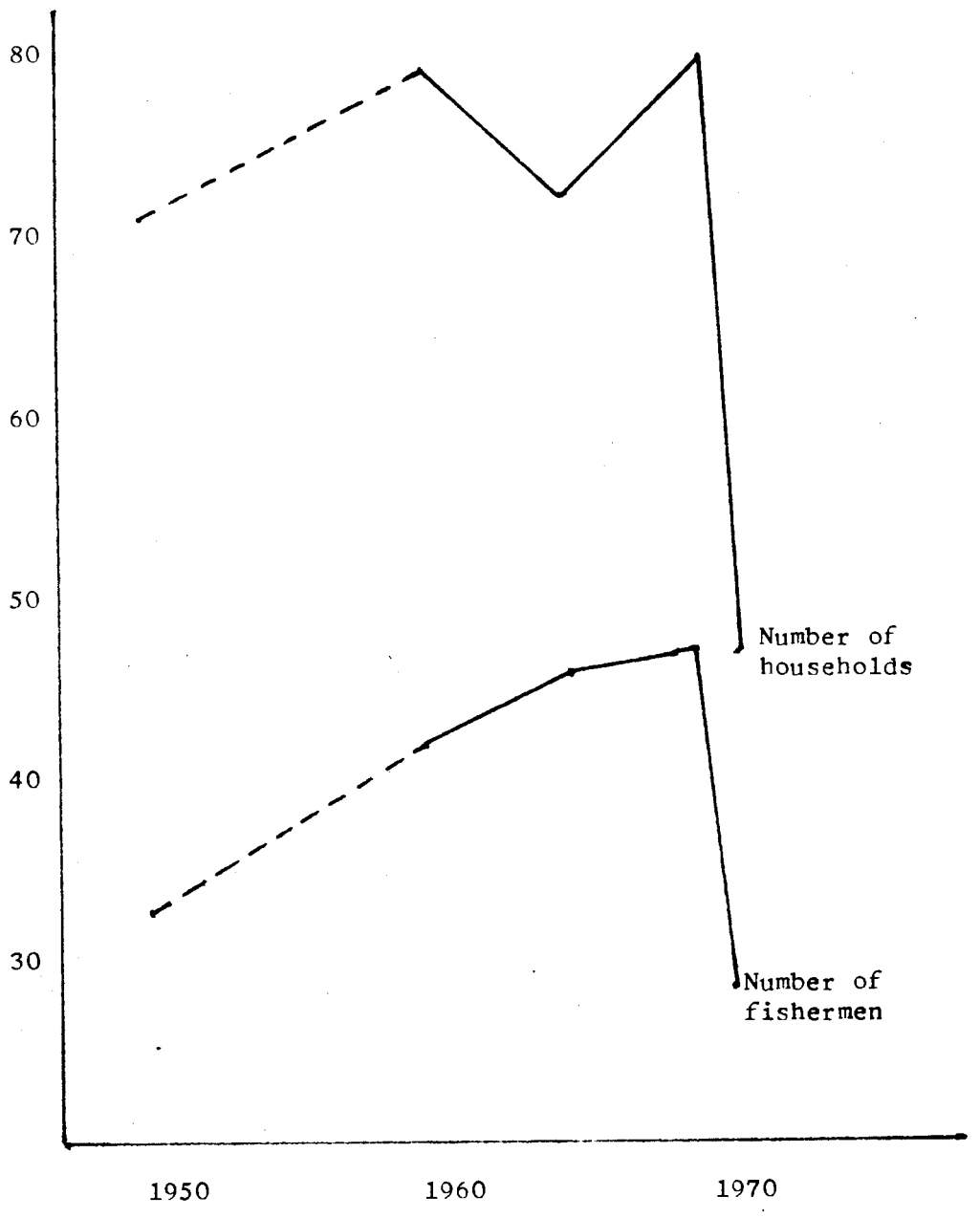
KILDONAN

(Uchucklesaht)

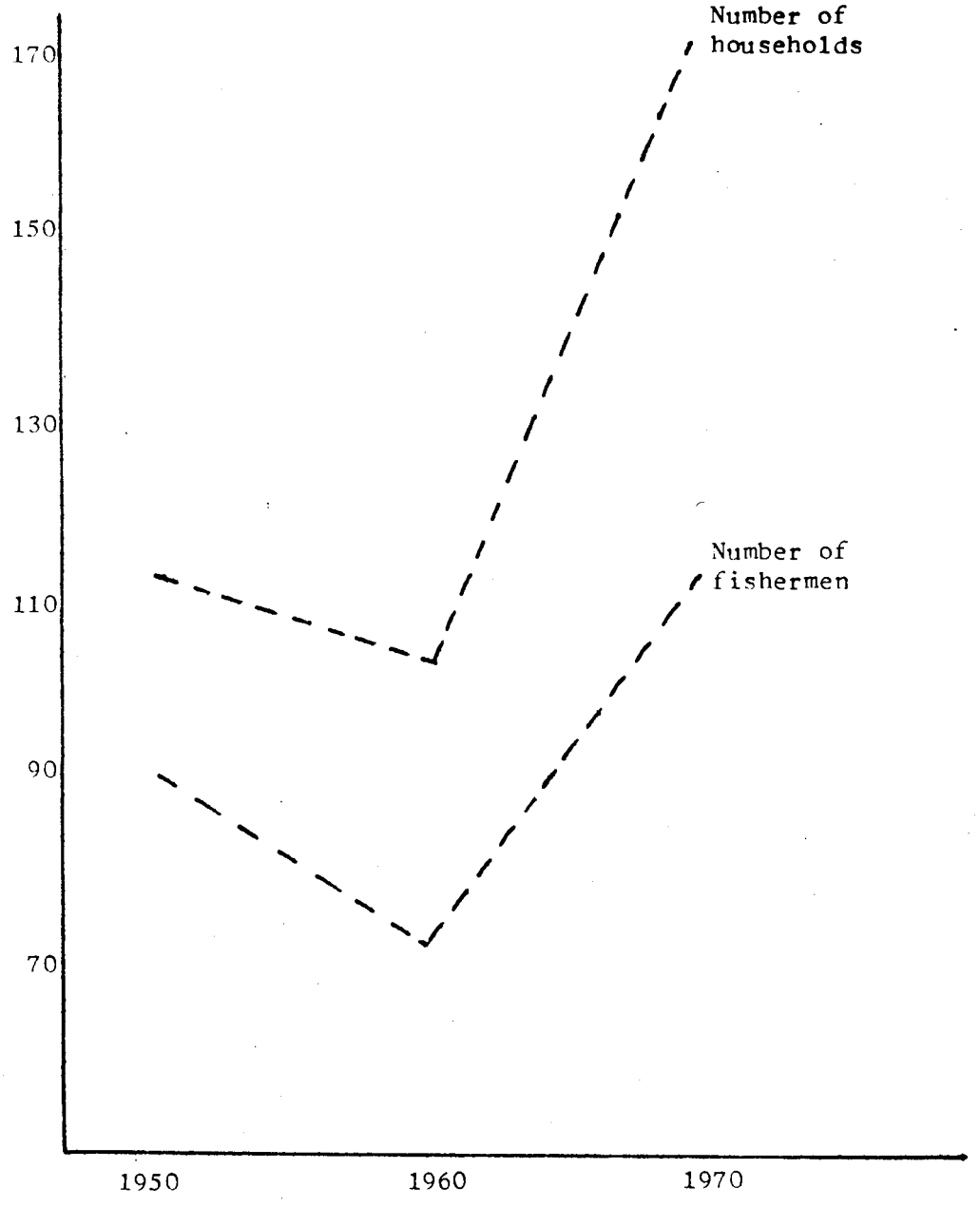


KINGCOME INLET

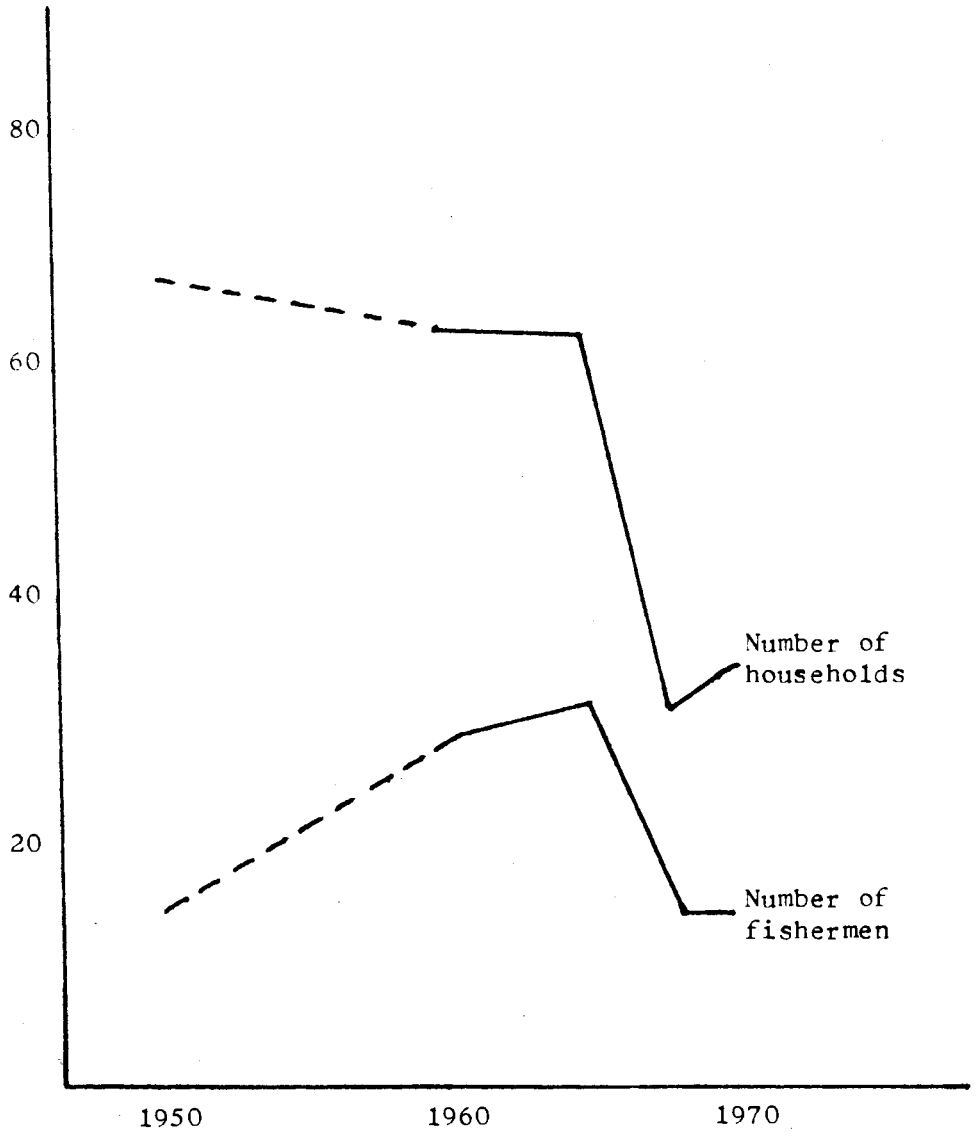
(Tsawataineuk)


80
70
60
50
40
30
Number of households
Number of fishermen
1950
1960
1970

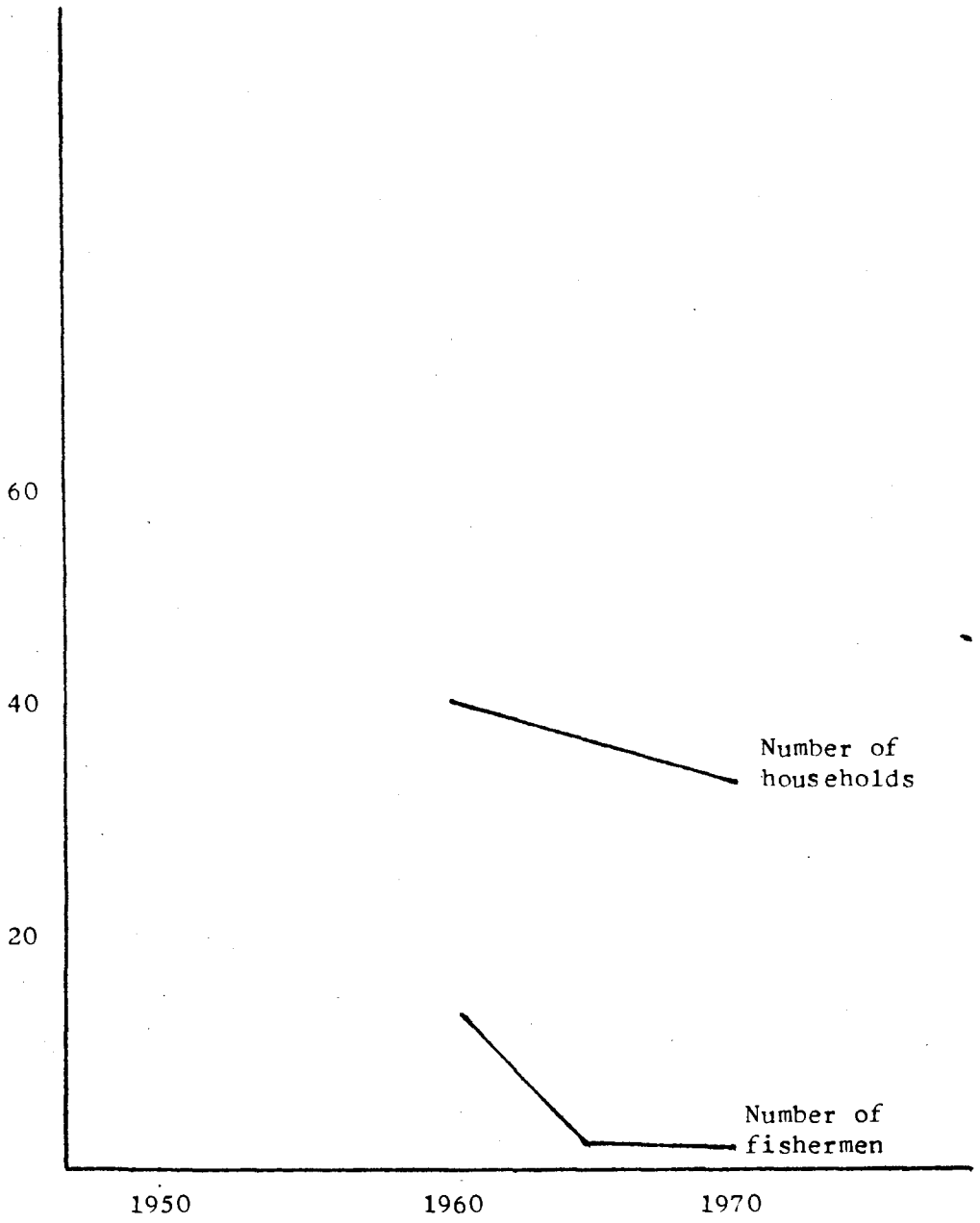
KYOQUOT



PORT SIMPSON


80
60
40
20
Number of households
Number of fishermen
1950
1960
1970

QUATSINO



SQUIRREL COVE

(Klahoose)

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