

## CHAPTER TEN

CONCLUSION AND FUTURE DIRECTIONS

Our pilot study has attempted to demonstrate an alternative approach to social impact analysis in Northern hinterland communities. By focussing on behavioural and subjective indicators of three critical community process variables, and by emphasizing "locality" rather than "universality", we hope we have been able to begin to establish a model that not only provides a different kind of abstraction of reality but also a potential for generating a predictive capacity.

In pursuing this initial research, we were, of course, testing ideas as much as abstracting indicators. The validity of these ideas and the reliability of the indicators have not yet been fully demonstrated. However, by assembling our findings in the way we have, we believe we have been able to show how certain quantitative approaches to drawing inferences and testing relationships are possible and valuable in the complex realm of normative data interpretation. We wish to emphasize that we were engaged in a pilot study and not a fully fledged research operation. Obviously, more testing is required if the full utility of our model approach is to be established.

Whenever we ourselves failed to emphasize locality, either through ignorance as in our early contacts with community, or through attempts to apply conventional research assumptions, we encountered disinterest or rejection. However, whenever we were able to utilize our own as yet imperfectly developed model to explain or answer a query about why we were asking particular questions, and did so in ways that left the respondent with a fuller understanding of his or her own available knowledge, then we had no problem in getting co-operation.

In pursuing these insights, we kept in mind our original intent, which was to develop a model that would be of value in establishing Northern development policies or guidelines because it was able to incorporate local community processes. But we also came to recognize that while a sympathetic policy environment is important to the effective protection and enhancement of Northern community life, it is also important to involve those communities themselves in dealing with existing problems with these processes in order that they might understand them. Because the field of "action research" is based on this approach to this task, we contacted Mr. Bert Painter of B.C. Research Council and Mr. Don Bryant of the Tavistock Institute of Human Relations, who have an intimate knowledge of action research methods. In addition, they have research knowledge of parts of our study region because they were the principal researchers in the Skeena Manpower Phase One Labour Instability study to which we have referred. They agreed to evaluate our approach, and the resulting model, and its implications for providing a novel framework for action research methods within the communities themselves. This evaluation appears as Appendix C to this report.

Future developments which are based on this pilot approach could take several directions. First, if the potential of our tentative model is to be developed, a more intensive replication would be required in order to determine reliability and to extend the concepts and relationships that are only tentative in our study. We suggest that our study region would continue to provide a good venue for such an intensive follow-up, and we would further suggest that some longitudinal research be taken in some of those communities that are about to be subjected to major impacts in the immediate future. If this was done, perhaps in conjunction with an action research programme of some kind, the results might provide crucial information about ways of reversing negative

trends and/or achieving positive adaptations.

Alternatively, if the formalistic aspects of the model are not regarded as particularly valuable it may be considered that our "indicator approach" has potential for "sensitizing" field workers, programme directors, and policy architects. In this circumstance, certain field exercises and/or educational sessions might be contemplated.

In conclusion, we believe that it is possible to quantify and manipulate normative data of the kind we have described in this report in order to determine relationships predict likely consequences of alternative actions, and thereby optimize policy and programme choices with respect to any given community situation. It is in this sense of going beyond description into explanation and prediction that we feel justified in laying some claim to having begun to establish a "model". For to simply describe the characteristics of a community is no great feat, nor is it of much value, when it comes to evaluating the positive or negative effects of a given kind or amount of development impact. To be able to abstract relevant and reliable normative indicators, and to correlate these to the usual (or perhaps unusual) objective indications in ways that make sense not only to the outside evaluators, but also to the community itself is, we contend, critically important in the context of contemporary northern development issues.

This last observation, that this approach has potential importance for the community itself in assessing social impact analysis, is one that emerged during the process of doing the fieldwork. It became very clear that the degree of co-operation we received and the quality of the responses that followed were directly proportional to the extent that we, as researchers, could feed back "meanings" into the context of local understandings and concerns.

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APPENDIX AGENERAL TABULAR INFORMATION

TABLE 8

POPULATION GROWTH

| <u>Municipality</u> | <u>1951</u> | <u>1956</u> | <u>1961</u> | <u>1966</u> | <u>1971</u> | <u>1976</u><br>(est.) |
|---------------------|-------------|-------------|-------------|-------------|-------------|-----------------------|
| Kitimat             | 2,031       | 9,676       | 8,217       | 9,792       | 11,803      | 13,000                |
| Smithers            | 1,024       | 1,962       | 2,487       | 3,135       | 3,864       | 4,200                 |
| Houston             |             | 612         | 699         | 699         | 2,232*      | 2,400                 |
| Stewart             | 283         | 435         | 327         | 522         | 1,357*      | 1,700                 |
| Hazelton            |             | 279         | 410         | 403         | 351         | 440                   |

\* change in status from village to district.

Source: Farstad, 1975.

TABLE 9

AGE DISTRIBUTION - 1971 Census

| <u>Municipality</u> | <u>Pop.</u> | <u>0-14</u> | <u>15-34</u> | <u>35-64</u> | <u>65+</u> |
|---------------------|-------------|-------------|--------------|--------------|------------|
| Kitimat             | 11,805      | 36%         | 35%          | 24%          | 2%         |
| Smithers            | 3,865       | 39%         | 33%          | 25%          | 4%         |
| Houston             | 2,235       | 39%         | 37%          | 23%          | 2%         |
| Stewart             | 1,355       | 35%         | 40%          | 24%          | 1%         |

Source: Farstad, 1971 Census.

TABLE 10

| POPULATION BY SEX:                    |      | MALE TO FEMALE RATIOS |       |     |  |
|---------------------------------------|------|-----------------------|-------|-----|--|
| 1971 Census<br>(males to 100 females) |      |                       |       |     |  |
| Municipality                          | 0-14 | 15-34                 | 35-64 | 65+ |  |
| Kitimat                               | 104  | 117                   | 133   | 61  |  |
| Smithers                              | 113  | 100                   | 108   | 117 |  |
| Houston                               | 96   | 117                   | 144   | 133 |  |
| Stewart                               | 113  | 122                   | 150   | 100 |  |
| Hazelton                              | 117  | 138                   | 127   | 144 |  |

TABLE 11

| POPULATION BY INCORPORATED SETTLEMENT<br>& CENSUS SUBDIVISIONS<br>1961-1976 |       |       |        |        |                     |
|---|-------|-------|--------|--------|---------------------|
| Municipality  | 1961  | 1966  | 1971   | 1976   | % Change<br>1971-76 |
| Houston   | 699   | 699   | 2,232  | 2,673  | 19.8                |
| Smithers  | 2,487 | 3,135 | 3,864  | 3,787  | -2.1                |
| Kitimat   | 8,217 | 9,792 | 11,803 | 11,956 | 1.3                 |
| Stewart   | 327   | 522   | 1,357  | 1,382  | 1.8                 |
| Hazelton  | 410   | 403   | 351    | 371    | 5.7                 |

Source: The North West Report 1977.

TABLE 12

LABOUR TURNOVER RATES - 1973 & 1974

| Company                 | Location | Industry  | Labour Force | Annual Turnover Rate               |
|-------------------------|----------|-----------|--------------|------------------------------------|
| B.V. Forest Industries* | Houston  | Saw Mill  | 500          | 225%                               |
| Granduc                 | Stewart  | Mine      | 681          | 160% (est. from secondary sources) |
| Alcan                   | Kitimat  | Smelter   | 1,800        | 62%                                |
| Eurocan                 | Kitimat  | Pulp Mill | 344          | 45%                                |
| PIR                     | Smithers | Saw Mill  | 150          | 30-36%                             |
| Groot Logging           | Smithers | Saw Mill  | 45           | 24-36%                             |

\* Second highest, next to Decker Lake Forest products at 250% turnover.

Source: Farstad, 1975.

TABLE 13

INCOME BY TAX RETURNS - 1972

| Place  | Average Income | % Above or Below B.C. Average | Total Tax Returns |
|--|----------------|-------------------------------|-------------------|
| Kitimat                                      |                | +27.7%                        |                   |
|  | 8,687          |                               | 5,676             |
| Stewart                                      | 8,641          | +27.0%                        | 830               |
| Houston                                      | 6,892          | + 1.3%                        | 1,114             |
| Smithers                                     | 6,368          | - 6.4%                        | 2,865             |
| New Aiyansh                                  | 5,418          | -20.3%                        | 104               |
| Hazelton & District<br>(Morisetown to Skeena | 5,223          | -23.2%                        | 1,316             |

Skeena Crossing)

Source: Farstad, 1975.

TABLE 14

INCOME BY TAX RETURNS - 1975

| <u>Place</u> | <u>Average<br/>Income</u> | <u>% Above or<br/>Below B.C.<br/>Average</u> |
|--------------|---------------------------|--|
| Kitimat      |                           | +19.7%                                       |
|              | 10,840                    |  |
| Stewart      |                           | +21.5%                                       |
|              | 12,019                    |  |
| Houston      |                           | - 8.5%                                       |
|              | 9,047                     |  |
| Smithers     |                           | - 5.0%                                       |
|              | 9,400                     |  |
| Hazelton     |                           | -26.2%                                       |
|              | 7,295                     |  |

Source: The North West Report 1977.

TABLE 15

NO. OF PERSONS EMPLOYED IN  
LOGGING & MILLING - 1977

| <u>Ranger<br/>District</u> | <u>Logging</u> | <u>Pulp Mills</u> | <u>Milling</u> | <u>Total</u> |
|----------------------------|----------------|-------------------|----------------|--------------|
| Houston                    | 160            | -                 | 465            | 623          |
| Smithers                   | 100            | -                 | 275            | 375          |
| Kitimat                    | 255            | 480               | -              | 735          |
| Hazelton                   | 120            | -                 | 125            | 245          |

Source: The North West Report 1977.