C. 1

Preliminary Report

OBEDJIWAN SOCIO-ECONOMIC STUDY

Research and Evaluation
Planning Branch
Indian and and Northern Affairs Canada

Ste-Foy
1978

## PRELIMINARY REPORT

OBEDJIWAN SOCIO-ECONOMIC SIUDY


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## CHAPTER I

## INTRODUCTION

In July 1977 the Obedjiwan band council and the Planning Branch of Indian and Northern Affairs Canada (INAC) set up a project to plan the socio-economic and physical development of the Obedjiwan reserve.

### 1.1 Purpose of the project

The main objective of the project was to translate the needs and aspirations of the Obedjiwan Indians into a development plan, taking into account the regional context of the reserve:

1. by carrying out surveys to determine current physical, social, cultural and economic conditions on the reserve
2. by analysing the results of the surveys to determine the current development trends
3. by identifying aspirations and needs of the population that run counter to those trends
4. by identifying ways to help meet the development objectives expressed by the Obedjiwan population, taking into account the regional context and the current trends.
1.2 Content of the study

The study was divided into two main parts--the regional context and the local situation.

### 1.2.1 Regional level

a) Area of influence

The area travelled and used by the Obedjiwan Indians in their various activities and for the services provided to them.
b) Transportation and communication

Communication network and accessibility.
c) Natural resources

Identification and evaluation of the resources in terms of potential benefit to the Obedjiwan Indians.
d) Employment

Current employment situation at the regional level and future prospects.
e) Services

Type and quality of available services.
1.2.2 Local level
a) Physical environment

Physical survey--physical limitations and potential of the reserve.
b) Demography

Current and projected data.
c) Social conditions

Language, education, attitude toward jobs, social problems.
d) Economic conditions

Working-age population and manpower. Jobs and income.
e) Housing

Current situation and needs.
f) Community facilities and services

Schools, health services, stores, municipal services.
g) Financial and administrative situation

Organization, administered programs, financing.
1.3 Work stages and methodology

The original intention was that the study would be done under the direction of the band council, by people recruited directly by the council, with professional assistance from the district office and the Planning Branch of INAC. After the project was begun, however, it was decided that the physical surveys and the physical development plan should be done by a firm of urban planning consultants. The socio-economic study and the overall development plan remained the responsibility of the band council and INAC. The main work stages were:
a) Information-gathering, by means of:

- existing systems (e.g., for population, school population)
- surveys (housing, manpower, aspirations of young people and of housewives)
- key informants or working groups (health, recreation).
b) Analysis of information:
- determining current trends and the aspirations of the population.
c) Formulation of development objectives;
d) Identification of means of achieving the objectives;
e) Drawing up of development plan.

Information-gathering began in August 1977 and most of the work was completed by March 1978. One hundred and twenty-six housing questionnaires and over two hundred questionnaires on the working-age population were completed, thanks to the work of Mr. Jean-Pierre Mattawa and Mr. Alexandre Dubé.

The information-analysing phase is now underway. This report contains the preliminary results of the socio-economic study.

### 1.4 Purpose of the preliminary report

In this report we will be presenting the initial results of the analysis so that work can go ahead on the physical development plan. We will be covering only the parts of the study that are of most importance for the plan.

## CHAPTER II

## POPULATION

### 2.1 Evolution of total population

The Obedjiwan population has been growing extremely rapidly over the last twenty years. Up until the early fifties the annual growth rate stayed below 3\%, but it shot up to $6 \%$ between 1954 and 1965.

Thus, in eleven years the band population almost doubled (see table 2.1). Growth remained strong after 1965, the average annual growth rate staying over $4 \%$.

Starting in 1972, however, the rate began to fall again and is now holding at about $3 \%$ a year. Although this represents a considerable drop from past years, it is still above the $2.0 \%$ rate recorded for all Quebec Indians in 1976.

The rapid expansion of the band population over the last twenty years has had tremendous repercussions on the structure of the population, as we will see later.

### 2.2 Distribution of population by place of residence

Figures for population distribution, according to residence, are available only from 1965 on; they are shown in table 2.l. It should be noted that reserve residents include people living off the reserve in order to receive hospital care or to attend school, for whatever length of time, as well as people living off the reserve for work reasons if they are away for less than twelve months. Although the figures for the number of people living off the reserve are fairly conservative in view of our definition of reserve residents, they show that only $5.3 \%$ of the total population was living off the reserve in 1976. The number of off-reserve residents remained fairly stable from 1970 to 1975. It rose only in 1976.

### 2.3 Age structure

Table 2.2 shows the composition of the Obedjiwan population by age, sex, and residence in 1965 and 1975, while table 2.3 compares the Obedjiwan figures with the figures for all Quebec Indians in 1975, in the form of percentages.

The Obedjiwan population is extremely young. Over half the population (53.9\%) was under 15 years of age on 31 December 1975 and only $2.1 \%$ was 65 or older. Comparing this with the figures for all Quebec Indians (who are as a group younger than the Quebec population as a whole) we find that only $37.6 \%$ of Quebec Indians were under 15 years of age in 1975, while $5.6 \%$ were 65 or older.

The dependency rate of the population (the ratio between the number of people under 15 or over 64 and the number of people between 15 and 64, expressed as a percentage) was 126.8 for Obedjiwan in 1975 and 76.1 for all Quebec Indians. Between 1965 and 1975 the age pyramid of course widened in almost all age groups (see graph I and table 2.2) and the proportion of people under 20 years of age also increased slightly. However, the slowdown in the growth rate is seen in the decreasing proportion of $0-4$ year-olds (from $25.3 \%$ in 1965 to $17.6 \%$ in 1975), though in actual numbers this group has also expanded, from 165 persons in 1965 to 175 in 1975.

The population of $10-14$ year-olds has more than doubled over the last 10 years, while the number of 15-19 year-olds has increased by $95 \%$ and $20-24$ year-olds by $69 \%$. One of the direct results of this large increase in the number of young people is a marked rise in the demand for facilities and services.

OBEDJIWAN
1934-1975

|  | IN NUMBERS |  |  | AVERAGE ANNUAL GROWIH RATE |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | OF TOIAL POPULATION |  |  |
|  | ON RESERVE | CROWN LANDS | OFF RESERVE | TOTAL | TOTAL POP | ION |
| 1934 | - | - | - | 226 |  |  |
| 1939 | - | - | - | 253 | 1934-1939 | 2.4 |
| 1944 | - | - | - | 275 | 1939-1944 | 1.7 |
| 1949 | - | - | - | 296 | 1944-1949 | 1.5 |
| 1954 | - | - | - | 349 | 1949-1954 | 3.6 |
| 1959 | - | - | - | 473 | 1954-1959 | 7.1 |
| 1965 | 653 | 0 | 0 | 653 | 1959-1965 | 6.3 |
| 1966 | 665 | 16 | 0 | 681 |  | 4.3 |
| 1967 | 687 | 0 | 33 | 720 |  | 5.7 |
| 1968 | 722 | 2 | 35 | 759 |  | 5.4 |
| 1969 | 763 | 1 | 39 | 803 |  | 5.8 |
| 1970 | 798 | 0 | 44 | 842 |  | 4.9 |
| 1971 | 845 | 0 | 42 | 887 |  | 5.3 |
| 1972 | 877 | 0 | 40 | 917 |  | 3.4 |
| 1973 | 897 | 0 | 45 | 942 |  | 2.7 |
| 1974 | 919 | 0 | 40 | 959 |  | 1.8 |
| 1975 | 948 | 0 | 43 | 991 |  | 3.3 |
| 1976 | 965 | 0 | 54 | 1019 |  | 2.8 |

-: Unavailable
NOTE: From 1965 to 1976 the data are for 31 December of each year.
SOURCE:
Membership Division, INAC.

|  | MALE |  | FEVAIE E |  | If A L E |  | $F \Gamma M A J E$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGE | ON | OFF | ON | OFF | ON | OFF | ON | OFF |
| GROUP | RESERVE | FESERVE | PESERNE | RESERVE | RESEPVE | ELCEIVF | RFSEPVVE | RESEFVE |
| 0-4 | 94 | 0 | 71 | 0 | 85 | 6 | 79 | 4 |
| 5-9 | 58 | 0 | 66 | 0 | 97 | 2 | 94 | 5 |
| 10-14 | 51 | 0 | 28 | 0 | 88 | 3 | 68 | 2 |
| 15-19 | 28 | 0 | 35 | 0 | 56 | 1 | 65 | - |
| 20-24 | 22 | 0 | 26 | 0 | 43 | 3 | 24 | 6 |
| 25-29 | 19 | 0 | 23 | 0 | 26 | 2 | 25 | 3 |
| 30-34 | 20 | 0 | 16 | 0 | 21 | - | 29 | - |
| 35-39 | 11 | 0 | 5 | 0 | 16 | - | 21 | 1 |
| 40-44 | 5 | 0 | 13 | 0 | 18 | 1 | 14 | 1 |
| 45-49 | 7 | 0 | 6 | 0 | 10 | 1 | 5 | - |
| 50-54 | 4 | 0 | 9 | 0 | 3 | 1 | 13 | _ |
| 55-59 | 6 | 0 | 4 | 0 | 6 | - | 6 | - |
| 60-64 | 5 | 0 | 5 | 0 | 3 | - | 7 | 1 |
| 65-69 | 6 | 0 | 1. | 0 | 5 | - | 4 | - |
| 70-74 |  |  |  |  | 3 | - | 2 | - |
| 75-79 |  |  |  |  | 4 | - | 0 | - |
|  | 7 | 0 | 2 | 0 |  |  |  |  |
| 80-34 |  |  |  |  | 0 | - | 1 | - |
| 85 \& over |  |  |  |  | 2 | - | 0 | - |
| FOTAL | 343 | 0 | 310 | 0 | 491 | 20 | 457 | 23 |

OBLDJI\|AN

|  |  | 1 |  |
| :---: | :---: | :---: | :---: |
| AGE <br> GROUP | M | F | TOMAL |
|  |  |  |  |
| 0-4 | 14.4 | 10.9 | 25.3 |
| 5-9 | 8.9 | 10.1 | 19.0 |
| 10-14 | 7.8 | 4.3 | 12.1 |
| 15-19 | 4.3 | 5.4 | 9.7 |
| 20-24 | 3.4 | 4.0 | 7.4 |
| 25-29 | 2.9 | 3.5 | 6.4 |
| 30-34 | 3.1 | 2.5 | 5.6 |
| 35-39 | 1.7 | 0.8 | 2.5 |
| 40-44 | 0.7 | 2.0 | 2.7 |
| 45-49 | 1.1 | 0.9 | 2.0 |
| 50-54 | 0.6 | 1.4 | 2.0 |
| 55-59 | 0.9 | 0.6 | 1.5 |
| 60-64 | 0.7 | 0.7 | 1.4 |
| 65-69 | 0.9 | 0.1 | 1.0 |
| 70\& over | 1.1 | 0.3 | 1.4 |
| UNINOWN | - | - | - |
| TCAFL | 52.5 | 47.5 | 100.0 |
| 0-14 | 31.1 | 25.3 | 56.4 |
| 15-64 | 19.4 | 21.8 | 41.2 |
| 65\& over | 2.0 | 0.4 | 2.4 |

1975

| CURi. TOTAL | M | F | GOTAJ, | CUM. TOTAL | M |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 25.3 | 0.2 | 8.4 | 17.6 | 17.6 | 5.8 |
| 44.3 | 10.0 | 10.0 | 20.0 | 37.6 | 6.5 |
| 56.4 | 9.2 | 7.0 | 16.2 | 53.3 | 6.6 |
| 66.1 | 5.8 | 6.6 | 12.4 | 66.2 | 5.5 |
| 73.5 | 5.2 | 3.1 | 8.3 | 74.5 | 4.5 |
| 79.9 | 2.8 | 2.8 | 5.6 | 80.1 | 3.7 |
| 85.5 | 2.1 | 2.9 | 5.0 | 25.1 | 3.1 |
| 88.0 | 1.6 | 2.2 | 3.8 | 88.9 | 2.4 |
| 90.7 | 1.9 | 1.5 | 3.4 | 92.3 | 2.4 |
| 92.7 | 1.1 | 0.5 | 1.6 | 93.9 | 2.2 |
| 94.7 | 0.4 | 1.3 | 1.7 | 95.6 | 1.8 |
| 96.2 | 0.6 | 0.6 | 1.2 | 96.8 | 1.5 |
| 97.6 | 0.3 | 0.8 | 1.1 | 97.9 | 1.3 |
| 98.6 | 0.5 | 0.4 | 0.9 | 98.8 | 1.0 |
| 100.0 | 0.9 | 0.3 | 1.2 | 100.0 | 1.8 |
| - | - | - | - | - | - |
| - | 51.6 | 48.4 | 100.0 | - | 50.1 |
| - | 28.4 | 25.4 | 53.8 | - | 18.9 |
| - | 21.8 | 22.3 | 44.1 | - | 28.4 |
| - | 1.4 | 0.7 | 2.1 | - | 2.8 |

QUEBEC INDIANS
1975

| WOTAL | CUM. |
| ---: | ---: |
|  | TOLAL |
| 11.4 | - |
| 13.0 | 24.4 |
| 13.1 | 37.5 |
| 11.3 | 48.8 |
| 8.8 | 57.6 |
| 7.5 | 65.1 |
| 6.3 | 71.4 |
| 5.1 | 76.5 |
| 4.8 | 81.3 |
| 4.1 | 85.4 |
| 3.5 | 88.9 |
| 2.9 | 91.8 |
| 2.6 | 94.4 |
| 1.8 | 96.2 |
| 3.7 | 99.9 |
| 0.1 | 100.0 |
| 100.0 | - |
|  | - |
| 37.5 | - |
| 57.0 | - |
| 5.5 | - |

### 2.4 Mortality and fertility

Birth and death data for the Obedjiwan band is available only from 1968 on. Table 2.4 shows the number of births and deaths and the crude birth and death rates.

Because the actual numbers are so small, the death rate can show sharp changes. However, since 49 deaths were recorded over the 10 years in an average population of 888 persons, the average annual death rate was 5.6 per 100 . This seems quite low, but taking into account the very young age structure of the population it is actually higher than the mortality for the province of Quebec as a whole. ${ }^{1}$

Up to 1971 the fertility rate remained very high, usually above 300 per 1000. Over the last six years, however, the rate has fallen very rapidly, reaching 155 per 1000 in 1976, which is still almost three times the overall fertility rate for the whole of Quebec.

The gross birth rate also shows sharp changes from year to year. However, it is clear that the trend is downward. Between 1968 and 1971 the average birth rate was 56 per 1000, whereas during the four preceding years it was 37 per 1000. Over the past three years it has gone down to 31.8 per 1000, which is still twice as high as the birth rate for Quebecers as a whole.

If we compare the number of births with the number of females of child-bearing age, we get an even clearer picture of the changing fertility rate.

Table 2.5 shows the changes in the overall fertility rate (the birth rate per 1000 women between the ages of 15 and 49 years) between 1968 and 1977.

### 2.5 Projected population

### 2.5.1 Methodology

To project the Obedjiwan population up to the year 1990, we used a simplified version of the age cohort survival method. It consisted of the following steps:
a) Calculation of survivors

The survivors in each projection year were calculated by applying the relevant survival rates to the population distributed by sex and five-year age groups:

$$
\begin{aligned}
& P_{x}+5, t+5-P_{x}, t-X S_{x}, x+5 \\
& P_{x}, t=\text { Population of age } \\
& \text { group } x \text { at time } t \text {. } \\
& P_{x}+5, t+5=\text { Population of group } x+5 \\
& \text { at time } t+5 \text {. } \\
& S_{x, x}+5=\text { Probability of the people in } \\
& \text { age group } \mathrm{x} \text { being survivors } \\
& \text { in age group } \mathrm{x}+5 \text {. }
\end{aligned}
$$

[^0]


Research and Evaluation Section

TABLE 2.4
CRUDE BIRIH AND DEATH RATES,
OBEDJIWAN,
1968-1977

| YEAR | AVERAGE <br> POPULATION | DEATHS <br> REOORDED | CRUDE DEATH <br> RATE <br> (per 1000) | BIRTHS <br> RECORDED | BIRTH RATE <br> (per 1000) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1968 | 740 | 1 | 1.4 | 37 | 50.0 |
| 1969 | 781 | 5 | 6.4 | 48 | 61.5 |
| 1970 | 823 | 865 | 8 | 9.7 | 45 |

SOURCE: Membership Division, INAC.

TABLE 2.5
OVERALL FERTILITY RATE,
OBEDIIWAN (1968-1977) AND PRŌVINCE OF QUEBEC (1968-1974)

O B QUEBEC

| YEAR | AVERAGE FEMALE POPULATION <br> BENWEEN 15 and 49 <br> YEARS OF AGE | BIRTHS <br> RECORDED | RATE <br> (per 1000) | RATE <br> (per 1000) |
| :--- | :---: | :--- | :---: | :---: |
| 1968 | 132 | 37 | 280.3 | 68.0 |
| 1969 | 135 | 48 | 355.6 | 66.2 |
| 1970 | 139 | 45 | 323.7 | 63.3 |
| 1971 | 146 | 49 | 335.6 | 60.7 |
| 1972 | 156 | 37 | 237.2 | 56.1 |
| 1973 | 167 | 37 | 167.7 | 56.1 |
| 1974 | 175 | 37 | 211.4 | 56.2 |
| 1975 | 200 | 31 | 196.8 |  |
| 1976 | 212 | 34 | 160.4 |  |
| 1977 |  |  |  |  |

SOURCE: Membership Division, INAC.
"Révision des naissances vivantes annuelles, Québec, 1950-1974", Department of Social Affairs, January 1977.

For example, of the 93 boys between 0 and 4 years of age in 1975, 92 will likely be alive in 1980, when they will be between 5 and 9 years of age (93 $\times$.9892 $=92$ ).
b) Calculation of births

To calculate the number of births for each 5-year projection period ( $31 / 12 / 1975$ to $31 / 12 / 1980$ and so forth up to $31 / 12 / 1990$ ), we applied the overall birth rate to the number of women between 15 and 49 years of age. We divided the total number of births into female and male on the basis of 488 females per 1000 births.
c) Infant survival

The number of infants born during a five-year period was multiplied by the probability of these infants being alive at the end of the period and thus being part of the 0-4 year-old group.
2.5.2 Basic assumptions
a) Migration

Our first assumption is that there will be no migration, based on the fact that there has not been any over the past few years, except in 1976. Since the projections are made for the total band population and the possibility of migration is disregarded, the projected number of residents on the reserve, under either birth rate assumption, is a maximum.
b) Mortality

We have assumed that mortality will remain constant at a level slightly above the current level for the whole of the province of Quebec. The survival rates used were taken from the mortality tables for Quebec, prepared by the Quebec Bureau of Statistics.
c) Fertility

The sharp changes in the fertility rate at Obedjiwan over the past ten years have made it difficult to project the number of births up to 1990. It does seem, however, that the drop in the rate over the last three years represents a fairly solid trend and is not simply a matter of chance variations. In view of this decline, we do not foresee a climb back to above 200 per 1000. The rate could either stabilize at its current level or continue to drop. We have therefore settled on two alternative assumptions.
I. Low assumption

According to this assumption, the fertility rate will continue its rapid descent, reaching 130 per 1000 for the period 1976-1980, 100 per 1000 for 1981-1985 and 70 per 1000 for 1986-1990.

## II. High assumption

The decline is at an end and the overall fertility rate will maintain its current level, 160 per 1000 .

### 2.5.3 Results

Tables 2.6 and 2.7 give the Obedjiwan population projections for each of the two fertility rate assumptions. Table 2.8 summarizes the projections for the total population, table 2.9 gives the projected average annual growth rates and table 2.10 shows the resultant age structure.

The low fertility rate assumption obviously translates into a drop in the growth rate. However, it should be noted that even with a drastic drop in the fertility rate, the growth rate will remain high into 1985. The reason for this is that during the projection period the number of women of child-bearing age will increase substantially. Therefore, even if the fertility rate declines, the number of births can still increase (such is the case between 1980 and 1985). This also explains why, under the high fertility assumption, the growth rate increases although the fertility rate remains constant.

With respect to age structure, both assumptions lead to an older population, since the proportion of young people will decrease while the proportion of workingage people will increase. In numerical terms, the 15-64 year-old group will more than double in fifteen years, from 437 persons in 1975 to 924 persons in 1990.

Thus, whichever assumption is chosen, the projections show that the growing need for facilities (particularly housing) and services observed over the last few years is going to become accentuated over the next fifteen years. Also the manpower supply is going to expand very rapidly, requiring the creation of a large number of new jobs.


OBEDJIWAN, 1975-1990
(HIGH FERTILITTY)

| MALE |  |  |  |  |  | FEMALE |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGE | SURVIVAL RATE | $\underline{1975}$ | 1980 | $\underline{1985}$ | 1990 | SURVIVAL RATE | $\underline{1975}$ | 1980 | $\underline{1985}$ | 1990 |
| N | . 9774 | (93) | (121) | (154) |  | . 9799 | (89) | (118) | (145) |  |
| 0-4 | . 9893 | 93 | 91 | 120 | 150 | . 9914 | 85 | 87 | 116 | 142 |
| 5-9 | . 9964 | 99 | 92 | 90 | 119 | . 9977 | 99 | 84 | 86 | 115 |
| 10-14 | . 9966 | 91 | 99 | 92 | 89 | . 9982 | 70 | 99 | 84 | 86 |
| 15-19 | . 9940 | 57 | 91 | 99 | 92 | . 9995 | 65 | 70 | 99 | 84 |
| 20-24 | . 9919 | 51 | 57 | 90 | 98 | . 9969 | 30 | 65 | 70 | 99 |
| 25-29 | . 9925 | 28 | 51 | 57 | 89 | . 9962 | 28 | 30 | 65 | 70 |
| 30-34 | . 9915 | 21 | 28 | 51 | 57 | . 9950 | 29 | 28 | 30 | 65 |
| 35-39 | . 9872 | 16 | 21 | 28 | 51 | . 9920 | 22 | 29 | 28 | 30 |
| 40-44 | . 9800 | 19 | 16 | 21 | 28 | . 9880 | 15 | 22 | 29 | 28 |
| 45-49 | . 9676 | 11 | 19 | 16 | 21 | . 9813 | 5 | 15 | 22 | 29 |
| 50-54 | . 9471 | 4 | 11 | 18 | 15 | . 9705 | 13 | 5 | 15 | 22 |
| 55-59 | . 9154 | 6 | 4 | 10 | 17 | . 9518 | 6 | 13 | 5 | 15 |
| 60-64 | . 8749 | 3 | 5 | 4 | 9 | . 9246 | 8 | 6 | 12 | 5 |
| 65-69 | . 8213 | 5 | 3 | 4 | 3 | . 8816 | 4 | 7 | 6 | 11 |
| 70-74 | . 7420 | 3 | 4 | 2 | 3 | . 8107 | 2 | 4 | 6 | 5 |
| 75-79 | . 6377 | 4 | 2 | 3 | 1 | . 7035 | 0 | 2 | 3 | 5 |
| 80-84 | . 4968 | 0 | 3 | 1 | 2 | . 5473 | 1 | 0 | 1 | 2 |
| 85-89 | . 3293 | 2 | 0 | 1 | 0 | . 3564 | 0 | 1 | 0 | 1 |
| 90-94 |  |  |  |  |  |  |  |  |  |  |
|  |  |  | $\underline{597}$ | 707 | 844 |  |  | 567 | 677 | 814 |

$\mathrm{N}=$ Births between x and $\mathrm{x}+5$, x being 1975, 1980 and 1985 successively.

TABLE 2.8
SUMMARY OF POPULATION PROJECTIONS,

| YEAR | OBEDJIWAN, 1975-1990 |  | ASSUMPTION | HIGH |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| (31 December) |  | LOW |  |  |
| 1980 | M | 580 |  | 597 |
|  | F | 551 |  | 567 |
|  | T | 1,131 |  | 1,164 |
| 1985 | M | 646 |  | 707 |
|  | F | 617 |  | 677 |
|  | T | 1,263 |  | 1,385 |
| 1990 | M | 699 |  | 844 |
|  | F | 675 |  | 814 |
|  | T | 1,374 |  | 1,658 |

TABLE 2.9
AVERAGE ANNUAL GROWIH RATE,
OBEDJIWAN, 1970-1990

| PERIOD | $\underline{\text { LOW }}$ | ASSUMPTION |  |
| :--- | :--- | :--- | :--- |
| 1970-1975 | 3.5 |  | $\underline{\text { HIGH }}$ |
| $1975-1980$ | 2.8 |  | 3.5 |
| $1980-1985$ | 2.3 |  | 3.5 |
| $1985-1990$ | 1.8 |  | 3.8 |

TABLE 2.10

## POPULATION STRUCTURE BY BROAD AGE GROUPS

FOR EACH FERTILITY HYPOTHESIS,
OBEDJIWAN, 1975-1990

LOW ASSUMPTION

|  | 1975 |  | 1980 |  | 1985 |  | 1990 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AGE GROUP | No. | \% | No. | \% | No. | \% | No. | \% |
| 0-14 | 533 | 53.8 | 519 | 45.9 | 467 | 37.0 | 417 | 30.4 |
| 15-64 | 437 | 44.1 | 586 | 51.8 | 769 | 60.9 | 924 | 67.2 |
| 65 and over | 21 | 2.1 | 26 | 2.3 | 27 | 2.1 | 33 | 2.4 |
| HIGH ASSUMPTION |  |  |  |  |  |  |  |  |
| 0-14 | 533 | 53.8 | 552 | 47.4 | 588 | 42.5 | 701 | 42.3 |
| 15-64 | 437 | 44.1 | 586 | 50.4 | 769 | 55.6 | 924 | 55.7 |
| 65 and over | 21 | 2.1 | 26 | 2.2 | 27 | 1.9 | 33 | 2.0 |

### 3.1 Number of children in school

Tables 3.1 and 3.2 show the number of children in elementary and secondary school, by age and grade, for the school years 1975-1976 and 1976-1977. From one year to the next the total number of students rose by 31 , with an increase of 30 in the elementary grades. This increase was due in part to a larger number of children entering the school system and in part to the fact that not many students passed out of elementary school and into secondary.

Slow progress is a problem right from the earliest grades of elementary school. For example, in 1975-1976 there were almost twice as many children in grade 2 as there were in grade 1 and there were more eight-year old children than seven-year old children in grade 2.

### 3.2 School enrolment rates

Table 3.3 compares the number of children in school with the total number of children on the reserve, showing the enrolment rate for each age group.

The rates for each age group under 20 years of age increased from 1975-1976 to 1976-1977. However, the rates for children 10 years of age and up are still low in relation to the figures for the whole of quebec.

### 3.3 Projected school population by age group and school level

School population projections were made by applying school enrolment rates for the various age groups to the population as projected in chapter I.

The school enrolment rates were projected as follows:

| $0-4:$ | constant at 22.0 |
| ---: | :--- |
| $5-9:$ | gradual increase to 99.0 in 1990 |
| $10-14:$ | gradual increase to 95.0 in 1990 |
| $15-19:$ | gradual increase to 55.0 in 1990 |
| $20-24:$ | gradual increase to 14.0 in 1990 |
| $25-29:$ | constant at 2.0 |

Table 3.4 gives the results.

1975-1976

| $\begin{aligned} & \text { AGE ON } \\ & 31 / 10 / 75 \\ & \hline \end{aligned}$ | N | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | SPECIAL | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 33 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 34 |
| 5 |  | 30 | 2 |  |  |  |  |  |  |  |  |  |  |  | 32 |
| 6 | 1 | 8 | 34 |  |  |  |  |  |  |  |  |  |  |  | 43 |
| 7 |  |  | 8 | 31 |  |  |  |  |  |  |  |  |  |  | 39 |
| 8 |  |  | 1 | 37 | 2 |  |  |  |  |  |  |  |  |  | 40 |
| 9 |  |  |  | 11 | 15 | 3 |  |  |  |  |  |  |  | 3 | 32 |
| 10 |  |  |  | 1 | 18 | 15 |  | 1 |  |  |  |  |  |  | 35 |
| 11 |  |  |  |  | 4 | 10 | 17 | 1 |  |  |  |  |  | 1 | 33 |
| 12 |  |  |  |  |  |  | 6 | 17 | 2 |  |  |  |  | 1 | 26 |
| 13 |  |  |  |  |  |  | 3 | 3 | 19 |  |  |  |  | 1 | 26 |
| 14 |  |  |  |  |  |  |  | 1 | 14 | 5 |  |  |  | 1 | 21 |
| 15 |  |  |  |  |  |  |  |  | 2 | 5 | 1 |  |  |  | 8 |
| 16 |  |  |  |  |  |  |  |  | 1 | 4 | 1 | 1 | 1 |  | 8 |
| 17 |  |  |  |  |  |  |  |  |  | 1 | 5 | 1 |  | 4 | 11 |
| 18 |  |  |  |  |  |  |  |  |  |  | 3 |  | 1 | 2 | 6 |
| 19 |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  | 2 |
| 20 |  |  |  |  |  |  |  |  |  |  | 2 | 1 | 1 |  | 4 |
| 21 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |
| 22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |
| 23 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |
| TOTAL: | 34 | 39 | 45 | 80 | 39 | 28 | 26 | 23 | 38 | 15 | 13 | 6 | 3 | 13 | 402 |

TABLE 3.2
SCHOOL POPULATION BY AGE AND GRADE
OBEDJIWAN
1976-1977

| AGE ON $31 / 10 / 76$ | N | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | SPECIAL | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 37 | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 38 |
| 5 | 4 | 37 | 1 |  |  |  |  |  |  |  |  |  |  |  | 42 |
| 6 |  | 2 | 35 | 1 |  |  |  |  |  |  |  |  |  |  | 38 |
| 7 |  |  | 12 | 30 |  |  |  |  |  |  |  |  |  |  | 42 |
| 8 |  |  |  | 28 | 10 |  |  |  |  |  |  |  |  |  | 38 |
| 9 |  |  |  | 7 | 33 | 1 |  |  |  |  |  |  |  |  | 41 |
| 10 |  |  | 1 |  | 11 | 16 | 2 |  |  |  |  |  |  | 1 | 31 |
| 11 |  |  |  |  | 1 | 20 | 8 | 3 |  |  |  |  |  |  | 32 |
| 12 |  |  |  |  |  | 4 | 8 | 15 | 3 |  |  |  |  | 1 | 31 |
| 13 |  |  |  |  |  |  | 2 | 4 | 16 |  |  |  |  | 3 | 25 |
| 14 |  |  |  |  | 1 |  |  | 1 | 16 | 1 |  |  |  | 6 | 25 |
| 15 |  |  |  |  |  |  |  |  | 7 | 2 | 4 |  |  | 5 | 18 |
| 16 |  |  |  |  |  |  |  |  | 2 |  | 6 | 1 |  | 4 | 13 |
| 17 |  |  |  |  |  |  |  |  | 1 |  | 3 | 2 | 1 |  | 7 |
| 18 |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 | 2 |
| 19 |  |  |  |  |  |  |  |  |  |  | 1 | 1 | 1 |  | 3 |
| 20 |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  |  | 2 |
| 21 |  |  |  |  |  |  |  |  |  |  |  | 2 | 1 |  | 3 |
| 22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |
| 23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |
| $24$ |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |
| INC. |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  | 1 |
| TOTAL: | 41 | 40 | 49 | 66 | 56 | 42 | 20 | 23 | 45 | 3 | 16 | 8 | 3 | 21 | 433 |

TABLE 3.3

## SCHOOL ENROLMENT RATES

OBEDJIWAN
1975-1976 AND 1976-1977

| Age | Population | In School | Rate | Population | In School | Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0-4 | 174 | 34 | 19.5 | 161 | 38 | 23.6 |
| 5-9 | 198 | 186 | 93.9 | 206 | 201 | 97.6 |
| 10-14 | 161 | 141 | 87.6 | 165 | 145 | 87.9 |
| 15-19 | 122 | 35 | 28.7 | 136 | 43 | 31.6 |
| 20-24 | 81 | 6 | 7.4 | 87 | 6 | 6.9 |
| 25-29 |  |  |  | 53 | 1 | 1.9 |

(*) Includes post-secondary

## PROJECTED SCHOOL POPULATION

BY AGE GROUP - OBEDJIWAN
1980-1990

| AGE | 1 | 9 | 8 | 0 | 1 | 9 | 8 | 5 | 1 | 9 | 90 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | IN SCHOOL |  |  |  | IN SCHOOL |  |  |  | I N | SCHOOL |
| GROUP | PATE | I |  | II | RATE | I |  | II | RATE | I | II |
| 0-4 | 22.0 | 32 |  | 39 | 22.0 | 33 |  | 52 | 22.0 | 28 | 64 |
| 5-9 | 98.0 | 172 |  | 172 | 98.5 | 141 |  | 173 | 99.0 | 145 | 232 |
| 10-14 | 90.0 | 178 |  | 178 | 92.0 | 162 |  | 162 | 95.0 | 136 | 166 |
| 15-19 | 35.0 | 56 |  | 56 | 45.0 | 89 |  | 89 | 55.0 | 97 | 97 |
| 20-24 | 10.0 | 12 |  | 12 | 12.0 | 19 |  | 19 | 14.0 | 28 | 28 |
| 25-29 | 2.0 | 2 |  | 2 | 2.0 | 2 |  | 2 | 2.0 | 3 | 3 |
| TOTAL: |  | 452 |  | 459 |  | 446 |  | 497 |  | 437 | 590 |

I : Low fertility rate assurmption.
II: High fertility rate assumption.

# DISTRIBUTION OF SCHOOL POPULATTION BY AGE GROUP 

AND GRADE
OBEDJIWAN - 1976 - 1977
(in \%)
GRADE

| AGE <br> GROUP | N | K | $1-6$ | 7 | $8-12$ | SPECIAL | POST-SECONDARY |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $0-4$ | 97.4 | 2.6 | - | - | - | - | - |
| $5-9$ | 1.9 | 18.9 | 79.2 | - | - | - | - |
| $10-14$ | - | - | 67.6 | 24.1 | 0.7 | 7.6 | - |
| $15-19$ | - | - | - | 23.3 | 53.5 | 23.2 | - |
| $20-24$ | - | - | - | - | 100.0 | - | - |
| $25-29$ | - | - | - | - | - | - | 100.0 |

TABIE 3.6

## DISTRIBUTION OF SCHOOL POPULATION

BY GPADE
OBEDIIWAN

$$
1976-1990
$$



### 4.1.1. Definition

Since we used the band list as our source of data on families, our definition of a family had to conform to the band list definition.

A family is any married couple with or without unmarried children less than 18 years of age, or any single parent with one or more unmarried children less than 18 years of age.

Any person with his or her own band number is not considered part of a family--for example, an unmarried child more than 17 years of age or a child whose mother married after the child was born (The figures for 31 December 1976 show eight Obedjiwan children less than 18 years of age who are not part of a family).

### 4.1.2 Size of families

Based on the above definition, there were 171 families at Obedjiwan on 31 December 1976. Of the 1,019 persons in the band, 914 belonged to a family, most of the remainder being unmarried persons between 18 and 24 years of age.

Table 4.1 shows the distribution of families by size. As can be seen, $20 \%$ of the families have more than 8 persons in them and these families make up a third of the total band population. The average size of a family is 5.3 persons.

Next we divided up the projected school population by school levels, using the distribution for 1976-1977 (see table 3.5). We hypothesized, however, that in future $50 \%$ of students in the $20-24$ age group would be at the post-secondary level. The future direction of the fertility rate at Obedjiwan will be a determining factor for the school population at the elementary level.

On the other hand, how the fertility rate develops will have little or no effect on the number of students in grade 7, or in special classes, or at the secondary and post-secondary levels. The total number of students in 1990 would be 172 under assumption I and 182 under assumption II, as compared with 97 in 1976-1977. Thus, there is going to be a big increase in the number of post-secondary students, no matter which fertility rate assumption is chosen.

Elementary school enrolment, however, should begin to decline after 1980 if the fertility rate continues to drop as it has over the past few years. By 1990 there would be only 265 students in nursery school to grade 6, as compared with 337 in 1976-1977 (a drop of 72).

If, on the other hand, the birth rate stays at its current level, by 1990 there should be 408 students in nursery to grade 6 (an increase of 71).

| Size | Number of families | \% | Cumulative \% |
| :---: | :---: | :---: | :---: |
| 2 | 44 | 25.7 |  |
| 3 | 21 | 12.3 | 38.0 |
| 4 | 16 | 9.4 | 47.4 |
| 5 | 18 | 10.5 | 57.9 |
| 6 | 13 | 7.6 | 65.5 |
| 7 | 11 | 6.4 | 71.9 |
| 8 | 14 | 8.2 | 80.1 |
| 9 | 14 | 8.2 | 88.3 |
| 10 | 10 | 5.8 | 94.1 |
| 11 | 6 | 3.5 | 97.6 |
| 12 | 3 | 1.8 | 99.4 |
| 13 | - | - | 99.4 |
| 14 | 1 | 0.6 | 100.0 |
| TOTAL: | 171 |  |  |

### 4.1.3 Distribution of families by age and sex of family head

Table 4.2 shows the distribution of the families according to the age and sex of the family head.

The vast majority of the families ( $87.7 \%$ ) have a man as head. The families with a woman as head are small (one or two children in two-thirds of the cases); one third of the female family heads are unmarried.

Men between the ages of 20 and 34 years make up the largest group of family heads (43\%). The size of the families of course increases with the age of the family head up to the $35-44$ age group, after which it decreases since children have left the family.
4.1.4 Projected number of families, by age and sex of family head

The rapid growth of the population since the fifties has already begun to add significantly to the number of families. Whereas from 1968 to 1972 there was an average of four marriages per year, the average since 1973 has been ten.

Based on the age and marriage structure of the Obedjiwan band, there is going to be a very marked increase in the number of families from now to 1990, as seen in table 4.3.

The numbers of families were calculated by applying the proportion of family heads in each age group in 1977 to the male and female populations over 15 years of age as projected in Chapter II. For example, in 197766.18 of males between the ages of 20 and 24 were married, and we hypothesized that the proportion would be the same in 1980, 1985 and 1990. Thus, we expect that the number of families will increase from the current 171 to 221 in 1980, 301 in 1985 and 384 in 1990, a total increase of 213 families from now until 1990.

## 2. Households

### 4.2.1 Number and type of households

On the basis of the Statistics Canada definition of a household (all the persons occupying one dwelling), there were 118 households at Obedjiwan in 1977. All of these were family households, i.e., they consisted of one or more nuclear families (see table 4.4). Over 30 were multi-family households. Of the 32 two-family households, most consisted of families where one of the children was married or was an unmarried mother. In other words, a large number of family heads under 25 years of age are not heads of households, but rather live with their parents or in-laws.

### 4.2.2 Size of households

Table 4.5 shows the distribution of occupied dwellings (or households) according to the number of persons in the household and also shows the average size of households. The average size of all households in 1977 was 8.0 persons. Households are bigger when two or more families share the same dwelling, but the single-family households are also large, with an average of 7.5 persons.

TABLE 4.2
DISTRIBUTION OF FAMILIES BY AGE AND SEX OF FAMILY HEAD,
OBEDITWAN

## $31 / 12 / 76$

| AGE AND SEX OF MLY HEAD |  | SIZE OF FAMILY |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | TOTAL |
| 20 years | M | 3 |  |  |  |  |  |  |  |  |  |  |  |  | 3 |
|  | F | 1 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |
|  | T | 4 |  |  |  |  |  |  |  |  |  |  |  |  | 4 |
| 20-24 years | M | 9 | 9 | 9 | 8 | 2 |  |  |  |  |  |  |  |  | 37 |
|  | F | 2 | - | - | - | - |  |  |  |  |  |  |  |  | 2 |
|  | T | 11 | 9 | 9 | 8 | 2 |  |  |  |  |  |  |  |  | 39 |
| 25-34 years | M | 2 |  | 3 | 4 | 7 | 4 | 7 | 3 | 2 | - | 2 |  |  | 37 |
|  | F | 3 | 1 | - | 1 | - | 1 | - | - | - | 1 | - |  |  | 7 |
|  | T | 5 | 4 | 3 | 5 | 7 | 5 | 7 | 3 | 2 | 1 | 2 |  |  | 44 |
| 35-44 years | M | 2 | 2 | - | 2 | 1 | 4 | 4 | 7 | 8 | 3 | 1 | - | 1 | 35 |
|  | F | - | 2 | - | - | - | - | 2 | 1 | - | - | - | - | - | 5 |
|  | T | 2 | 4 | - | 2 | 1 | 4 | 6 | 8 | 8 | 3 | 1 | - | 1 | 40 |
| 45-54 years | M | 4 | 1 | 1 | 2 | 2 | 2 | 1 | 3 | - | 2 |  |  |  | 18 |
|  | F | 2 | - | 1 | - | - | - | - | - | - | - |  |  |  | 3 |
|  | T | 6 | 1 | 2 | 2 | 2 | 2 | 1 | 3 | - | 2 |  |  |  | 21 |
| 55-65 years | M | 4 | 2 | 2 | 1 | 1 |  |  |  |  |  |  |  |  | 10 |
|  | F | 2 | 1 | - | - | - |  |  |  |  |  |  |  |  | 3 |
|  | T | 6 | 3 | 2 | 1 | 1 |  |  |  |  |  |  |  |  | 13 |
| $63-6$ over | M | 10 |  |  |  |  |  |  |  |  |  |  |  |  | 10 |
|  | F | - |  |  |  |  |  |  |  |  |  |  |  |  | - |
|  | T | 10 |  |  |  |  |  |  |  |  |  |  |  |  | 10 |
| TOTAL | M | 34 | 17 | 15 | 17 | 13 | 10 | 12 | 13 | 10 | 5 | 3 | - | 1 | 150 |
|  | F | 10 | 4 | 1 | 1 | - | 1 | 2 | 1 | - | 1 | - | - | - | 21 |
|  | T | 44 | 21 | 16 | 18 | 13 | 11 | 14 | 14 | 10 | 6 | 3 | - | 1 | 171 |

TABLE 4.3
PROTECTED DISTRIBUTION OF FAMILIES,
BY AGE AND SEX OF FAMILY HEAD, OBEDJIWAN
1977-1990

| 1977-1990 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { AGE GROUP } \\ & \text { AND SEX } \end{aligned}$ |  | 1977 | 1980 | 1985 | 1990 | $\begin{gathered} \text { PROPORTION }{ }^{1} \\ \text { IN } \% \\ \hline \end{gathered}$ |
| $15-19$ | M | 3 | 4 | 4 | 4 | 4.5 |
|  | F | 1 | 1 | 1 | 1 | 1.4 |
|  | T | 4 | 5 | 5 | 5 |  |
| 20-24 | M | 37 | 38 | 59 | 65 | 66.1 |
|  | F | 2 | 4 | 5 | 6 | 6.5 |
|  | T | 39 | 42 | 64 | 71 |  |
| 25-34 | M | 37 | 61 | 83 | 113 | 77.1 |
|  | F | 7 | 7 | 11 | 16 | 12.1 |
|  | T | 44 | 68 | 94 | 129 |  |
| 35-44 | M | 35 | 37 | 49 | 79 | 100.0 |
|  | F | 5 | 7 | 8 | 8 | 13.5 |
|  | T | 40 | 44 | 57 | 87 |  |
| 45-54 | M | 18 | 30 | 34 | 36 | 100.0 |
|  | F | 3 | 4 | 7 | 10 | 18.8 |
|  | T | 21 | 34 | 41 | 46 |  |
| 55-64 | M | 10 | 15 | 28 | 32 | 100.0 |
|  | F | 3 | 4 | 4 | 7 | 20.0 |
|  | T | 13 | 19 | 32 | 39 |  |
| 65 \& over | M | 10 | 9 | 8 | 7 | 76.9 |
|  | F | - | - | - | - | - |
|  | T | 10 | 9 | 8 | 7 |  |
| TOTAL: | M | 150 | 194 | 265 | 336 |  |
|  | F | 21 | 27 | 36 | 48 |  |
|  | T | 171 | 221 | 301 | 384 |  |

1 Proportion of family heads in age group.
UNOCCUPIED DWELLINGS ..... 4
©CCUPIED DWELLINGS
One Family ..... 81

- Nuclear family only ..... 73
- Nuclear family plus other person(s) ..... 8
Two Families ..... 32
- Nuclear families only ..... 25
- Nuclear families plus other person(s) ..... 7
Three or more families ..... 5
- Nuclear families only ..... 4
- Nuclear families plus other person(s) ..... 1
TOTAL OCCUPIED DWELLINGS ..... 118
TOTAL ..... 122

TABLE 4.5
DISTRIBUTION OF OCCUPIED DWELLINGS,
BY NUMBER OF PERSONS IN HOUSEHOLD
AND AVERAGE SIZE OF HOUSEHOLDS,
OBEDJIWAN
1977
DWELLINGS OCCUPIED BY

## NUMBER OF PERSONS

 ONE FAMILY TWO FAMILIES THREE FAMILIES TOTAL| 1 | - | - | - | - |
| :---: | :---: | :---: | :---: | :---: |
| 2 | 4 | - | - | 4 |
| 3 | 5 | - | - | 5 |
| 4 | 4 | - | - | 4 |
| 5 | 11 | 1 | - | 12 |
| 6 | 7 | 4 | - | 11 |
| 7 | 5 | 6 | - | 12 |
| 8 | 12 | 6 | - | 18 |
| 9 | 12 | 4 | 2 | 18 |
| 10 | 7 | 2 | 1 | 10 |
| 11 | 7 | 4 | - | 11 |
| 12 | 5 | 1 | - | 6 |
| 13 | 1 | 3 | - | 4 |
| 14 | 1 | - | 1 | 2 |
| 15 | - | - | - | - |
| 16 | - | - | - | - |
| 17 | - | - | 1 | 1 |
| TOTAL (Dwellings) | 81 | 32 | 5 | 118 |
| TOTAL (persons) | 609 | 277 | 59 | 945 |
| Average size of households | 7.5 | 8.7 | 11.8 | 8.0 |

NOTE: The band list showed 985 persons living at Obedjiwan on 31 December 1976, whereas the housing survey showed 945 persons on the reserve in March 1978, a difference of 40 persons. This difference is partly due to the fact that two families whose homes were now classed as vacant were away for the winter, trapping.

TABLE 4.6

## CHARACIERISTICS OF HEADS OF HOUSEHOLDS AND

## PROPORTION OF FAMILY HEADS WHO ARE

HOUSEHOLD HEADS,
OBEDJIWAN,
1977
MALE FEMALE

| AGE <br> GROUP | UNMARRIED | MARRIED | WIDOWED | PROPOR- <br> TION | UNMARRIED | WIDOWED | PROPOR- <br> TION (IN \%) |
| :--- | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| $15-19$ | - | 1 | - | 33.3 | - | - | - |
| $20-24$ | - | 13 | - | 35.1 | - | - | - |
| $25-34$ | - | 28 | - | 75.7 | - | 2 | 28.6 |
| $35-44$ | - | 32 | - | 91.4 | - | 1 | 20.0 |
| $45-54$ | - | 15 | - | 83.3 | - | 3 | 100.0 |
| $55-64$ | - | 9 | - | 90.0 | - | 6 | 100.0 |
| $65 \&$ Over | - | 8 | - | 80.0 | - | - | - |
| TOTAL | 0 | 106 | - | 70.7 | 0 | 12 |  |

### 4.2.3 Heads of households

Table 4.6 gives some data on the household heads (sex, age and marital status). As seen, the vast majority of household heads ( $78 \%$ ) are married men 25 years of age and older.

### 4.2.4 Projected number of households

As mentioned earlier, the number of households is much lower than the number of nuclear families, since many dwellings are shared by families. This is partly because there is a housing shortage, but also because some families want to share their home, to help relatives as well as for economic reasons. In our housing questionnaire we asked families that were sharing dwellings why they were doing so. In seven of the thirty-two cases where two families were sharing a dwelling, the families wanted to continue living together: these were families that were looking after elderly parents or an unmarried or widowed daughter with children. In all the other cases, however, homes were shared because of a lack of available housing. In theory, given an improving economic situation, each one of the projected families in table 4.3 could make up a separate household. However, in view of the data on the current household heads and the fact that some families say they want to continue living together, it seems more realistic to expect, for example, that female family heads under 25 years of age will continue to share a dwelling with relatives. Likewise, it is unlikely that male family heads under the age of 20 will be able to become household heads, given their financial situation. Assuming that all the family heads were able to afford housing, Obedjiwan would have 212 households in 1980, 291 in 1985 and 373 in 1990.

## CHAPTER V

## HOUSING

In early 1978 there was a total of 122 Indian homes at Obedjiwan, four of which were vacant. The housing survey covered all these homes. A total of 126 questionnaires were filled out, but fifteen of these were completed by families sharing a home with another family whose head had already filled out the questionnaire. Fourteen questionnaires could not be clearly identified and in some cases are omitted from the results. The sample used most frequently consisted of 111 of the 118 occupied dwellings.

### 5.1 Size of dwellings

The biggest housing problem at Obedjiwan is that the dwellings are not big enough for the households they contain. Of the 111 homes covered, 39 have only two rooms--a kitchen and a bedroom, and only 19 have more than four rooms (see table 5.1). Any free rooms are used as bedrooms; only 16 homes have a living-room. Over $60 \%$ of the homes have only one or two bedrooms. According to the normal occupancy standards for Quebec, almost all the Obedjiwan homes are overcrowded. In thirty-four cases, homes consisting of only two rooms are occupied by households consisting of five or more persons. In fact, eight of these households have more than nine people in them.

### 5.2 Heating and fuel

The vast majority of households still use wood stoves to heat their homes. A total of 92 households use wood fuel, either solely or in combination with oil or electricity. Nineteen households use electric heaters for extra heat. Only one household has an electrical heating system. For cooking, many residents use a combination of methods (electricity and wood, wood and propane, etc) but propane stoves are relied on more than anything else. A total of 81 households use propane, 36 electricity and 25 wood. Only 8 households rely completely on wood for cooking.

### 5.3 Domestic facilities and appliances

At present only 22* households are connected to the water and sewer system and have running water in their homes. No houses have hot water and this was a source of many complaints in the housing survey.

Eighty-four* households have electricity and can therefore use electrical appliances. Over half the households have washing machines, record players and radios, but only $30.6 \%$ have refrigerators. There are no televisions, because reception is impossible.

[^1]TABLE 5.1

## OCCUPIED DWELLINGS BY NUMBER OF OCCUPANTS

AND NUMBER OF ROOMS

## OBEDJIWAN

$$
1978
$$



| 2 | 2 | 1 | - | - | - |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 3 | 1 | - | - | - |
| 4 | - | 4 | - | - | - |
| 5 | 5 | 2 | 2 | 1 | - |
| 6 | 7 | 1 | 2 | - | - |
| 7 | 5 | 4 | 2 | 1 | - |
| 8 | 3 | 2 | 5 | 3 | - |
| 9 | 4 | 3 | 2 | 3 | 1 |
| 10 | 1 | 2 | 2 | 3 | - |
| 11 | 3 | 1 | 2 | 2 | - |
| 12 | 1 | 1 | 1 | 2 | - |
| 13 | 3 | - | 1 | - | - |
| 14 | - | 1 | 1 | - | - |
| 15 | - | - | - | - | - |
| 16 | - | - | - | - | - |
| 17 | - | - | - | - | 1 |
| INC. | 2 | 5 | 5 | 1 | 1 |
| TOTAL | 39 | 28 | 25 | 16 | 3 |

Sample: 111 dwellings

TABLE 5.2
@CCUPIED DWELLINGS, BY NUMBER OF ROOMS
AND NUMBER OF BEDROOMS - OBEDJIWAN - 1978

| NUMBER OF ROOMS | NUMBER OF BEDROOMS |  |  |  | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 |  |
| 2 | 39 | - | - | - | 39 |
| 3 | 4 | 24 | - | - | 28 |
| 4 | - | 2 | 23 | - | 25 |
| 5 | - | - | 7 | 9 | 16 |
| 6 | - | - | - | 3 | 3 |
| TOTAL | 43 | 26 | 30 | 12 | 111 |

## TYPE OF HEATING AND FUEL USED

## OBEDIIWAN

1978
Wood stove ..... 73
Floor furnace (oil) ..... 15
Combination floor system (oil and wood) ..... 3
wood stove and electric heaters ..... 15
Floor furnace (oil) and electric heaters ..... 3
Wood and oil stove and electric heaters ..... 1
Electrical system ..... 1
111
FUEL USED FOR COOKING
Electricity ..... 18
wood ..... 8
Propane ..... 57
Electricity and wood ..... 4
Electricity and propane ..... 11
Wood and propane ..... 10
Electricity, wood and propane ..... 3

## NUMBER OF DNELLINGS WITH FACILITIES AND APPLIANCES

## OBEDJIWAN

| Hot water | 0 | 0.0 |
| :--- | :---: | ---: |
| Refrigerator | 34 | 30.6 |
| Washing machine | 71 | 64.0 |
| Record player | 65 | 58.6 |
| Radio | 77 | 69.4 |
| Television | 0 | 0.0 |
| Shed | 71 | 64.0 |

(1) Sarmple: 111 dwellings

### 5.4 Housing problems

Only $13.5 \%$ of the households covered said there were no problems with their houses (see table 5.5).

The most commonly mentioned problem involved doors and windows-- they were poorly fitted, allowing cold and water to come in, or in other cases the wood was rotten.

The second most common problem, which was connected with water and dampness seeping in, concerned the floors and ceilings--tiles coming off and ceiling panels falling down.

Seventeen households, not all of which are among the most crowded, mentioned the small size of the houses as a major problem.

The problems of cold and dampness in the houses and the lack of foundations or their poor condition came up about an equal number of times. The main reason people wanted foundations was so that the houses could be connected to the water and sewer system.

Problems mentioned under the heading "Other" included porches that were too small or that were rotting away, pipes freezing during the winter, and vandalism when the houses are closed up during the summer or for the hunting season.

Of the 111 houses covered in the survey, 47 are closed up for part of the year, mainly during the summer. Twenty-one families have camps outside the village. Most are within 30 or 35 miles of the village and are used for about three months of the year.
5.5 Housing needs

According to the answers given in the housing survey, there is a need for 32 additional houses and 39 need to be replaced (table 5.6).

However, the Analysis of Housing Needs for 1977 came up with very different figures. According to the analysis, 40 new houses were needed. As well, 84 houses required major repairs and 17 needed to be enlarged, a total of 101 out of 122 houses, including vacant ones.

The reason for the discrepancy between the two sources of information is that in the survey 45 households did not actually say that they needed a new house, even though they complained about the condition of their present homes, which really are in need of major repairs.

In any case, the facts remain that there is at present a need for at least 32 new houses and that current homes are so inadequate that 101 need to be renovated.

Assuming that these houses are in fact repaired or expanded, giving a total of 119 usable housing units ( 122 minus 3 that should be torn down), the need for additional houses will be as follows:

| 1978-1980: $\quad 93$ (including those currently needed) |
| :--- |
| 1980-1985: 79 |
| 1986-1990: |
| 1978-1990: |
| 254 |

In other words, a large number of new houses are going to be needed at Obedjiwan over the next 12 years, unless an increasing number of young people start leaving the reserve.

## TABLE 5.5

## HOUSING PROBLEMS

OBEDIIWAN
1978
\% OF DWELLINGS ${ }^{1}$

| No problems | 15 | 13.5 |  |
| :--- | :---: | :---: | :---: |
| Doors and windows | 36 | 32.4 |  |
| Floors and ceilings | 26 | 23.4 |  |
| Too small |  | 17 | 15.3 |
| Cold and dampness | 13 | 11.7 |  |
| Foundation - none: | 10 |  |  |
|  | 2 | 12 | 10.8 |
| Electricity - none: | 2 |  | 7.2 |
|  | 6 | 8 | 2.7 |
| Completely poor condition: |  |  |  |
| Other |  | 3 | 9.0 |

# HOUSING NEEDS, BASED ON THE 

## SURNEY OF THE POPULATION

## OBEDIIWAN

1978

| DWELLINGS |  | REPLACEMENT OF | ADDITIONAL |  |
| :--- | :---: | :---: | :---: | :---: |
| OCCUPIED BY | NO NEEDS | PRESENT HOUSE | HOUSES | UNKNOWN |


| One family | 38 | 26 | - | 17 |
| :--- | :---: | :---: | :---: | :---: |
| Two families | 6 | 4 | 23 | 3 |
| Three families | - | - | 6 | 1 |
| Five families | - | - | 3 | - |
|  |  |  |  |  |
| TOTAL | 44 | 30 | 32 | $21^{* *}$ |

** Of the 14 unidentified questionnaires relating to the 21 "unknown" homes, 9 said that a new house was needed.

The problem is all the more acute because the existing homes are inadequate: they are too small, over $80 \%$ have no running water or inside toilets, over $30 \%$ have no electricity, there is no hot water, etc.

Over the coming years a huge effort must be made to improve the housing situation, which is significantly hampering the social development of the entire Obedjiwan community.

Moreover, the answers given in the housing survey indicate that the community is prepared to do its part. Of the 71 persons who said they needed a new home (see table 5.6: $30+32+9), 59$ are prepared to contribute financially, though they cannot give large amounts.

First of all, it should be mentioned that all these people wanted to have their own home rather than rent a house or an apartment.

Most of those who are prepared to contribute would not be able to pay down more than $\$ 500$ cash on the purchase of their home. Most would be able to repay about $\$ 70$ a month on a loan. The distribution of respondents according to their potential financial contribution is shown in table 5.7.

In addition, the majority of respondents are willing to contribute free manpower to the construction of their home. Ten persons said that they were prepared to put in 40 man-days or more, or the entire length of construction.

# CONTRIBUTIONS TO CONSTRUCTION OF 

NEW HOMES

## OBEDIIWAN

1978

Cash down payment:

| Less than $\$ 500$ | $:$ | 34 |
| :--- | :--- | ---: |
| $\$ 500-\$ 999$ | $:$ | 18 |
| $\$ 1,000-\$ 1,999$ | $:$ | 4 |
| $\$ 2,000-\$ 4,999$ | $:$ | 3 |
| NO answer | $:$ | 12 |
| TOTAL | $:$ | 71 |

Monthly payment:

| $\$ 40-\$ 49$ | $:$ | 16 |
| :--- | :--- | ---: |
| $\$ 50-\$ 74$ | $:$ | 15 |
| $\$ 75-\$ 99$ | $:$ | 19 |
| $\$ 100-\$ 125$ | $:$ | 9 |
| NO answer | $:$ | 12 |
| TOTAL | $:$ | 71 |

## Free manpower

Part-time or less than 40 man/days 35
Full-time for the length of construction
(or 40 man-days or more) : 10
Unspecified : 1
No answer : 22
None (handicapped, widows) : 3

## CHAPTER VI

## COMMUNITY FACILITIES AND SERVICES

6.1 Degree of satisfaction with community facilities and services

This chapter does not discuss the survey of facilities and services as such, but rather the degree of community satisfaction with these services. The results are summarized in table 6.1.

The respondents were particularly dissatisfied with the fact that there is no garbage collection and that every family has to transport its own garbage to the dump. $75.5 \%$ of the respondents asked that a garbage collection service be set up. After garbage collection, the next major sources of dissatisfaction, to about an equal degree, were water and sewer services, with over $60 \%$ of respondents saying that they were dissatisfied. This was to be expected, given that only 22 houses currently have these services. The respondents asked that water and sewers be provided and many would also like to be able to have water heaters.

Road maintenance and the condition of parks and playgrounds were also rated unsatisfactory by over $55 \%$ of respondents. A larger playground should be built to meet the needs of the population (part of the playground beside the school was lost to school expansion).

The respondents were fairly satisfied with the stores on the reserve, though many (43\%) would like to see a greater variety of stores. Almost all said they needed a hardware and a clothing store most of all, and there were also requests for a garage and a tobacconist's.

Finally, people asked that the street lighting be extended to all streets on the reserve.

The two miscellaneous comments had to do with electrification of houses that did not yet have this service and the need for more recreational and athletic activities on the reserve.
6.2 Contributions to improvement of community facilities and services

Many respondents said they were dissatisfied, and the majority ( $81 \%$ of respondents) are prepared to contribute financially to improve the service. Sixty respondents are willing to pay $\$ 5$ to $\$ 9$ a month, twelve $\$ 10$ to $\$ 14$, eleven $\$ 15$ to $\$ 19$, and seven $\$ 20$ or more.

# DISSATISFIED \% OF RESPONDENTS* 

| Water | 73 | 65.8 |
| :--- | :---: | :---: |
| Sewers | 68 | 61.3 |
| Street maintenance | 63 | 56.8 |
| Street lighting | 34 | 30.6 |
| Garbage collection | 84 | 75.7 |
| Parks and playgrounds | 63 | 56.8 |
| Stores | 48 | 43.2 |
| Other | 2 | 1.8 |

[^2]The working-age population has grown rapidly over the past 10 years and will continue to do so into 1990.

TABLE 7.1
POPULATION OF RESERVE BETWEEN 15 AND 64 YEARS OF AGE
OBEDJIWAN
1965-1990

|  | 1965 | 1975 | $1980^{*}$ | $1985^{*}$ | $1990^{*}$ |
| :--- | ---: | ---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| Men | 127 | 207 | 285 | 370 | 448 |
| Women | 142 | 209 | 266 | 353 | 420 |
| Total: | 269 | 416 | 551 | 723 | 868 |

* assuming that the proportion of the total population living on the reserve will remain constant at $94 \%$.

The working age population rose by $54.6 \%$ from 1965 to 1975 and, based on the population projections, it will rise by $108.7 \%$ between 1975 and 1990. The growth of the male working-age population should be even more rapid--ll6.4\% between now and 1990.
7.2 Participation rate and projected manpower

The survey of the working-age population showed that the participation rate in 1977 was $17.6 \%$ women and $95.2 \%$ for men.

In view of the increasing percentage of people attending school, we can assume that from now to 1990 there will be a slight increase in the female participation rate, along with a decrease in the male participation rate, since more 15 to 19 year-olds will be staying in school instead of entering the job market.

Table 3.4 showed the number of 15 to 29 year-olds expected to be attending school in 1980, 1985 and 1990. Using the assumption that half these students will be male and that 94\% will be living on the reserve, we calculated the expected number of students for 1980, 1985 and 1990.

To calculate the number of persons making up the manpower supply, we assumed that all male persons between 15 and 29 years of age who are not students will be in the job market. We also assumed that the participation rate for men between 30 and 64 years of age would be constant at $95 \%$. The results appear in table 7.2.

Thus, the male particpation rate should be about $87 \%$ in 1980 and $84 \%$ in 1985 and 1990.

Unless a signficant number of people start leaving the reserve, the male manpower will more than double in fifteen years.

Female manpower was almost non-existent a few years ago (2 in 1973, 4 in 1974, according to Jules Garneau's report), but it has grown rapidly since then. In 1975 there were 41 women in the job market, a participation rate of 19.6\%. In 1977 the participation rate was $17.6 \%$, based on the sample obtained in the survey of the working-age population.

## MALE MANPOWER ON RESERVE

## OBEDJIWAN

1975-1990

| AGE GROUP | $1975^{(1)}$ | 1980 | 1985 | 1990 |
| :--- | ---: | :---: | :---: | :---: |
|  |  |  |  |  |
| $15-29$ | 105 | 154 | 180 | 202 |
| $30-64$ | 75 | 93 | 132 | 177 |
| TOTAL: | 180 | 247 | 312 | 379 |
| percentage of $15-29$ |  |  |  |  |
| year olds in total |  |  |  |  |
| manpower: | $58.3 \%$ | $62.3 \%$ | $57.7 \%$ | $53.3 \%$ |

Source: Jules Garneau, "Employment and Manpower Report, Obedjiwan, 1975."

Thus, the female manpower supply is subject to fairly wide fluctuations; no doubt demand has a very strong influence on it. Nevertheless, it is reasonable to assume that many of the female students who will be finishing grades 10 , ll or 12 in the coming years will be looking for work. We have therefore projected a female participation rate of $22 \%$ in 1980, $25 \%$ in 1985 and $30 \%$ in 1990.

TABLE 7.3

## MANPOWER ON RESERVE, BY SEX

OBEDIIWAN
1975-1990
197519801985

| Male | 180 | 247 | 312 | 379 |
| :--- | ---: | ---: | ---: | :--- |
| Female | 41 | 59 | 88 | 126 |
| TOTAL: | 221 | 306 | 400 | 505 |

Thus, an average of 19 jobs a year will have to be created at Obedjiwan or nearby in order to accommodate the manpower supply from now to 1990.


[^0]:    1
    Since the death rate is calculated in relation to the total population, a young population may have a lower death rate than an older population even if the mortality (or risk of death) in each age group is actually higher.

[^1]:    * Source: Analysis of Housing Needs for 1977, INAC

[^2]:    * 111 households

