

# 2002 Regional Employment & Harvesting Survey - Survey Methodology -

### **Survey Organization**

- Survey operations, training, and organization of community interviewers were completed by Bureau of Statistics staff. Senior interviewers were recruited and trained by Bureau of Statistics staff in Yellowknife. Senior interviewers then recruited and trained interviewers in each community. An interviewer manual was prepared and provided to all senior and community interviewers.
- The regional employment & harvesting survey questionnaire and the survey methodology were developed by the Bureau of Statistics, in consultation with RWED.
- All questionnaires were interviewer administered with face to face interviews. Most interviews were completed during the period of mid-October through to the end of November 2002.

### Sampling Procedures

- The requirement for statistically reliable estimates of labour force activity and harvesting data at the regional level, with some information for larger communities dictated sampling procedures used for the 2002 regional employment & harvesting survey. Random sampling procedures were used with the Bureau of Statistics dwelling listing updated in mid-2002 as the sampling frame.
- A survey questionnaire was completed for each sampled dwelling and included information for all persons fifteen years of age and over who normally resided in the dwelling. Where an individual was not present, responses were accepted from other household members.
- Population residing in unorganized areas were excluded from the survey .

# Data Entry and Processing

- As Senior Interviewers returned completed questionnaires to the Bureau of Statistics, each questionnaire was reviewed and obvious corrections and edits were made. In some cases, respondents were re-contacted for clarification of survey responses.
- Data entry was completed directly from questionnaires on a database developed by the Bureau of Statistics, while statistical tables were prepared using the Statistical Package for the Social Sciences (SPSS).
- Following data entry, computer-assisted edits were performed to check for data entry errors and logical inconsistencies among responses.

#### **Questionnaires Received and Sample Weighting**

• Information for a total of 3,079 persons 15 years of age and older was received. The count of persons for which information was provided from each area (sample size) is presented in the table that follow.

- Weighting of the statistical file was undertaken so survey statistics were based on estimated numbers of males and females for specific age categories and ethnic groups. Weighting of the sample was done at the regional and community level.
- Due to the use of weighting procedures, totals for tables in this report do not necessarily sum.
- Population estimates used for weighting are based on published estimates of the NWT population produced by Statistics Canada and community population estimates produced by the Bureau of Statistics.

# **Sampling and Non-Sampling Errors**

- Information on the sample sizes and sampling errors is summarized in the attached table. Standard errors and coefficients of variation are provided for the estimates of employed and unemployed. This information should be considered when statistics from this survey are being used.
- The standard error statistic is used to determine confidence intervals for estimates of population values based on a sample. Most often, the 95 percent confidence interval, which should contain the true population value 19 times out of 20, is used. To determine the 95 percent confidence interval for an estimate, the standard error is approximately doubled.
- The other measure of sampling error, provided in attached table, is the coefficient of variation (CV). This statistic is the ratio of the standard error to the sample estimate, indicating the percentage error implicit in the estimate. As noted on the table, Statistics Canada publishes estimates with less than a 16.5% CV without any caution. A CV between 16.5% and 33.3% are often published with a cautionary note, while estimates with a CV of greater than 33.3% are often suppressed.
- Another source of error in surveys is referred to as non-sampling errors. These errors result from incorrect answers being given to questions, data entry errors, etc. Surveys are designed to help minimize such errors. Generally, the effect of such errors is not known.

# Sample Size, Standard Error & Coefficient of Variation, by Area 2002 Regional Employment & Harvesting Survey

	Population		Employed			
			Standard	Coefficient	Standard	Coefficient
	15 & Over	Sample	Error	of Variation	Error	of Variation
Northwest Territories	30,459	3,079	281	1.3	132	6.1
Beaufort-Delta	5,116	525	105	3.5	70	10.9
Inuvik	2,606	241	75	4.2	44	20.5
Other Communities	2,510	284	70	6.0	53	12.3
Sahtu	1,951	317	49	4.0	33	13.6
Norman Wells	634	136	18	3.3	10	36.9
Other Communities	1,317	181	46	6.6	34	15.5
Deh Cho	2,525	434	55	3.8	35	12.1
Fort Simpson	941	166	30	4.4	16	27.3
Other Communities	1,583	268	44	5.8	31	13.5
South Slave	5,157	767	82	2.5	48	11.0
Hay River	2,579	283	67	3.7	37	20.4
Fort Smith	1,796	266	48	4.1	27	19.8
Other Communities	782	218	22	6.4	16	13.9
Dogrib	2,051	553	37	4.2	25	9.2
Rae-Edzo	1,265	259	35	6.5	25	13.2
Other Communities	787	294	18	5.1	11	13.2
Yellowknife	13,658	483	233	2.1	86	31.3

Note: Statistics Canada publishes data with coefficients of variation up to 33.3%. Figures with cv's less than 16.5% are published without any cautionary notes.

Prepared by: NWT Bureau of Statistics