

# SEA Fertility Transition Project Codebook

## Thailand

### The Merged 1970 and 1980 file: Geographical Comparability, Construction of Contextual Measures, Comparability of Variables, and Computer Programs:

#### THAILAND

##### A. Geographical Comparability

The 1970 province boundaries have been used for both 1970 and 1980. There was an increase from 71 provinces in 1970 to 72 provinces in 1980. This change resulted from the creation of two new provinces (Phayao and Yasothon) and the combining of two provinces (Phranakorn and Thonburi). Information was available on the amphoes involved in the changes therefore it was possible, from the census tapes, to accurately reconstitute the 1970 boundaries.

However, where data was taken from published sources these procedures could not be followed because information was not available at the amphoe level. In these instances the values for Phranakorn were assigned to Thonburi, and Phayao and Yasothon were combined with their original provinces (Chiangrai and Ubon Ratchathani, respectively) based on a weighted average of their respective 1980 populations. The variables taken from published sources were 1980 infant mortality and family planning variables.

In all instances of the construction of contextual variables for 1970 the base populations exceeded 100 persons except for the some contextual variables for the province of Ranong. These variables were those with more restrictive ages (marriage variables), work statuses (women's status variables restricting the base population to those in the labor force), or marital status (restricting the base population to currently married women). Even under these more restrictive conditions base populations were generally greater than 50. Except for infant mortality (which is described later in this codebook) and two of the marriage contextual variables, the base populations for 1980 contextual variables generally exceeded 100 persons.

The exception, as in 1970, was Ranong. For both 1970 and 1980 an examination of the values of the contextual variables for Ranong revealed no major differences from expectations therefore the estimated values were accepted.

## B. Construction of Contextual Measures

### i) Women's Status

The following indicators of women's status were constructed for both 1970 and 1980:

1. E1 : % Women 15-49 with Education greater than Grade 4 level.
2. E2 : % Women 15-49 with Education greater than Grade 7 level.
3. E3 : Mean Educational Level of Women aged 15-49.
4. MED1 : Median level of Education of Women aged 15-49.
5. E4 : % Women 15-34 with Education greater than Grade 4 level.
6. E5 : % Women 15-34 with Education greater than Grade 7 level.
7. E6 : Mean Educational Level of Women aged 15-34.
8. MED2 : Median level of Education of Women aged 15-34.
9. W1 : % Women 15-49 working in Non-Agricultural Sector.
10. W2 : % Women 15-49 working in Non-Agricultural Sector and not working as Family Workers in Sales or Service Sector.
11. W3 : % Women 15-49 working in Non-Agricultural Sector and not working in Sales or Service Sector.
12. W4 : % Working Women 15-49 working in Non-Agricultural Sector.
13. W5 : % Working Women 15-49 working in Non-Agricultural Sector and not working as Family Workers in Sales or Service Sector.
14. W6 : % Working Women 15-49 working in Non-Agricultural Sector and not working in Sales or Service Sector.
15. W7 : % Women 15-34 working in Non-Agricultural Sector.
16. W8 : % Women 15-34 working in Non-Agricultural Sector and not working as Family Workers in Sales or Service Sector.
17. W9 : % Women 15-34 working in Non-Agricultural Sector and not working in Sales or Service Sector.
18. W10 : % Working Women 15-34 working in Non-Agricultural Sector.
19. W11 : % Working Women 15-34 working in Non-Agricultural Sector and not working as Family Workers in Sales or Service Sector.
20. W12 : % Working Women 15-34 working in Non-Agricultural Sector and not working in Sales or Service Sector.
21. AGE1 : Mean Husband Wife age difference (Women aged 15-49).
22. AGE3 : Proportion of couples where Wife's Age is greater than Husband's Age  
(For women aged 15-49).

23. AGE2 : Mean Husband Wife age difference (Women aged 15-34).
24. AGE4 : Proportion of couples where Wife's Age is greater than Husband's Age  
(For women aged 15-34).
25. ED1 : Mean Difference of Husband's and Wife's Logged Level of Education  
(Women aged 15-49).
26. ED3 : Proportion of couples where Wife's Education is greater than Husband's Education (For women aged 15-49).
27. ED2 : Mean Difference of Husband's and Wife's Logged Level of Education  
(Women aged 15-34).
28. ED4 : Proportion of couples where Wife's Education is greater than Husband's Education (For women aged 15-34).

Half of the 28 indicators of women's status were based on measures aggregated from the sample of women aged 15-49 while the other half were aggregated from women aged 15-34. For all of the possible 14 comparisons between indicators that varied only by the age of the sample population the correlations were, with the exception of median years of education, greater than .99. The measure of median education exhibited little variation in 1970 and this accounts for its low correlation with the 1980 measure. Therefore there would appear to be no empirical preference for measures based on these two different age groups.

Correlations between the women's status variables and the two dependent variables, children-ever-born and own-children aged 2 were run. As expected, given the high correlations between indicators of women's status, there was little difference in the relationships with the dependent variables between indicators based on different ages.

For education and educational differences the indicators based on the amount of variation around a fixed point were related more highly to the DV's than indicators based on some measure of central tendency such as the mean or median. Also for education indicators there seems to be little difference in using completion of Grade 4 (the old completion of primary) or Grade 7 (the new completion of primary) as the cut-point. The measure for completion of Grade 4 showed, in general, a slightly stronger relationship with fertility, especially in 1980 when the correlations with current fertility and CEB were -.0311 and -.1080 respectively for the measure based on completion of Grade 4 and -.0281 and -.1038 for the measure based on completion of grade 7.

The occupation variables also showed little variation in their relationships with current or cumulative fertility according to the age of the base population. Among the occupation variables the percentage of women in non-agricultural occupations displayed the most consistently strong relationships with the fertility variables in both 1970 and 1980. In 1970 the percentage of the female labor force in non-agricultural occupations and not working as family workers also exhibited a strong relationship with fertility.

The variables based on differences in age and education between husbands and wives displayed very weak relationships with the fertility variables. While the signs of the variables were in the hypothesized direction the weak relationships suggest that these variables should not be considered further.

#### ii) Marriage

Three indicators of the marriage market were employed. These indicators varied only in terms of the age group employed in the denominator.

1. MAR1 : Proportion of women aged 15-24 who are single.
2. MAR2 : Proportion of women aged 25-29 who are single.
3. MAR3 : Proportion of women aged 15-29 who are single.

An analysis of the relationships between the different indicators shows a reasonably high level of correspondence, with the most strongly related indicators being those based on women aged 15-24 and 15-29 (a correlation of .9779 in 1970 and .9736 in 1980). In both 1970 and 1980, however, it was the measure based on women aged 25-29 that was most strongly related to fertility (the correlation coefficients for this variables were several times the magnitude of the coefficients for the other two measures). This might be due to the later age at marriage in Thailand (compared to other Southeast-Asian countries) and therefore the normative effects of marriage might work through an older marriage reference group.

#### iii). Infant Mortality

The Brass technique of indirect estimation of infant mortality has been extensively used in Thailand. Both 1970 and 1980 Census data have been used for this purpose (Population Survey Division, National Statistics Office, 1983, unpublished; Chamratritirong and Pejaranonda, 1985; Knodel and

Chamratritirong, 1978). Other sources of information of mortality are scarce. Vital registration has been used also a great deal of incompleteness of coverage has been reported (Chamratritirong and Pejaranonda, 1985). In addition the three surveys of population change (SPC) which have a dual record design, have been used to make some estimates of mortality. While the Brass estimates of infant mortality for Thailand are known to underestimate the level of infant mortality it has been argued that they are consistent in terms of patterns across areas and over time (Chamratritirong and Pejaranonda, 1985). Although we have generated the Brass estimates for both 1970 and 1980 there was some difficulties because of the small sample sizes in 1980 for several of the provinces. Published results for 1980 were available (Population Survey Division, 1983). These estimates were based on a 20 percent sample of the Census, and thus do not encounter the problems of small sample size. It was decided to use these estimates, based on the age group of women 20-24, and the North life table, in conjunction with our estimates based on the same age group and life table for 1970. In addition estimates based on the West life table for women aged 25-29 were calculated.

iv). Value of Children

The indicators of the value of children reflect two activities, children's education and children's work. There are two education variables which were defined. The first variable is defined as the proportion of children 7-15 years, and the second is the proportion of children 13-18 years, who attended school. The two work variables created were the proportion of children, age 11-15, and aged 11-18 who were in the labor force. These indicators are shown below:

1. CHWORK - Proportion of Children Aged 11-15 in Labor Force.<sup>1</sup>
2. CHWORK1 - Proportion of Children aged 11-18 in Labor Force.
3. CHSCL - Proportion of Children Aged 7-15 attending school.
4. CHSCL1 - Proportion of Children Aged 13-18 attending school.

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<sup>1</sup> The Labor Force includes all persons employed (ie. with a usual occupation)

In both 1970 and 1980 the two value of children variables based on education are strongly correlated (.84 in 1970 and .87 in 1980). That they are not more strongly correlated may reflect the bifurcated pattern of educational participation exhibited in many southern provinces in which attendance at younger age groups is at, or below, the national average, while attendance at the older age groups is above the national average.

Thailand has had effective compulsory secular education since the 1930s (and legal compulsory education before that). Initially education was compulsory to Grade 4 while in the mid 1960s compulsory education was extended to Grade 7, and upon reorganization of the educational system a few years later, to Grade 6. In 1970 approximately 60 percent of children aged 7-15 were reported to be attending school while in 1980 the corresponding percentage was 73. After the period of compulsory schooling attendance quickly drops off, and provincial differences in attendance are more pronounced. Overall only 17 percent of children age 13-18 were attending school in 1970 although this more than doubled to 40 percent by 1980.

Given a long tradition of compulsory school attendance, and high rates of attendance, it might not be surprising if the contextual effects of the value of children, as they operate through education, on fertility are reflected at older ages of childrens' school attendance. In the bivariate relationships with fertility this is indeed the case with the measure based on children aged 13 to 18, compared to 7-15, much more strongly related to fertility in 1970 and marginally more related to fertility in 1980.

The two work variables were very strongly related with each other (.99 in 1970 and .98 in 1980) and strongly and negatively related to the education value of children variables (-.84 to -.92). There were only small differences in the relationships between the work variables and the fertility variables, although in 3 out of the 4 comparisons the variable based on ages 11-15 exhibited stronger correlations than the variables based on the age group 11-18.

#### v). Family Planning

The family planning variables were obtained from the Mahidol University Changwat Data Base. The earliest family planning data available was for 1975, additional data was available for 1977, 1979, and 1981. Therefore no variables could be constructed for 1970 and the data for 1979

was selected to represent the family planning inputs (availability) for 1980. An analysis of the 16 indicators available suggested a clustering into three dimensions. One dimension consisted of health personnel, one consisted of public facilities, and the final dimension consisted of private facilities. Three indexes - personnel, public, and private, were created to correspond with these dimensions. The components that went into each index are shown below.

1. Personnel - Numbers of:
  - a) Doctors
  - b) Nurses
  - c) Nurses Aides
  - d) Midwives
  - e) Health Workers
  - f) Village Health-Post Volunteers
  - g) Health Communicators
2. Public - Numbers of:
  - a) Hospitals
  - b) Amphoe Hospitals
  - c) Medical and Health Centers
  - d) Amphoe Health Centers
  - e) Midwifery Centers
3. Private - Numbers of:
  - a) Private Clinics
  - b) First Class Drugstores
  - c) Second Class Drugstores
  - d) Traditional Drugstores

Each of the indexes consists of summing the components, dividing the total by the number of married women aged 15-44 in 1979 (obtained from the Mahidol database), and multiplying each index by 1000. When correlated with fertility toe of the variables, personnel and public exhibited positive (although small) correlations with fertility. The private measure was negatively correlated, as hypothesized, with fertility. The family planning variables, for 1970, are given values of 0.

vi). Other Contextual Variables

- 1) Sex Ratio



The proportion of males to females in the age group 15-34 was chosen as the measure of the sex-ratio.

### C. Construction of Merged File

#### i) Comparability of Individual level variables between 1970 and 1980

In creating the merged file for the Thailand, an effort was made to match variables from the 1970 and 1980 censuses in such a way that they would be comparable across the censuses. For the majority of the variables, this was accomplished. For several, however, perfect comparability could not be established. There were two primary reasons for this, including changes in the province boundaries and changes in the coding of variables.

Most of the variables required little, if any recoding, or other manipulation to establish comparability. For other variables perfect comparability could not be established. For example both province of birth and province of previous residence in 1980 could not be directly linked to the same variables in 1970 and amphoe (information) would be required for each of these variables in order to establish 1970 province boundaries. Therefore it was decided to retain the 1980 coding for these variables. If comparable data is required an approximation can be undertaken of by using the recodes for present place of residence. The source of error will be that there is no way to split Thonburi and Phra Nakorn (Bangkok). The changing treatment by census officials of Bangkok forced a number of recodes. For example, we have used 1980 region boundaries in which Bangkok was treated as a separate region. In order to match this region for the 1970 data we have coded the provinces of Phra Nakorn and Thonburi into the region of Bangkok. Similarly in the urban variables we have treated Bangkok, in 1970, as a separate category (with the value of Metropolitan).

There are several other differences in the coding of province of previous residence and municipality of previous residence between 1970 and 1980. In the former instance, province of previous residence, in both 1970 and 1980 the question was only asked, and coded, for persons who had been living in their current place of residence (definition not known but this likely refers to a muban 'village') for less than 5 years. In 1970 those

respondents who fit this description were coded according to the province code of the province in which they had previously resided. In 1980 the same coding was undertaken for those who had moved between provinces and a separate code (78) was used for those respondents who had changed their place of residence within a province. The question type of municipality previously resided in was again restricted to persons who had resided in their current place of residence less than 5 years. However, in 1980, the population of eligible respondents was further restricted to only those persons who had moved within a province.

The education variables used in the Thai census, given that the populations asked the questions differ from those in many other censuses, should be noted. One question, referred to here as EDUC asked all persons aged over 5 years their highest grade of schooling that had been completed. The second variable, referred to here as HILEVEL, asks all persons aged between 5 and 30 years of age what is the school grade attended. Both variables have the same coding within census years. There are minor coding differences between years. We have not attempted to make the codes completely compatible, preferring instead, to retain as much detail as possible. The user is referred to the respective codebooks in situations where compatibility of codes are required.

Similarly the occupation (occupation last week and usual occupation), and industry (usual industry) variables are coded differently for each census year, and users wishing to make these variables comparable should consult the codebooks. One other variable, age at first marriage, was available in 1980 but not in 1970. Because of the importance of this variable in explaining fertility it was decided to include it in the merged file. In 1970 a variable called age at marriage was constructed and coded 0 for all respondents.

#### ii) Sample Sizes and Weights

In both the 1970 and 1980 sample data, individual weights, designed to inflate the sample to either the total population (1970) or the full sample (1980), and to correct for compositional differences between the sample and full count (see codebooks for a more complete discussion), were attached to each record. As analysis conducted on the merged file is not intended to be used to provide estimates of the total population only the second aspect of

the weight (ensuring representativeness) needed to be retained. As the weighting schemes for 1970 and 1980 were different it was necessary to transform the weight to ensure comparability across years while at the same time adjusting for representativeness within years. This was achieved by dividing, for each census year, the individual weights by the mean weight (obtained from the full sample). Therefore the weight will vary among observations within years but the mean weights for 1970 and 1980 will both be close to 1.

iii) Selection of Contextual Measures

The following list of contextual variables were chosen to be included in the merged file.

1. E4 : Proportion of Women 15-34 with Education greater than Primary level.
2. W7 : Proportion of Women 15-34 working in Non-Agricultural Sector.
3. W11 : Proportion of Working Women 15-34 working in Non-Agricultural Sector and not working as Family Workers in Sales or Service Sector.
4. MAR1 : Proportion of women aged 15-24 who are single.
5. MAR2 : Proportion of women aged 25-29 who are single.
6. CHWORK: Proportion of Children Aged 11-15 in Labor Force.
7. CHSCL : Proportion of Children Aged 7-15 attending school.
8. CHSCL1: Proportion of Children Aged 13-18 attending school.
9. IMN : Infant Mortality q0 (x1000) based on North Life Table.
10. IMW : Infant Mortality q0 (x1000) based on West Life Table.
11. SEXRAT: Proportion of Males 15-34
12. PERSONEL: Number of Medical personnel per 1000 Currently-Married Women.
13. PRIVATE : Number of Drug stores and Private Clinics per 1000 Currently-Married Women.
14. PUBLIC : Number of Hospitals and Clinics per 1000 Currently-Married Women.

The indicators selected were included in a raw data file. The file, named TCONTEXT DAT, contains 29 variables. The first variable, named

PROVINCE, indicates the province of residence, while the remaining 28 variables consist of the fourteen indicators measured for 1970 and for 1980. The year is identified by the addition of 70 or 80 onto the variable name. Therefore mar170 and mar180 are the respective 1970 and 1980 contextual measures for marriage.

This file has been matched to the 1970 and 1980 micro-data files and the resulting matched files have been merged. A new variable, YEAR, coded as either 1970 or 1980, identifies from which census each observation was derived. Each record contains the contextual variables for 1970 and 1980. This will enable the contextual change scores to be easily calculated. The tape information for the merged file, the EXEC file, and the SPSSX file that created the merged system file, are provided in Appendix A.

The Merged 1970 and 1980 file: Geographical Comparability, Construction of Contextual Measures, Comparability of Variables, and Computer Programs:

THAILAND

A. Geographical Comparability

The 1970 province boundaries have been used for both 1970 and 1980. There was an increase from 71 provinces in 1970 to 72 provinces in 1980. This change resulted from the creation of two new provinces (Phayao and Yasothon) and the combining of two provinces (Phranakorn and Thonburi). Information was available on the amphoes involved in the changes therefore it was possible, from the census tapes, to accurately reconstitute the 1970 boundaries.

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In all instances of the construction of contextual variables for 1970 the base populations exceeded 100 persons except for the some contextual variables for the province of Ranong. These variables were those with more

restrictive ages (marriage variables), work statuses (women's status variables restricting the base population to those in the labor force), or marital status (restricting the base population to currently married women). Even under these more restrictive conditions base populations were generally greater than 50. Except for infant mortality (which is described later in this codebook) and two of the marriage contextual variables, the base populations for 1980 contextual variables generally exceeded 100 persons. The exception, as in 1970, was Ranong. For both 1970 and 1980 an examination of the values of the contextual variables for Ranong revealed no major differences from expectations therefore the estimated values were accepted.

## B. Construction of Contextual Measures

### i) Women's Status

The following indicators of women's status were constructed for both 1970 and 1980:

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2. E2 : % Women 15-49 with Education greater than Grade 7 level.
3. E3 : Mean Educational Level of Women aged 15-49.
4. MED1 : Median level of Education of Women aged 15-49.
5. E4 : % Women 15-34 with Education greater than Grade 4 level.
6. E5 : % Women 15-34 with Education greater than Grade 7 level.
7. E6 : Mean Educational Level of Women aged 15-34.
8. MED2 : Median level of Education of Women aged 15-34.
9. W1 : % Women 15-49 working in Non-Agricultural Sector.
10. W2 : % Women 15-49 working in Non-Agricultural Sector and not working as Family Workers in Sales or Service Sector.
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22. AGE3 : Proportion of couples where Wife's Age is greater than Husband's Age  
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25. ED1 : Mean Difference of Husband's and Wife's Logged Level of Education  
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#### v). Family Planning

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vi). Other Contextual Variables

- 1) Sex Ratio

The proportion of males to females in the age group 15-34 was chosen as the measure of the sex-ratio.

### C. Construction of Merged File

#### i) Comparability of Individual level variables between 1970 and 1980

In creating the merged file for the Thailand, an effort was made to match variables from the 1970 and 1980 censuses in such a way that they would be comparable across the censuses. For the majority of the variables, this was accomplished. For several, however, perfect comparability could not be established. There were two primary reasons for this, including changes in the province boundaries and changes in the coding of variables.

Most of the variables required little, if any recoding, or other manipulation to establish comparability. For other variables perfect comparability could not be established. For example both province of birth and province of previous residence in 1980 could not be directly linked to the same variables in 1970 and amphoe (information) would be required for each of these variables in order to establish 1970 province boundaries. Therefore it was decided to retain the 1980 coding for these variables. If comparable data is required an approximation can be undertaken of by using the recodes for present place of residence. The source of error will be that there is no way to split Thonburi and Phra Nakorn (Bangkok). The changing treatment by census officials of Bangkok forced a number of recodes. For example, we have used 1980 region boundaries in which Bangkok was treated as a separate region. In order to match this region for the 1970 data we have coded the provinces of Phra Nakorn and Thonburi into the region of Bangkok. Similarly in the urban variables we have treated Bangkok, in 1970, as a separate category (with the value of Metropolitan).

There are several other differences in the coding of province of previous residence and municipality of previous residence between 1970 and 1980. In the former instance, province of previous residence, in both 1970 and 1980 the question was only asked, and coded, for persons who had been living in their current place of residence (definition not known but this likely refers to a muban 'village') for less than 5 years. In 1970 those

respondents who fit this description were coded according to the province code of the province in which they had previously resided. In 1980 the same coding was undertaken for those who had moved between provinces and a separate code (78) was used for those respondents who had changed their place of residence within a province. The question type of municipality previously resided in was again restricted to persons who had resided in their current place of residence less than 5 years. However, in 1980, the population of eligible respondents was further restricted to only those persons who had moved within a province.

The education variables used in the Thai census, given that the populations asked the questions differ from those in many other censuses, should be noted. One question, referred to here as EDUC asked all persons aged over 5 years their highest grade of schooling that had been completed. The second variable, referred to here as HILEVEL, asks all persons aged between 5 and 30 years of age what is the school grade attended. Both variables have the same coding within census years. There are minor coding differences between years. We have not attempted to make the codes completely compatible, preferring instead, to retain as much detail as possible. The user is referred to the respective codebooks in situations where compatibility of codes are required.

Similarly the occupation (occupation last week and usual occupation), and industry (usual industry) variables are coded differently for each census year, and users wishing to make these variables comparable should consult the codebooks. One other variable, age at first marriage, was available in 1980 but not in 1970. Because of the importance of this variable in explaining fertility it was decided to include it in the merged file. In 1970 a variable called age at marriage was constructed and coded 0 for all respondents.

#### ii) Sample Sizes and Weights

In both the 1970 and 1980 sample data, individual weights, designed to inflate the sample to either the total population (1970) or the full sample (1980), and to correct for compositional differences between the sample and full count (see codebooks for a more complete discussion), were attached to each record. As analysis conducted on the merged file is not intended to be used to provide estimates of the total population only the second aspect of

the weight (ensuring representativeness) needed to be retained. As the weighting schemes for 1970 and 1980 were different it was necessary to transform the weight to ensure comparability across years while at the same time adjusting for representativeness within years. This was achieved by dividing, for each census year, the individual weights by the mean weight (obtained from the full sample). Therefore the weight will vary among observations within years but the mean weights for 1970 and 1980 will both be close to 1.

iii) Selection of Contextual Measures

The following list of contextual variables were chosen to be included in the merged file.

1. E4: Proportion of Women 15-34 with Education greater than Primary level.
2. W7: Proportion of Women 15-34 working in Non-Agricultural Sector.
- 3.W11 : Proportion of Working Women 15-34 working in Non-Agricultural Sector and not working as Family Workers in Sales or Service Sector.
4. MAR1: Proportion of women aged 15-24 who are single.
5. MAR2 : Proportion of women aged 25-29 who are single.
6. CHWORK: Proportion of Children Aged 11-15 in Labor Force.
7. CHSCL : Proportion of Children Aged 7-15 attending school.
8. CHSCL1: Proportion of Children Aged 13-18 attending school.
9. IMN : Infant Mortality q0 (x1000) based on North Life Table.
10. IMW : Infant Mortality q0 (x1000) based on West Life Table.
11. SEXRAT: Proportion of Males 15-34
12. PERSONEL: Number of Medical personnel per 1000 Currently-Married Women.
13. PRIVATE : Number of Drug stores and Private Clinics per 1000 Currently-Married Women.
14. PUBLIC : Number of Hospitals and Clinics per 1000 Currently-Married Women.

The indicators selected were included in a raw data file. The file, named TCONTEXT DAT, contains 29 variables. The first variable, named PROVINCE, indicates the province of residence, while the remaining 28

variables consist of the fourteen indicators measured for 1970 and for 1980. The year is identified by the addition of 70 or 80 onto the variable name. Therefore mar170 and mar180 are the respective 1970 and 1980 contextual measures for marriage.

This file has been matched to the 1970 and 1980 micro-data files and the resulting matched files have been merged. A new variable, YEAR, coded as either 1970 or 1980, identifies from which census each observation was derived. Each record contains the contextual variables for 1970 and 1980. This will enable the contextual change scores to be easily calculated. The tape information for the merged file, the EXEC file, and the SPSSX file that created the merged system file, are provided in Appendix A.

Every effort was made to ensure that the coding for variables was the same for both 1970 and 1980. For several variables, explained above, the coding schemes are different for each of the two years. Therefore, for these variables it will be necessary to recode the variables so that they be comparable across years. The recodes that were employed for other variables can be seen in the SPSSX program shown in Appendix A. In Appendix B the Thailand component of the standard file codebooks are provided while in Appendix C the dictionary information from the SPSSX merged system file is shown.

## APPENDIX A

The exec file used to define input and output files for the Thai merged file is shown below.

```
/* To Run the Thailand Contextual Variables */
'VMTAPE MOUNT 181 BN0039 DSN THAILAND.80.COPY2 (LAB BLP NOWAIT'
'VMTAPE MOUNT 182 BN0182 DSN THAI (RING LAB BLP NOWAIT'
'FI INDATA TAP1 SL 2 (RECFM FB BLKSIZE 32600 LRECL 200'
'FI INDATA1 TAP1 SL 1 (RECFM FB BLKSIZE 32600 LRECL 200'
'FI INDATA2 DISK TCONTEXT DAT'
'FI OUTCON DISK TCONTEXT SYS'
'FI OUTDATA DISK T70 SYS'
'FI OUTDATA1 DISK T80 SYS'
'FI OUTDATA2 TAP2 SL 1 (RECFM FB BLKSIZE 30720 LRECL 1024'
'LA OUTDATA2 FID THAI VOLID CH169 FSEQ 1 EXDTE 99364'
'SPSSX TCONTEXT (100K'
```

The file 'TCONTEXT SPSSX' is as follows.

```
DATA LIST FILE=INDATA2 FREE/PROVINCE MAR170 MAR270 E470 W770
    W1170 CHWORK70 CHSCL70 CHSCL170 IMN70 IMW70
    SEXRAT70 PERSON70 PRIV70 PUB70
    MAR180 MAR280 E480 W780
    W1180 CHWORK80 CHSCL80 CHSCL180 IMN80 IMW80
    SEXRAT80 PERSON80 PRIV80 PUB80
SAVE OUTFILE=OUTCON
DATA LIST FILE=INDATA/REGION 8 PROVINCE 9-10 URBAN 13-14
    AGE 33-34 RELHH 35-36 MARSTAT 37-38
    RELIGION 45-47 HILEVEL 51-52 EDUC 53-55
    POB 64-67 LIVELOC 80-81
    PREVPROV 72-75 PREVMUN 76-79
    CEB 98-99 OCC 128-130 USOCC 120-123
    USIND 124-127 WKSTAT 133
    MATCH 140 HAGE 141-142 HHILEVEL 143-144 HEDUC 145-147
    HOCC 162-164 HUSOCC 154-157 HUSIND 158-161
    HWKSTAT 167
    NKIDS 174 C1 TO C8 175-182 NUKIDS 183-184 UC1 TO UC8 185-192
    WT 22-32 (8)

COMPUTE WEIGHT=WT/44.454

DO IF (PROVINCE EQ 32 OR PROVINCE EQ 17)
COMPUTE REGION=1
ELSE IF (REGION EQ 1)
COMPUTE REGION=2
ELSE IF (REGION EQ 2)
COMPUTE REGION=3
ELSE IF (REGION EQ 3)
COMPUTE REGION=4
ELSE IF (REGION EQ 4)
```



COMPUTE REGION=5  
END IF

IF (PROVINCE EQ 32 OR PROVINCE EQ 17) URBAN=31

DO IF (RELHH GE 5 AND RELHH LE 7)  
COMPUTE RELHH=5  
ELSE IF (RELHH EQ 10)  
COMPUTE RELHH=6  
ELSE IF (RELHH EQ 8)  
COMPUTE RELHH=7  
ELSE IF (RELHH EQ 11)  
COMPUTE RELHH=8  
ELSE IF (RELHH EQ 0)  
COMPUTE RELHH=9  
ELSE IF (RELHH EQ 9)  
COMPUTE RELHH=10  
END IF

COMPUTE OWN=0  
COUNT OWN=C1 TO C8(2)

RECODE POB PREVPROV (81 THRU 98=81)  
RECODE URBAN (01 THRU 29=1) (31 THRU 49=2) (51 THRU 69=3) (71 THRU  
79=4)  
(91 THRU 99=5)

SORT CASES BY PROVINCE

MATCH FILES FILE=\*/TABLE=OUTCON/BY PROVINCE

COMPUTE YEAR=1970  
COMPUTE AGEMAR=0

VALUE LABELS PROVINCE POB PREVPROV 1 'KRABI'  
2 'KANCHANABURI' 3 'KALASIN'  
4 'KAMPHAENG PHET'  
5 'KHON KAEN' 6 'CHANTHA BURI' 7 'CHCHOENGSAO' 8 'CHON BURI'  
9 'CHAINAT' 10 'CHAIYAPHUM' 11 'CHUMPHON' 12 'CHAING RAI'  
13 'CHIANG MAI' 14 'TRANG' 15 'TRAT' 16 'TAK' 17 'THON BURI'  
18 'NAKHON NAYOK' 19 'NAKHON PATHOM' 20 'NAKHON PHANOM'  
21 'NAKHON RATCHASIMA' 22 'NAKHON SI THAMMARAT' 23 'NAKHON SAWAN'  
24 'NONTHABURI' 25 'NARATHIWAT' 26 'NAN' 27 'BURI RAM' 28 'PATHUM  
THANI'  
29 'PRACHUAP KHIRI KHAN' 30 'PRACHIN BURI' 31 'PATTANI'  
32 'BANGKOK' 33 'PRA NAKHON SI AYUTT' 34 'PHANGNGA'  
35 'PHATTHALUNG' 36 'PHICIT' 37 'PHITSANULOK' 38 'PETCHABURI'  
39 'PETCHABUN' 40 'PHRAE' 41 'PHUKET' 42 'MAHA SARAKAM'  
43 'MAE HONG SON' 44 'YALA' 45 'ROI ET' 46 'RANONG' 47 'RAYONG'  
48 'RATCHABURI' 49 'LOP BURI' 50 'LAMPANG' 51 'LAM PHUN' 52  
'LOEI'  
53 'SI SA KET' 54 'SAKON NAKHON' 55 'SONGKHALA' 56 'SATUN'

57 'SAMUT PRAKAN' 58 'SAMUT SONGKHRAM' 59 'SAMUT SAKHON'  
60 'SARABURI' 61 'SING BURI' 62 'SUKHOTHAI' 63 'SUPHAN BURI'  
64 'SURAT THANI' 65 'SURIN' 66 'NONG KAI' 67 'ANG THONG'  
68 'UDON THANI' 69 'UTTARADIT' 70 'UTHAI THANI' 71 'UBON  
RATCHATHANI'  
79 'OTHER PROVINCE' 81 'ABROAD' 99 'UNKNOWN'  
/REGION 1 'BANGKOK' 2 'CENTRAL' 3 'NORTH' 4 'NORTHEAST'  
5 'SOUTH'  
/URBAN 1 'RURAL' 2 'BANGKOK' 3 'CITY' 4 'TOWN' 5 'TAMBON'  
/PREVMUN 1 'RURAL' 2 'URBAN' 9 'UNKNOWN'  
/LIVELOC 0 'LESS THAN 1 YEAR' 1 '1-1.9 YEARS' 2 '2-2.9 YEARS'  
3 '3-3.9 YEARS' 4 '4-4.9 YEARS' 5 '5-9.9 YEARS' 6 '10-14.9 YEARS'  
7 '15-19.9 YEARS' 8 '20 YEARS AND OVER' 9 'UNKNOWN'  
/RELHH 1 'HEAD OF HOUSEHOLD' 2 'SPOUSE' 3 'CHILD'  
4 'SON OR DAU-IN-LAW' 5 'OTHER RELS'  
6 'ADOPTED CHILD' 7 'NON-RELATIVES' 8 'SERVANT' 9 'NON-INMATE'  
10 'INMATE'  
/MARSTAT 1 'NEVER MARRIED' 2 'MARRIED'  
3 'WIDOWED' 4 'DIVORCED' 5 'SEPARATED' 6 'UNKNOWN, PREV MARR'  
7 'MONKS' 9 'UNKNOWN'  
/RELIGION 1 'BUDDHIST' 2 'CONFUCIST' 3 'ISLAM' 4 'CHRISTAN'  
5 'HINDU' 6 'OTHER' 7 'NONE' 9 'UNKNOWN'  
/WKSTAT HWKSTAT 0 'NOT IN LF-NOT STATED'  
1 'EMPLOYER' 2 'SELF-EMPLOYED' 3 'GOVERNMENT EMPLOYEE'  
4 'PRIVATE EMPLOYEE' 5 'FAMILY WORKER' 9 'UNKNOWN'  
/MATCH 0 'NO HUSBAND MATCH' 1 'HUSBAND MATCH'  
VARIABLE LABELS PROVINCE 'PROVINCE'/REGION '1980 REGION'  
/URBAN 'MUNICIPAL-NONMUNICIPAL STATUS'/AGE 'AGE'  
/HAGE 'HUSBANDS AGE'/MARSTAT 'MARITAL STATUS'  
/RELHH 'RELATIONSHIP TO HOUSEHOLD HEAD'  
/RELIGION 'RELIGION'  
/PREVPROV 'PREVIOUS PROVINCE'  
/PREVMUN 'PREVIOUS MUNICIPALITY'  
/HILEVEL 'SCHOOL GRADE ATTENDED'  
/HHILEVEL 'HUSBANDS SCHOOL GRADE ATTENDED'  
/EDUC 'HIGHEST GRADE COMPLETED'  
/HEDUC 'HUSBANDS HIGHEST GRADE COMPLETED'  
/POB 'PLACE OF BIRTH'/LIVELOC 'TIME LIVED IN LOCALITY'  
/OCC 'LAST WEEKS OCCUPATION'/HOCC 'HUSBANDS LAST WEEK OCCUPATION'  
/USOCC 'USUAL OCCUPATION'/HUSOCC 'HUSBANDS USUAL OCCUPATION'  
/USIND 'USUAL INDUSTRY'/HUSIND 'HUSBANDS USUAL INDUSTRY'  
/HWKSTAT 'HUSBANDS WORK STATUS'/CEB 'CHILDREN-EVER-BORN'  
/OWN 'OWN-CHILDREN AGED 2'  
/NKIDS 'NUMBER OF MATCHED CHILDREN'  
/NUKIDS 'NUMBER OF UNMATCHED CHILDREN'  
/C1 'AGE OF 1ST MATCHED CHILD'/C2 'AGE OF 2ND MATCHED CHILD'/  
C3 'AGE OF 3RD MATCHED CHILD'/C4 'AGE OF 4TH MATCHED CHILD'/  
C5 'AGE OF 5TH MATCHED CHILD'/C6 'AGE OF 6TH MATCHED CHILD'/  
C7 'AGE OF 7TH MATCHED CHILD'/C8 'AGE OF 8TH MATCHED CHILD'/  
UC1 'AGE OF 1ST UNMATCHED CHILD'/UC2 'AGE OF 2ND UNMATCHED  
CHILD'/

UC3 'AGE OF 3RD UNMATCHED CHILD'/UC4 'AGE OF 4TH UNMATCHED CHILD'/  
 UC5 'AGE OF 5TH UNMATCHED CHILD'/UC6 'AGE OF 6TH UNMATCHED CHILD'/  
 UC7 'AGE OF 7TH UNMATCHED CHILD'/UC8 'AGE OF 8TH UNMATCHED CHILD'  
 /MAR170 '1970 PROPORTION WOMEN AGED 15-24 WHO ARE SINGLE'  
 /MAR270 '1970 PROPORTION WOMEN AGED 25-29 WHO ARE SINGLE'  
 /E470 '1970 PROPORTION OF WOMEN 15-34 WITH EDUCATION GT GRADE 4'  
 /W770 '1970 PROPORTION OF WOMEN 15-34 IN NON-AGRICULTURAL SECTOR'  
 /W1170 '1970 PROP WORKING WOMEN 15-34 IN NON-AGRICULTURAL SECTOR'  
 /CHWORK70 '1970 PROP CHILDREN 10-14 IN LABOR FORCE'  
 /CHSCL70 '1970 PROPORTION CHILDREN 7-15 ATTENDING SCHOOL'  
 /CHSCL170 '1970 PROPORTION CHILDREN 13-18 ATTENDING SCHOOL'  
 /IMN70 '1970 BRASS Q0 (\*1000) ESTIMATE BASED ON NORTH LIFE TABLE'  
 /IMW70 '1970 BRASS Q0 (\*1000) ESTIMATE BASED ON WEST LIFE TABLE'  
 /SEXRAT70 '1970 PROPORTION MALES AGES 15-34'  
 /PERSON70 '1970 MEDICAL PERSONELL PER 1000 CMW AGED 15-44'  
 /PRIV70 '1970 PRIVATE DRUG STORES AND CLINICS PER 1000 CMW 15-44'  
 /PUB70 '1970 HOSPITALS AND CLINICS PER 1000 CMW 15-44'  
 /MAR180 '1980 PROPORTION WOMEN AGED 15-24 WHO ARE SINGLE'  
 /MAR280 '1980 PROPORTION WOMEN AGED 25-29 WHO ARE SINGLE'  
 /E480 '1980 PROPORTION OF WOMEN 15-34 WITH EDUCATION GT GRADE 4'  
 /W780 '1980 PROPORTION OF WOMEN 15-34 IN NON-AGRICULTURAL SECTOR'  
 /W1180 '1980 PROP WORKING WOMEN 15-34 IN NON-AGRICULTURAL SECTOR'  
 /CHWORK80 '1980 PROP CHILDREN 10-14 IN LABOR FORCE'  
 /CHSCL80 '1980 PROPORTION CHILDREN 7-15 ATTENDING SCHOOL'  
 /CHSCL180 '1980 PROPORTION CHILDREN 13-18 ATTENDING SCHOOL'  
 /IMN80 '1980 BRASS Q0 (\*1000) ESTIMATE BASED ON NORTH LIFE TABLE'  
 /IMW80 '1980 BRASS Q0 (\*1000) ESTIMATE BASED ON WEST LIFE TABLE'  
 /SEXRAT80 '1980 PROPORTION MALES AGES 15-34'  
 /PERSON80 '1980 MEDICAL PERSONELL PER 1000 CMW AGED 15-44'  
 /PRIV80 '1980 PRIVATE DRUG STORES AND CLINICS PER 1000 CMW 15-44'  
 /PUB80 '1980 HOSPITALS AND CLINICS PER 1000 CMW 15-44'  
 /YEAR 'YEAR OF CENSUS'  
 /WEIGHT 'INDIVIDUAL WEIGHT'  
 /AGEMAR 'AGE AT FIRST MARRIAGE'  
 SAVE OUTFILE=OUTDATA/KEEP=REGION PROVINCE URBAN AGE HAGE RELHH  
 MARSTAT  
 RELIGION HILEVEL HHILEVEL POB EDUC HEDUC PREVPROV  
 PREVMUN LIVELOC OCC HOCC USOCC HUSOCC USIND HUSIND  
 WKSTAT HWKSTAT CEB MATCH OWN  
 NKIDS NUKIDS C1 C2 C3 C4 C5 C6 C7 C8 UC1 UC2 UC3 UC4 UC5 UC6  
 UC7 UC8  
 MAR170 MAR270 E470 W770  
 W1170 CHWORK70 CHSCL70 CHSCL170 IMN70 IMW70  
 SEXRAT70 PERSON70 PRIV70 PUB70  
 MAR180 MAR280 E480 W780  
 W1180 CHWORK80 CHSCL80 CHSCL180 IMN80 IMW80  
 SEXRAT80 PERSON80 PRIV80 PUB80  
 WEIGHT AGEMAR YEAR/COMPRESSED

DATA LIST FILE=INDATA1/REGION 8-9 PROVINCE 10-11 AMPHOE 12-13  
URBAN 14-15  
AGE 33-34 RELHH 35-36 MARSTAT 37-38  
RELIGION 45-47 EDUC 51-52 HILEVEL 53-55  
POB 64-67 LIVELOC 80-81  
PREVPROV 72-75 PREVMUN 82-83  
CEB 98-99 OCC 129-131 USOCC 120-123  
USIND 124-127 WKSTAT 128  
MATCH 140 HAGE 141-142 HEDUC 143-144 HHILEVEL 145-147  
HOCC 163-165 HUSOCC 154-157 HUSIND 158-161  
HWKSTAT 162 AGEMAR 86-87  
NKIDS 174 C1 TO C8 175-182 NUKIDS 183-184 UC1 TO UC8 185-192  
WT 26-32 (4)

COMPUTE WEIGHT=WT/114.090

DO IF (PROVINCE EQ 72 AND (AMPHOE EQ 2 OR AMPHOE EQ 4 OR AMPHOE  
EQ 5 OR AMPHOE EQ 6 OR AMPHOE EQ 7 OR AMPHOE EQ 9  
OR AMPHOE EQ 16 OR AMPHOE EQ 19 OR AMPHOE EQ 22))  
COMPUTE PROVINCE=17  
ELSE IF (PROVINCE EQ 32)  
COMPUTE PROVINCE=12  
ELSE IF (PROVINCE EQ 43)  
COMPUTE PROVINCE=71  
ELSE IF (PROVINCE EQ 72)  
COMPUTE PROVINCE=32  
ELSE IF (PROVINCE EQ 17)  
COMPUTE PROVINCE=18  
ELSE IF (PROVINCE EQ 18)  
COMPUTE PROVINCE=19  
ELSE IF (PROVINCE EQ 23)  
COMPUTE PROVINCE=24  
ELSE IF (PROVINCE EQ 27)  
COMPUTE PROVINCE=28  
ELSE IF (PROVINCE EQ 28)  
COMPUTE PROVINCE=29  
ELSE IF (PROVINCE EQ 29)  
COMPUTE PROVINCE=30  
ELSE IF (PROVINCE EQ 31)  
COMPUTE PROVINCE=33  
ELSE IF (PROVINCE EQ 37)  
COMPUTE PROVINCE=38  
ELSE IF (PROVINCE EQ 22)  
COMPUTE PROVINCE=23  
ELSE IF (PROVINCE EQ 25)  
COMPUTE PROVINCE=26  
ELSE IF (PROVINCE EQ 35)  
COMPUTE PROVINCE=36  
ELSE IF (PROVINCE EQ 36)  
COMPUTE PROVINCE=37  
ELSE IF (PROVINCE EQ 38)

```
COMPUTE PROVINCE=39
ELSE IF (PROVINCE EQ 39)
COMPUTE PROVINCE=40
ELSE IF (PROVINCE EQ 42)
COMPUTE PROVINCE=43
ELSE IF (PROVINCE EQ 19)
COMPUTE PROVINCE=20
ELSE IF (PROVINCE EQ 20)
COMPUTE PROVINCE=21
ELSE IF (PROVINCE EQ 26)
COMPUTE PROVINCE=27
ELSE IF (PROVINCE EQ 41)
COMPUTE PROVINCE=42
ELSE IF (PROVINCE EQ 21)
COMPUTE PROVINCE=22
ELSE IF (PROVINCE EQ 24)
COMPUTE PROVINCE=25
ELSE IF (PROVINCE EQ 30)
COMPUTE PROVINCE=31
ELSE IF (PROVINCE EQ 33)
COMPUTE PROVINCE=34
ELSE IF (PROVINCE EQ 34)
COMPUTE PROVINCE=35
ELSE IF (PROVINCE EQ 40)
COMPUTE PROVINCE=41
END IF
```

```
DO IF (RELHH EQ 4)
COMPUTE RELHH=3
ELSE IF (RELHH EQ 5)
COMPUTE RELHH=6
ELSE IF (RELHH EQ 6)
COMPUTE RELHH=4
ELSE IF (RELHH GE 7 AND RELHH LE 10)
COMPUTE RELHH=5
ELSE IF (RELHH EQ 11)
COMPUTE RELHH=7
ELSE IF (RELHH EQ 12)
COMPUTE RELHH=8
ELSE IF (RELHH EQ 13)
COMPUTE RELHH=10
ELSE IF (RELHH EQ 14)
COMPUTE RELHH=9
END IF
```

```
RECODE HILEVEL HHILEVEL (1=0) (91=99)/EDUC HEDUC (1=0)
```

```
RECODE URBAN (01 THRU 29=1) (31 THRU 49=2) (51 THRU 69=3) (71 THRU
79=4)
(91 THRU 99=5)
```

```
DO IF (WKSTAT EQ 3 OR WKSTAT EQ 4)
COMPUTE WKSTAT=3
ELSE IF (WKSTAT EQ 5)
COMPUTE WKSTAT=4
ELSE IF (WKSTAT EQ 6)
COMPUTE WKSTAT=5
END IF
```

```
DO IF (HWKSTAT EQ 3 OR HWKSTAT EQ 4)
COMPUTE HWKSTAT=3
ELSE IF (HWKSTAT EQ 5)
COMPUTE HWKSTAT=4
ELSE IF (HWKSTAT EQ 6)
COMPUTE HWKSTAT=5
END IF
```

```
RECODE POB PREVPROV (81 THRU 98=81)
DO IF (LIVELOC GE 5 AND LIVELOC LE 9)
COMPUTE LIVELOC=5
ELSE IF (LIVELOC GE 10 AND LIVELOC LE 14)
COMPUTE LIVELOC=6
ELSE IF (LIVELOC GE 15 AND LIVELOC LE 19)
COMPUTE LIVELOC=7
ELSE IF (LIVELOC GE 20 AND LIVELOC LE 98)
COMPUTE LIVELOC=8
ELSE IF (LIVELOC EQ 99)
COMPUTE LIVELOC=9
END IF
```

```
COMPUTE OWN=0
COUNT OWN=C1 TO C8(2)
```

```
SORT CASES BY PROVINCE
```

```
MATCH FILES FILE=*/TABLE=OUTCON/BY PROVINCE
```

```
COMPUTE YEAR=1980
```

```
VALUE LABELS PROVINCE 1 'KRABI'
2 'KANCHANABURI' 3 'KALASIN'
4 'KAMPHAENG PHET'
5 'KHON KAEN' 6 'CHANTHA BURI' 7 'CHCHOENGSAO' 8 'CHON BURI'
9 'CHAINAT' 10 'CHAIYAPHUM' 11 'CHUMPHON' 12 'CHAING RAI'
13 'CHIANG MAI' 14 'TRANG' 15 'TRAT' 16 'TAK' 17 'THON BURI'
18 'NAKHON NAYOK' 19 'NAKHON PATHOM' 20 'NAKHON PHANOM'
21 'NAKHON RATCHASIMA' 22 'NAKHON SI THAMMARAT' 23 'NAKHON SAWAN'
24 'NONTHABURI' 25 'NARATHIWAT' 26 'NAN' 27 'BURI RAM' 28 'PATHUM
THANI'
29 'PRACHUAP KHIRI KHAN' 30 'PRACHIN BURI' 31 'PATTANI'
32 'BANGKOK' 33 'PRA NAKHON SI AYUTT' 34 'PHANGNGA'
35 'PHATTHALUNG' 36 'PHICIT' 37 'PHITSANULOK' 38 'PETCHABURI'
39 'PETCHABUN' 40 'PHRAE' 41 'PHUKET' 42 'MAHA SARAKAM'
```

43 'MAE HONG SON' 44 'YALA' 45 'ROI ET' 46 'RANONG' 47 'RAYONG'  
 48 'RATCHABURI' 49 'LOP BURI' 50 'LAMPANG' 51 'LAM PHUN' 52  
 'LOEI'  
 53 'SI SA KET' 54 'SAKON NAKHON' 55 'SONGKHALA' 56 'SATUN'  
 57 'SAMUT PRAKAN' 58 'SAMUT SONGKHRAM' 59 'SAMUT SAKHON'  
 60 'SARABURI' 61 'SING BURI' 62 'SUKHOTHAI' 63 'SUPHAN BURI'  
 64 'SURAT THANI' 65 'SURIN' 66 'NONG KAI' 67 'ANG THONG'  
 68 'UDON THANI' 69 'UTTARADIT' 70 'UTHAI THANI' 71 'UBON  
 RATCHATHANI'  
 79 'OTHER PROVINCE' 81 'ABROAD' 99 'UNKNOWN'  
 /REGION 1 'BANGKOK' 2 'CENTRAL' 3 'NORTH' 4 'NORTHEAST'  
 5 'SOUTH'  
 /URBAN 1 'RURAL' 2 'BANGKOK' 3 'CITY' 4 'TOWN' 5 'TAMBON'  
 /PREVMUN 1 'RURAL' 2 'URBAN' 9 'UNKNOWN'  
 /LIVELOC 0 'LESS THAN 1 YEAR' 1 '1-1.9 YEARS' 2 '2-2.9 YEARS'  
 3 '3-3.9 YEARS' 4 '4-4.9 YEARS' 5 '5-9.9 YEARS' 6 '10-14.9 YEARS'  
 7 '15-19.9 YEARS' 8 '20 YEARS AND OVER' 9 'UNKNOWN'  
 /RELHH 1 'HEAD OF HOUSEHOLD' 2 'SPOUSE' 3 'CHILD'  
 4 'SON OR DAU-IN-LAW' 5 'OTHER RELS'  
 6 'ADOPTED CHILD' 7 'NON-RELATIVES' 8 'SERVANT' 9 'NON-INMATE'  
 10 'INMATE'  
 /MARSTAT 1 'NEVER MARRIED' 2 'MARRIED'  
 3 'WIDOWED' 4 'DIVORCED' 5 'SEPARATED' 6 'UNKNOWN, PREV MARR'  
 7 'MONKS' 9 'UNKNOWN'  
 /RELIGION 1 'BUDDHIST' 2 'CONFUCIST' 3 'ISLAM' 4 'CHRISTIAN'  
 5 'HINDU' 6 'OTHER' 7 'NONE' 9 'UNKNOWN'  
 /WKSTAT HWKSTAT 0 'NOT IN LF-NOT STATED'  
 1 'EMPLOYER' 2 'SELF-EMPLOYED' 3 'GOVERNMENT EMPLOYEE'  
 4 'PRIVATE EMPLOYEE' 5 'FAMILY WORKER' 9 'UNKNOWN'  
 /MATCH 0 'NO HUSBAND MATCH' 1 'HUSBAND MATCH'  
 /AGEMAR 98 '98 AND OVER' 99 'UNKNOWN'  
 VARIABLE LABELS PROVINCE 'PROVINCE'/REGION '1980 REGION'  
 /URBAN 'MUNICIPAL-NONMUNICIPAL STATUS'/AGE 'AGE'  
 /HAGE 'HUSBANDS AGE'/MARSTAT 'MARITAL STATUS'  
 /RELHH 'RELATIONSHIP TO HOUSEHOLD HEAD'  
 /RELIGION 'RELIGION'  
 /PREVPROV 'PREVIOUS PROVINCE'  
 /PREVMUN 'PREVIOUS MUNICIPALITY'  
 /HILEVEL 'SCHOOL GRADE ATTENDED'  
 /HHILEVEL 'HUSBANDS SCHOOL GRADE ATTENDED'  
 /EDUC 'HIGHEST GRADE COMPLETED'  
 /HEDUC 'HUSBANDS HIGHEST GRADE COMPLETED'  
 /POB 'PLACE OF BIRTH'/LIVELOC 'TIME LIVED IN LOCALITY'  
 /OCC 'LAST WEEKS OCCUPATION'/HOCC 'HUSBANDS LAST WEEK OCCUPATION'  
 /USOCC 'USUAL OCCUPATION'/HUSOCC 'HUSBANDS USUAL OCCUPATION'  
 /USIND 'USUAL INDUSTRY'/HUSIND 'HUSBANDS USUAL INDUSTRY'  
 /HWKSTAT 'HUSBANDS WORK STATUS'/CEB 'CHILDREN-EVER-BORN'  
 /OWN 'OWN-CHILDREN AGED 2'  
 /NKIDS 'NUMBER OF MATCHED CHILDREN'  
 /NUKIDS 'NUMBER OF UNMATCHED CHILDREN'  
 /C1 'AGE OF 1ST MATCHED CHILD'/C2 'AGE OF 2ND MATCHED CHILD'/  
 C3 'AGE OF 3RD MATCHED CHILD'/C4 'AGE OF 4TH MATCHED CHILD'/

C5 'AGE OF 5TH MATCHED CHILD'/C6 'AGE OF 6TH MATCHED CHILD'/  
 C7 'AGE OF 7TH MATCHED CHILD'/C8 'AGE OF 8TH MATCHED CHILD'/  
 UC1 'AGE OF 1ST UNMATCHED CHILD'/UC2 'AGE OF 2ND UNMATCHED  
 CHILD'/  
 UC3 'AGE OF 3RD UNMATCHED CHILD'/UC4 'AGE OF 4TH UNMATCHED  
 CHILD'/  
 UC5 'AGE OF 5TH UNMATCHED CHILD'/UC6 'AGE OF 6TH UNMATCHED  
 CHILD'/  
 UC7 'AGE OF 7TH UNMATCHED CHILD'/UC8 'AGE OF 8TH UNMATCHED CHILD'  
 /MAR170 '1970 PROPORTION WOMEN AGED 15-24 WHO ARE SINGLE'  
 /MAR270 '1970 PROPORTION WOMEN AGED 25-29 WHO ARE SINGLE'  
 /E470 '1970 PROPORTION OF WOMEN 15-34 WITH EDUCATION GT GRADE 4'  
 /W770 '1970 PROPORTION OF WOMEN 15-34 IN NON-AGRICULTURAL SECTOR'  
 /W1170 '1970 PROP WORKING WOMEN 15-34 IN NON-AGRICULTURAL SECTOR'  
 /CHWORK70 '1970 PROP CHILDREN 10-14 IN LABOR FORCE'  
 /CHSCL70 '1970 PROPORTION CHILDREN 7-15 ATTENDING SCHOOL'  
 /CHSCL170 '1970 PROPORTION CHILDREN 13-18 ATTENDING SCHOOL'  
 /IMN70 '1970 BRASS Q0 (\*1000) ESTIMATE BASED ON NORTH LIFE  
 TABLE'  
 /IMW70 '1970 BRASS Q0 (\*1000) ESTIMATE BASED ON WEST LIFE TABLE'  
 /SEX RAT70 '1970 PROPORTION MALES AGES 15-34'  
 /PERSON70 '1970 MEDICAL PERSONELL PER 1000 CMW AGED 15-44'  
 /PRIV70 '1970 PRIVATE DRUG STORES AND CLINICS PER 1000 CMW 15-44'  
 /PUB70 '1970 HOSPITALS AND CLINICS PER 1000 CMW 15-44'  
 /MAR180 '1980 PROPORTION WOMEN AGED 15-24 WHO ARE SINGLE'  
 /MAR280 '1980 PROPORTION WOMEN AGED 25-29 WHO ARE SINGLE'  
 /E480 '1980 PROPORTION OF WOMEN 15-34 WITH EDUCATION GT GRADE 4'  
 /W780 '1980 PROPORTION OF WOMEN 15-34 IN NON-AGRICULTURAL SECTOR'  
 /W1180 '1980 PROP WORKING WOMEN 15-34 IN NON-AGRICULTURAL SECTOR'  
 /CHWORK80 '1980 PROP CHILDREN 10-14 IN LABOR FORCE'  
 /CHSCL80 '1980 PROPORTION CHILDREN 7-15 ATTENDING SCHOOL'  
 /CHSCL180 '1980 PROPORTION CHILDREN 13-18 ATTENDING SCHOOL'  
 /IMN80 '1980 BRASS Q0 (\*1000) ESTIMATE BASED ON NORTH LIFE  
 TABLE'  
 /IMW80 '1980 BRASS Q0 (\*1000) ESTIMATE BASED ON WEST LIFE TABLE'  
 /SEX RAT80 '1980 PROPORTION MALES AGES 15-34'  
 /PERSON80 '1980 MEDICAL PERSONELL PER 1000 CMW AGED 15-44'  
 /PRIV80 '1980 PRIVATE DRUG STORES AND CLINICS PER 1000 CMW 15-44'  
 /PUB80 '1980 HOSPITALS AND CLINICS PER 1000 CMW 15-44'  
 /YEAR 'YEAR OF CENSUS'  
 /WEIGHT 'INDIVIDUAL WEIGHT'  
 /AGEMAR 'AGE AT FIRST MARRIAGE'  
 SAVE OUTFILE=OUTDATA1/KEEP=REGION PROVINCE URBAN AGE HAGE RELHH  
 MARSTAT  
 RELIGION HILEVEL HHILEVEL POB EDUC HEDUC PREVPROV  
 PREVMUN LIVELOC OCC HOCC USOCC HUSOCC USIND HUSIND  
 WKSTAT HWKSTAT CEB MATCH OWN  
 NKIDS NUKIDS C1 C2 C3 C4 C5 C6 C7 C8 UC1 UC2 UC3 UC4 UC5 UC6  
 UC7 UC8  
 MAR170 MAR270 E470 W770  
 W1170 CHWORK70 CHSCL70 CHSCL170 IMN70 IMW70  
 SEXRAT70 PERSON70 PRIV70 PUB70



MAR180 MAR280 E480 W780  
W1180 CHWORK80 CHSCL80 CHSCL180 IMN80 IMW80  
SEXRAT80 PERSON80 PRIV80 PUB80  
WEIGHT AGEMAR YEAR/COMPRESSED  
FINISH  
ADD FILES FILE=OUTDATA/FILE=OUTDATA1  
SAVE OUTFILE=OUTDATA2/COMPRESSED  
FINISH

APPENDIX B

THAILAND, 1970 CENSUS.

INPUT LOCATION, as substring of raw data rec	VARIABLE DESCRIPTION	STANDARD FILE (output) LOCATION
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WIFE INFORMATION:

YH(F(7))	Computed Household Number	1- 7
(1,1)	Region	8- 8
(2,2)	Changwat (Province)	9- 10
(4,2)	Amphoe (District)	11- 12
(6,2)	Municipal/Non-municipal	13- 14
(8,2)	Enumeration District number	15- 16
(10,1)	Split Enumeration District or Block	17- 17
(11,1)	Sanitary District	18- 18
(12,3)	Household number	19- 21
(125,11)	Weighting factor	22- 32
(26,2)	Age	33- 34
(20,2)	Relationship to HH head	35- 36
' ' (64,1)	Marital status	37- 38
'999'	Ethnicity (N.A.)	39- 41
' ' (28,1)	Residence Status	42- 44
' ' (29,1)	Religion	45- 47
' ' (30,2)	Citizenship	48- 50
(41,2)	School grade attended	51- 52
' ' (43,2)	Highest grade completed	53- 55
'99'	Education, other info (N.A.)	56- 57
' ' (40,1)	Literacy	58- 59
'99'	School attendance (N.A.)	60- 61
'99'	Migrant status (N.A.)	62- 63
' ' (32,2)	Place of birth	64- 67
'9999'	Place of birth, other info (N.A.)	68- 71
' ' (37,2)	Previous residence, Changwat	72- 75
' ' (39,1)	Previous residence, Municipality/Non	76- 79
' ' (36,1)	Length of residence	80- 81
'9999'	Residence/Migration, other info (N.A.)	82- 85
'99'	Age at marriage (N.A.)	86- 87
'99'	Duration of marriage, years (N.A.)	88- 89
'99'	Number of times married (N.A.)	90- 91
'99'	Duration of marriage, months (N.A.)	92- 93
'99'	Contraception: Ever use (N.A.)	94- 95
'99'	Contraception: Current use (N.A.)	96- 97
(65,2)	Children ever born, Total	98- 99
'99'	children ever born, male (N.A.)	100-101
'99'	children ever born, female (N.A.)	102-103
(67,2)	Live children, Total	104-105
'99'	live children, male (N.A.)	106-107
'99'	live children, female (N.A.)	108-109
'99'	Number of children who died (N.A.)	110-111
'99'	Date of last birth, month (N.A.)	112-113
'99'	Date of last birth, year (N.A.)	114-115
'99'	Last born is still alive (N.A.)	116-117
'99'	Number of births last year (N.A.)	118-119
' ' (74,3)	Main occupation last year	120-123
' ' (77,2)	Main industry last year	124-127
(69,3)	Occupation last week	128-130

(72,2)	Reason for not working	131-132
(79,1)	Work status, past year's occup.	133-133
(84,3)	Recode of Main occupation	134-136
(87,3)	Recode of last week's occupation	137-139

HUSBAND INFORMATION:

0,1 (f(1))	Computed: Husband match=1, else=0	140-140
(26,2)	Age, husband	141-142
(41,2)	School grade attended, husband	143-144
' '  (43,2)	Highest grade completed, husband	145-147
'99'	Education, other info, husband (N.A.)	148-149
' '  (40,1)	Literacy, husband	150-151
'99'	School attendance, husband (N.A.)	152-153
' '  (74,3)	Main occupation last year, husband	154-157
' '  (77,2)	Main industry last year, husband	158-161
(69,3)	Occupation last week, husband	162-164
(72,2)	Reason for not working, husband	165-166
(79,1)	Work status, past year occup., husband	167-167
(84,3)	Recode of Main occupation, husband	168-170
(87,3)	Last week occupation recode, husband	171-173

OWN (matched) CHILDREN INFORMATION:

OWN(f(1))	Computed: Number of matched own kids	174-174
K1(26,2)	Age of matched own kid No.1	175-175
K2(26,2)	Age of matched own kid No.2	176-176
K3(26,2)	Age of matched own kid No.3	177-177
K4(26,2)	Age of matched own kid No.4	178-178
K5(26,2)	Age of matched own kid No.5	179-179
k6(26,2)	Age of matched own kid no.6	180-180
K7(26,2)	Age of matched own kid No.7	181-181
K8(26,2)	Age of matched own kid No.8	182-182

CHILDREN (in Household) WITH NO MOTHER-MATCH:

OTH(f(2))	Computed: Number of unmatched kids in HH	183-184
K 1(26,2)	Age of unmatched kid in HH, No. 1	185-185
K 2(26,2)	Age of unmatched kid in HH, No. 2	186-186
K 3(26,2)	Age of unmatched kid in HH, No. 3	187-187
K 4(26,2)	Age of unmatched kid in HH, No. 4	188-188
K 5(26,2)	Age of unmatched kid in HH, No. 5	189-189
K 6(26,2)	Age of unmatched kid in HH, No. 6	190-190
K 7(26,2)	Age of unmatched kid in HH, No. 7	191-191
K 8(26,2)	Age of unmatched kid in HH, No. 8	192-192
K 9(26,2)	Age of unmatched kid in HH, No. 9	193-193
K10(26,2)	Age of unmatched kid in HH, No.10	194-194
K11(26,2)	Age of unmatched kid in HH, No.11	195-195
K12(26,2)	Age of unmatched kid in HH, No.12	196-196
K13(26,2)	Age of unmatched kid in HH, No.13	197-197
K14(26,2)	Age of unmatched kid in HH, No.14	198-198
K15(26,2)	Age of unmatched kid in HH, No.15	199-199
K16(26,2)	Age of unmatched kid in HH, No.16	200-200

THAILAND, 1980 CENSUS.

INPUT LOCATION, as substring of raw data rec	VARIABLE DESCRIPTION	STANDARD FILE (output) LOCATION
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WIFE INFORMATION:

YH(F(7))	Computed Household Number	1- 7
' ' (1,1)	Region	8- 9
(2,2)	Changwat (Province)	10- 11
(4,2)	Amphoe (District)	12- 13
(6,2)	Municipality/Non-municipality	14- 15
(8,2)	Enumeration District number	16- 17
(10,2)	Block or village number	18- 19
(12,1)	Sanitary District	20- 20
'9'	Urban-Rural (N.A.)	21- 21
(18,4)	Household size	22- 25
(91,7)	Weighting factor	26- 32
(34,2)	Age	33- 34
(27,2)	Relationship to HH head	35- 36
' ' (40,1)	Marital status	37- 38
'999'	Ethnicity (N.A.)	39- 41
' ' (48,2)	Language spoken in household	42- 44
' ' (52,1)	Religion	45- 47
' ' (36,1)	Residence status	48- 50
(38,2)	Highest grade completed	51- 52
' ' (55,2)	School grade attended	53- 55
'99'	Education, other (N.A.)	56- 57
' ' (57,1)	Literacy	58- 59
'99'	School attendance (N.A.)	60- 61
'99'	Migrant status (N.A.)	62- 63
' ' (53,2)	Place of birth	64- 67
'9999'	Place of birth, other info (N.A.)	68- 71
' ' (60,2)	Previous residence, Changwat	72- 75
' ' (62,2)	Previous residence, Amphoe	76- 79
(58,2)	Length of residence	80- 81
' ' (64,1)	Previous residence, Rural/Urban	82- 83
(65,2)	Reason for moving	84- 85
(67,2)	Age at marriage	86- 87
(89,2)	Duration of marriage, years	88- 89

'99'	Number of times married (N.A.)	90- 91
'99'	Marriage, other (N.A.)	92- 93
' ' (75,1)	Contraception: Ever use	94- 95
' ' (76,1)	Contraception: Current use	96- 97
(85,2)	Children ever born, Total	98- 99
'99'	children ever born, male (N.A.)	100-101
'99'	children ever born, female (N.A.)	102-103
(87,2)	Live children, Total	104-105
(69,2)	children living at home	106-107
(71,2)	children living elsewhere	108-109
(73,2)	Number of children who died	110-111
'99'	Date of last birth, month (N.A.)	112-113
'99'	Date of last birth, year (N.A.)	114-115
'99'	Last born is still alive (N.A.)	116-117
'99'	Number of births last year (N.A.)	118-119
' ' (41,3)	Occupation last year	120-123
' ' (44,3)	Main industry last year	124-127
(47,1)	Work status	128-128
(77,3)	Main occupation last week	129-131
(80,2)	Reason for not working	132-133
'999999'	Other work variables (N.A.)	134-139

HUSBAND INFORMATION:

0,1 (f(1))	Computed: Husband match=1, else=0	140-140
(34,2)	Age, husband	141-142
(38,2)	Highest grade completed, husband	143-144
' ' (55,2)	School grade attended, husband	145-147
'99'	Education, other (N.A.), husband	148-149
' ' (57,1)	Literacy, husband	150-151
'99'	School attendance (N.A.), husband	152-153
' ' (41,3)	Occupation last year, husband	154-157
' ' (44,3)	Main industry last year, husband	158-161
(47,1)	Work status, husband	162-162
(77,3)	Main occupation last week, husband	163-165
(80,2)	Reason for not working, husband	166-167
'999999'	Other work variables (N.A.), husband	168-173

OWN (matched) CHILDREN INFORMATION:

OWN(f(1))	Computed: Number of matched own kids	174-174
K1(34,2)	Age of matched own kid No.1	175-175
K2(34,2)	Age of matched own kid No.2	176-176
K3(34,2)	Age of matched own kid No.3	177-177
K4(34,2)	Age of matched own kid No.4	178-178
K5(34,2)	Age of matched own kid No.5	179-179
k6(34,2)	Age of matched own kid no.6	180-180
K7(34,2)	Age of matched own kid No.7	181-181
K8(34,2)	Age of matched own kid No.8	182-182

CHILDREN (in Household) WITH NO MOTHER-MATCH:

OTH(f(2))	Computed: Number of unmatched kids in HH	183-184
K 1(34,2)	Age of unmatched kid in HH, No. 1	185-185
K 2(34,2)	Age of unmatched kid in HH, No. 2	186-186
K 3(34,2)	Age of unmatched kid in HH, No. 3	187-187
K 4(34,2)	Age of unmatched kid in HH, No. 4	188-188

K 5(34,2)	Age of unmatched kid in HH, No. 5	189-189
K 6(34,2)	Age of unmatched kid in HH, No. 6	190-190
K 7(34,2)	Age of unmatched kid in HH, No. 7	191-191
K 8(34,2)	Age of unmatched kid in HH, No. 8	192-192
K 9(34,2)	Age of unmatched kid in HH, No. 9	193-193
K10(34,2)	Age of unmatched kid in HH, No.10	194-194
K11(34,2)	Age of unmatched kid in HH, No.11	195-195
K12(34,2)	Age of unmatched kid in HH, No.12	196-196
K13(34,2)	Age of unmatched kid in HH, No.13	197-197
K14(34,2)	Age of unmatched kid in HH, No.14	198-198
K15(34,2)	Age of unmatched kid in HH, No.15	199-199
K16(34,2)	Age of unmatched kid in HH, No.16	200-200

APPENDIX C

LIST OF VARIABLES ON THE ACTIVE FILE

NAME		POSITION
REGION	1980 REGION	1
	1 BANGKOK	
	2 CENTRAL	
	3 NORTH	
	4 NORTHEAST	
	5 SOUTH	
PROVINCE	PROVINCE	2
	1 KRABI	
	2 KANCHANABURI	
	3 KALASIN	
	4 KAMPHAENG PHET	
	5 KHON KAEN	
	6 CHANTHA BURI	
	7 CHCHOENGSAO	
	8 CHON BURI	
	9 CHAINAT	
	10 CHAIYAPHUM	
	11 CHUMPHON	
	12 CHAING RAI	
	13 CHIANG MAI	
	14 TRANG	
	15 TRAT	
	16 TAK	
	17 THON BURI	
	18 NAKHON NAYOK	
	19 NAKHON PATHOM	
	20 NAKHON PHANOM	
	21 NAKHON RATCHASIMA	
	22 NAKHON SI THAMMARAT	
	23 NAKHON SAWAN	
	24 NONTHABURI	
	25 NARATHIWAT	
	26 NAN	
	27 BURI RAM	
	28 PATHUM THANI	
	29 PRACHUAP KHIRI KHAN	
	30 PRACHIN BURI	
	31 PATTANI	
	32 BANGKOK	
	33 PRA NAKHON SI AYUTT	
	34 PHANGNGA	
	35 PHATTHALUNG	
	36 PHICIT	
	37 PHITSANULOK	
	38 PETCHABURI	
	39 PETCHABUN	
	40 PHRAE	
	41 PHUKET	

42 MAHA SARAKAM  
 43 MAE HONG SON  
 44 YALA  
 45 ROI ET  
 46 RANONG  
 47 RAYONG  
 48 RATCHABURI  
 49 LOP BURI  
 50 LAMPANG  
 51 LAM PHUN  
 52 LOEI  
 53 SI SA KET  
 54 SAKON NAKHON  
 55 SONGKHALA  
 56 SATUN  
 57 SAMUT PRAKAN  
 58 SAMUT SONGKHRAM  
 59 SAMUT SAKHON  
 60 SARABURI  
 61 SING BURI  
 62 SUKHOTHAI  
 63 SUPHAN BURI  
 64 SURAT THANI  
 65 SURIN  
 66 NONG KAI  
 67 ANG THONG  
 68 UDON THANI  
 69 UTTARADIT  
 70 UTHAI THANI  
 71 UBON RATCHATHANI  
 79 OTHER PROVINCE  
 81 ABROAD  
 99 UNKNOWN

URBAN	MUNICIPAL-NONMUNICIPAL STATUS	3
	1 RURAL	
	2 BANGKOK	
	3 CITY	
	4 TOWN	
	5 TAMBON	
AGE	AGE	4
HAGE	HUSBANDS AGE	5
RELHH	RELATIONSHIP TO HOUSEHOLD HEAD	6
	1 HEAD OF HOUSEHOLD	
	2 SPOUSE	
	3 CHILD	
	4 SON OR DAU-IN-LAW	
	5 OTHER RELS	
	6 ADOPTED CHILD	
	7 NON-RELATIVES	
	8 SERVANT	
	9 NON-INMATE	



	10	INMATE	
MARSTAT	MARITAL STATUS		7
	1	NEVER MARRIED	
	2	MARRIED	
	3	WIDOWED	
	4	DIVORCED	
	5	SEPARATED	
	6	UNKNOWN, PREV MARR	
	7	MONKS	
	9	UNKNOWN	
RELIGION	RELIGION		8
	1	BUDDHIST	
	2	CONFUCIST	
	3	ISLAM	
	4	CHRISTAN	
	5	HINDU	
	6	OTHER	
	7	NONE	
	9	UNKNOWN	
HILEVEL	SCHOOL GRADE ATTENDED		9
HHILEVEL	HUSBANDS SCHOOL GRADE ATTENDED		10
POB	PLACE OF BIRTH		11
	1	KRABI	
	2	KANCHANABURI	
	3	KALASIN	
	4	KAMPHAENG PHE'T	
	5	KHON KAEN	
	6	CHAN'THA BURI	
	7	CHCHOENGS'AO	
	8	CHON BURI	
	9	CHAINAT	
	10	CHAIYAPHUM	
	11	CHUMPHON	
	12	CHAING RAI	
	13	CHIANG MAI	
	14	TRANG	
	15	TRAT	
	16	TAK	
	17	THON BURI	
	18	NAKHON NAYOK	
	19	NAKHON PATHOM	
	20	NAKHON PHANOM	
	21	NAKHON RATCHASIMA	
	22	NAKHON SI THAMMARAT	
	23	NAKHON SAWAN	
	24	NONTHABURI	
	25	NARATHIWAT	
	26	NAN	
	27	BURI RAM	

28 PATHUM THANI  
 29 PRACHUAP KHIRI KHAN  
 30 PRACHIN BURI  
 31 PATTANI  
 32 BANGKOK  
 33 PRA NAKHON SI AYUTT  
 34 PHANGNGA  
 35 PHATTHALUNG  
 36 PHICIT  
 37 PHITSANULOK  
 38 PETCHABURI  
 39 PETCHABUN  
 40 PHRAE  
 41 PHUKET  
 42 MAHA SARAKAM  
 43 MAE HONG SON  
 44 YALA  
 45 ROI ET  
 46 RANONG  
 47 RAYONG  
 48 RATCHABURI  
 49 LOP BURI  
 50 LAMPANG  
 51 LAM PHUN  
 52 LOEI  
 53 SI SA KET  
 54 SAKON NAKHON  
 55 SONGKHALA  
 56 SATUN  
 57 SAMUT PRAKAN  
 58 SAMUT SONGKHRAM  
 59 SAMUT SAKHON  
 60 SARABURI  
 61 SING BURI  
 62 SUKHOTHAI  
 63 SUPHAN BURI  
 64 SURAT THANI  
 65 SURIN  
 66 NONG KAI  
 67 ANG THONG  
 68 UDON THANI  
 69 UTTARADIT  
 70 UTHAI THANI  
 71 UBON RATCHATHANI  
 79 OTHER PROVINCE  
 81 ABROAD  
 99 UNKNOWN

EDUC	HIGHEST GRADE COMPLETED	12
HEDUC	HUSBANDS HIGHEST GRADE COMPLETED	13
PREVPROV	PREVIOUS PROVINCE	14
	1 KRABI	
	2 KANCHANABURI	
	3 KALASIN	

4 KAMPHAENG PHET  
5 KHON KAEN  
6 CHANTHA BURI  
7 CHCHOENGSAO  
8 CHON BURI  
9 CHAINAT  
10 CHAIYAPHUM  
11 CHUMPHON  
12 CHAING RAI  
13 CHIANG MAI  
14 TRANG  
15 TRAT  
16 TAK  
17 THON BURI  
18 NAKHON NAYOK  
19 NAKHON PATHOM  
20 NAKHON PHANOM  
21 NAKHON RATCHASIMA  
22 NAKHON SI THAMMARAT  
23 NAKHON SAWAN  
24 NONTHABURI  
25 NARATHIWAT  
26 NAN  
27 BURI RAM  
28 PATHUM THANI  
29 PRACHUAP KHIRI KHAN  
30 PRACHIN BURI  
31 PATTANI  
32 BANGKOK  
33 PRA NAKHON SI AYUTT  
34 PHANGNGA  
35 PHATTHALUNG  
36 PHICIT  
37 PHITSANULOK  
38 PETCHABURI  
39 PETCHABUN  
40 PHRAE  
41 PHUKET  
42 MAHA SARAKAM  
43 MAE HONG SON  
44 YALA  
45 ROI ET  
46 RANONG  
47 RAYONG  
48 RATCHABURI  
49 LOP BURI  
50 LAMPANG  
51 LAM PHUN  
52 LOEI  
53 SI SA KET  
54 SAKON NAKHON  
55 SONGKHALA  
56 SATUN  
57 SAMUT PRAKAN  
58 SAMUT SONGKHRAM  
59 SAMUT SAKHON  
60 SARABURI

	61	SING BURI	
	62	SUKHOTHAI	
	63	SUPHAN BURI	
	64	SURAT THANI	
	65	SURIN	
	66	NONG KAI	
	67	ANG THONG	
	68	UDON THANI	
	69	UTTARADIT	
	70	UTHAI THANI	
	71	UBON RATCHATHANI	
	79	OTHER PROVINCE	
	81	ABROAD	
	99	UNKNOWN	
PREVMUN	PREVIOUS MUNICIPALITY		15
	1	RURAL	
	2	URBAN	
	9	UNKNOWN	
LIVELOC	TIME LIVED IN LOCALITY		16
	0	LESS THAN 1 YEAR	
	1	1-1.9 YEARS	
	2	2-2.9 YEARS	
	3	3-3.9 YEARS	
	4	4-4.9 YEARS	
	5	5-9.9 YEARS	
	6	10-14.9 YEARS	
	7	15-19.9 YEARS	
	8	20 YEARS AND OVER	
	9	UNKNOWN	
OCC	LAST WEEKS OCCUPATION		17
HOCC	HUSBANDS LAST WEEK OCCUPATION		18
USOCC	USUAL OCCUPATION		19
HUSOCC	HUSBANDS USUAL OCCUPATION		20
USIND	USUAL INDUSTRY		21
HUSIND	HUSBANDS USUAL INDUSTRY		22
WKSTAT			23
	0	NOT IN LF-NOT STATED	
	1	EMPLOYER	
	2	SELF-EMPLOYED	
	3	GOVERNMENT EMPLOYEE	
	4	PRIVATE EMPLOYEE	
	5	FAMILY WORKER	
	9	UNKNOWN	
HWKSTAT	HUSBANDS WORK STATUS		24
	0	NOT IN LF-NOT STATED	

	1	EMPLOYER	
	2	SELF-EMPLOYED	
	3	GOVERNMENT EMPLOYEE	
	4	PRIVATE EMPLOYEE	
	5	FAMILY WORKER	
	9	UNKNOWN	
CEB		CHILDREN-EVER-BORN	25
MATCH			26
	0	NO HUSBAND MATCH	
	1	HUSBAND MATCH	
OWN		OWN-CHILDREN AGED 2	27
NKIDS		NUMBER OF MATCHED CHILDREN	28
NUKIDS		NUMBER OF UNMATCHED CHILDREN	29
C1		AGE OF 1ST MATCHED CHILD	30
C2		AGE OF 2ND MATCHED CHILD	31
C3		AGE OF 3RD MATCHED CHILD	32
C4		AGE OF 4TH MATCHED CHILD	33
C5		AGE OF 5TH MATCHED CHILD	34
C6		AGE OF 6TH MATCHED CHILD	35
C7		AGE OF 7TH MATCHED CHILD	36
C8		AGE OF 8TH MATCHED CHILD	37
UC1		AGE OF 1ST UNMATCHED CHILD	38
UC2		AGE OF 2ND UNMATCHED CHILD	39
UC3		AGE OF 3RD UNMATCHED CHILD	40
UC4		AGE OF 4TH UNMATCHED CHILD	41
UC5		AGE OF 5TH UNMATCHED CHILD	42
UC6		AGE OF 6TH UNMATCHED CHILD	43
UC7		AGE OF 7TH UNMATCHED CHILD	44
UC8		AGE OF 8TH UNMATCHED CHILD	45
MAR170		1970 PROPORTION WOMEN AGED 15-24 WHO ARE SINGLE	46
MAR270		1970 PROPORTION WOMEN AGED 25-29 WHO ARE SINGLE	47
E470		1970 PROPORTION OF WOMEN 15-34 WITH EDUCATION GT GRADE 4	48

W770	1970 PROPORTION OF WOMEN 15-34 IN NON-AG SECTOR	49
W1170	1970 PROP WORKING WOMEN 15-34 IN NON-AG SECTOR	50
CHWORK70	1970 PROP CHILDREN 10-14 IN LABOR FORCE	51
CHSCL70	1970 PROPORTION CHILDREN 7-15 ATTENDING SCHOOL	52
CHSCL170	1970 PROPORTION CHILDREN 13-18 ATTENDING SCHOOL	53
IMN70	1970 BRASS Q0 (*1000) ESTIMATE (NORTH LIFE TABLE)	54
IMW70	1970 BRASS Q0 (*1000) ESTIMATE (WEST LIFE TABLE)	55
SEXRAT70	1970 PROPORTION MALES AGES 15-34	56
PERSON70	1970 MEDICAL PERSONELL PER 1000 CMW AGED 15-44	57
PRIV70	1970 PRIVATE DRUG STORES AND CLINICS PER 1000 CMW 15-44	58
PUB70	1970 HOSPITALS AND CLINICS PER 1000 CMW 15-44	59
MAR180	1980 PROPORTION WOMEN AGED 15-24 WHO ARE SINGLE	60
MAR280	1980 PROPORTION WOMEN AGED 25-29 WHO ARE SINGLE	61
E480	1980 PROPORTION OF WOMEN 15-34 WITH EDUCATION GT GRADE 4	62
W780	1980 PROPORTION OF WOMEN 15-34 IN NON-AG SECTOR	63
W1180	1980 PROP WORKING WOMEN 15-34 IN NON-AG SECTOR	64
CHWORK80	1980 PROP CHILDREN 10-14 IN LABOR FORCE	65
CHSCL80	1980 PROPORTION CHILDREN 7-15 ATTENDING SCHOOL	66
CHSCL180	1980 PROPORTION CHILDREN 13-18 ATTENDING SCHOOL	67
IMN80	1980 BRASS Q0 (*1000) ESTIMATE (NORTH LIFE TABLE)	68
IMW80	1980 BRASS Q0 (*1000) ESTIMATE (WEST LIFE TABLE)	69
SEXRAT80	1980 PROPORTION MALES AGES 15-34	70
PERSON80	1980 MEDICAL PERSONELL PER 1000 CMW AGED 15-44	71
PRIV80	1980 PRIVATE DRUG STORES AND CLINICS PER 1000 CMW 15-44	72
PUB80	1980 HOSPITALS AND CLINICS PER 1000 CMW 15-44	73
WEIGHT	INDIVIDUAL WEIGHT	74
AGEMAR	AGE AT FIRST MARRIAGE	75
YEAR	YEAR OF CENSUS	76

Note Position refers to the sequence of the variable on the SPSSX system file