

# **Report on the Data Processing Preparations Cambodia Labour Force and Child Labour Survey 2011-12**

## **1. Introduction**

The Cambodia Labor Force and Child Labour Survey 2011-12 (CLF-CLS) was conducted by the National Institute of Statistics (NIS), Ministry of Planning, in close collaboration with the ILO. The data collection of the CLF-CLS 2011-12 was conducted for 48 days, starting on 26 February 2012 and ending on 13 April 2012.

The completed questionnaires were submitted and processed at NIS. Editing and coding of the completed questionnaires was done manually. Data entry was done with the use of the Census and Survey Processing System (CSPPro) of the United States Bureau of Census. The NIS staff was used to operate the data processing of the survey which was responsibility for data capture, data cleaning, and post data cleaning computer programs needed to come up with the statistical tables.

Data editors were responsible for checking the correctness and consistency of the responses, assigning numeric codes to the responses in order to facilitate computer processing and verifying error listings and other computer outputs.

Data entry operators from NIS was responsible for encoding entries from the questionnaires, verifying the data entries, checking the completeness of the records, correcting the errors that were committed during data entry and other errors not detected during the manual processing. The second data entry was carried out after checking errors and for unsatisfactory solution.

## **2. Training for data processing**

Training for data processing staff was conducted for three days starting from 18 to 20 April 2012. The training was participated by 15 staffs in which 5 were coders/editors and 10 were data entry operators, and those were trained together. Training was instructed by Mr. Yip Thavrin, Mr. Sam Soksotheavuth (core staff for computer processing), Mr. Oeur Sophal, and Mr. Teav Rongsa (core staff for manual processing). The schedule of the training was:

Day 1: 18 April 2012

Manual of editing and coding

Data editors were trained how to check the correct entries in completed questionnaires and consistency between responses, to assign numeric codes to responses and to verify error listings and other computer outputs. The 4-digit codes of the International Standard Classification of Occupations, 2008 (ISCO 08) and 4-digit codes of the International Standard Industrial Classification, Revision 4 (ISIC Rev.4) were used. All 12 modules from section A to L of the questionnaire of the survey were explained.

However, the receipt and management of the completed questionnaires which submitted from the field work were also instructed such as how to check missing on cover

page, counting the number of questionnaires for each Enumeration Area (EA) that contained 16 sample households, ranking checking, and consistency of sections.

Day 2: 19 April 2012

Manual of data entry programmes

Data entry operators were trained how to encode entries from the questionnaires, verify the data entries, check the completeness of the records, and correct errors that were committed during data entry and other errors not detected during the manual processing.

Furthermore, the coders/editors and the data entry operators were also trained how to open and close the CSPro application for data entry, create the files for each EA for the first data entry and the second data entry, skip for each question, correct the value of each variable which was wrong answer, check the rank and consistency checking, explain the error messages when error window were appeared, edit the matching of between first entry and second entry, and modify after the matching, etc.

Day 3: 20 April 2012

Testing of manual editing/coding and data entry

For the last day of training, reviewing from the first and second day was made, particularly for encoding four-digit of ISCO 08 and ISIC Rev.4. Participants were tested by using the completed questionnaire from the survey. Each coder/editor did manual editing and coding for two questionnaires. Also, each data entry operator was tested after finishing manual processing. Each operator did data entry on computer for two questionnaires.

Testing of coding and editing were instructed by Mr. Oeur Sopha and Mr. Teav Rongsa whereas testing of data entry instructed by Mr. Yip Thavrin and Mr. Sam Soksotheavuth.

**Table 1 NIS staff participated in the training on data processing**

No	Name	Position
1	Mr. Yip Thavrin	Trainer
2	Mr. Sam Soksotheavuth	Trainer
3	Mr. Oeur Sopha	Trainer
4	Mr. Teav Rongsa	Trainer
5	Ms. Khon Neary	Coder/Editor
6	Ms. Chhin Phearum	Coder/Editor
7	Ms. Heng Vichet	Coder/Editor
8	Mr. Nim Saomony	Coder/Editor
9	Mr. Khit Thona	Coder/Editor
10	Mr. Khieu Khemarin	Data Entry Operator
11	Ms. Khon Naren	Data Entry Operator
12	Ms. Chhuon Sokunthea	Data Entry Operator
13	Ms. Vuth Sokun	Data Entry Operator
14	Ms. San Sopha	Data Entry Operator
15	Ms. Yim Rany	Data Entry Operator
16	Ms. Ty Chankanha	Data Entry Operator
17	Ms. Mey Marady	Data Entry Operator
18	Ms. Leng Sreypao	Data Entry Operator
19	Ms. Chea Sophy	Data Entry Operator

### **3. Activities of data processing**

#### **3.1 Reception of questionnaire**

After the field work of data collection operation, the completed questionnaires were submitted by supervisors to Mr. Oeur Sopha and Mr. Teav Rongsa (as supervisors of coding and editing) for coding and editing at the National Institute of Statistics (NIS). The reception was started from 25 to 30 April 2012.

#### **3.2 Coding and editing**

When the reception was finished, the coders/editors had to input the codes and editing all those questionnaires by province. After coding/editing was completed for one EA consisting of 16 households, then the supervisor of coding/editing had to submit them to Mr. Yip Thavrin and Mr. Sam Soksotheavuth (as supervisor of data entry). The coding/editing activity was carried out from 01 May to 15 June 2012.

#### **3.3 Data entry**

After finishing coding and editing the completed questionnaires, the data entry was operated. The first data entry was started on 07 May 2012 and the second entry was started on 09 May 2012. Hence, both data entries were finished on 24 June 2012.

#### **3.4 Data matching**

Data matching was done by Mr. Yip Thavrin as CSPro Applications developer and programmer, by printing out the lists of the first and second entry (comparison list) of each operator in order to edit and check the correct value of variable by looking or checking with the actual questionnaires and go to the screen of computer to correct it. The matching data was started 25 June to 02 July 2012.

#### **3.5 Data Cleaning**

After data matching, data consistency checking or cross-referencing was done by the CSPro batch application designed for this purpose. The list of questionnaires and their corresponding errors were listed in the error list file that would be printed out on the papers to correct the errors until zero error-message. Data cleaning was carried out on 03 to 08 July 2012.

#### **3.6 Exportation**

Cambodia Labor Force and Child Labor Survey 2011-12 was used by CSPro application then data were stored in the flat file or text file. Therefore, Mr. Yip Thavrin has exported data from the flat file into SPSS format only. However, the users can convert themselves from SPSS into any formats if they needed. The exportation of the data was made on 09 July 2012.

**Graph 1 Data Processing System  
Cambodia Labour Force and Child Labour Survey 2011-12**

