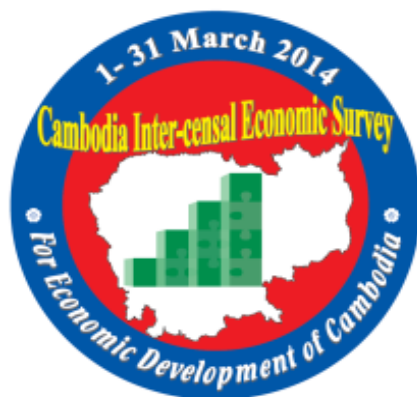


KINGDOM OF CAMBODIA
Nation- Religion- King

Cambodia Inter-censal Economic Survey 2014

Manual on Mapping Work



National Institute of Statistics, Ministry of Planning

Phnom Penh, Cambodia

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Chapter 1

Outline of the Mapping Work for the CIES2014

I. Purpose of the Mapping Work for the CIES2014

The mapping work for the CIES2014 aims to newly draw the Village and EA Boundary Maps (hereinafter referred to as “Village/EA map”s) of the selected Villages or EAs (hereinafter referred to as “Village/EA”s) on the basis of the maps for the EC2011 and information obtained from the field work.

II. Necessity of Mapping

The Maps of the CIES2014, basically, are based on the EC2011. Although the latter was revised or updated to some extent for the EC2011, the three years have passed and it cannot be denied that the village boundary on the map of the EC2011 has become out-of-date for identifying exactly them in the field for the CIES2014.

III. Characteristics of the Mapping Work

The mapping work for the CIES2014 has the following characteristics or differences in comparison with the one of the 2011 Economic Census.

1- Target Villages/EAs

The target Villages/EAs of the mapping work are the following areas and they are just 30 selected Villages/EAs in 14 provinces.

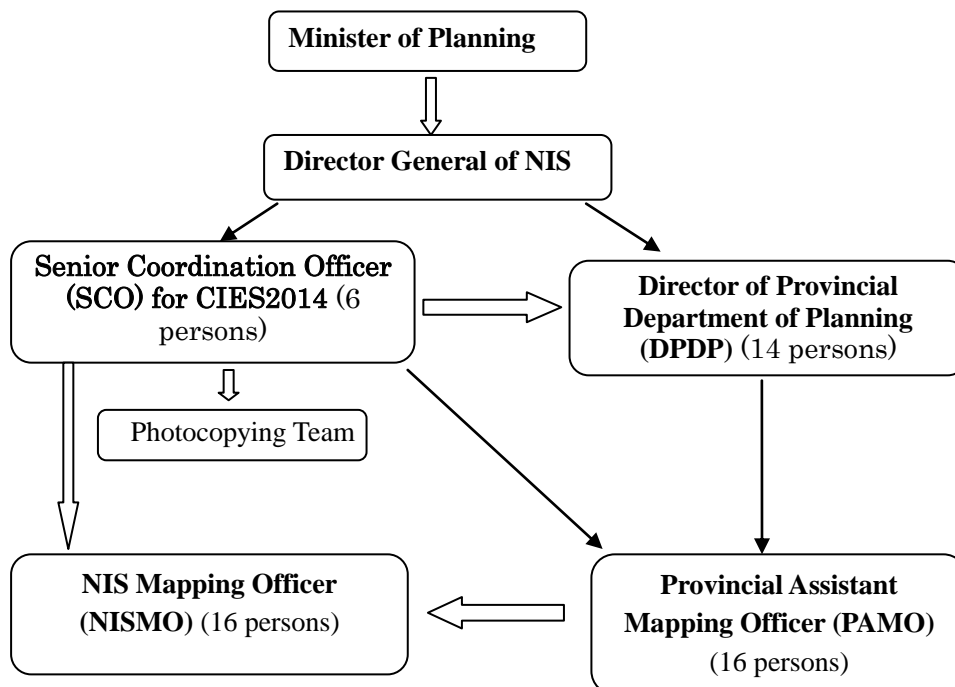
- a. Villages/EAs where their boundaries changed after the EC2011
- b. Villages/EAs where the newly developed areas are located
- c. Villages/EAs where there were 130 establishments or more in the EC2011

2- Officers in charge of mapping work

- The mapping work is carried out by Mapping Officers who are selected from among the staff members of the NIS (hereinafter referred to as “NISMO”s) with the assistance of Provincial Assistant Mapping Officers (hereinafter referred to as “PAMO”s) who are selected from among the staff members of the Provincial Department of Planning (hereinafter referred to as “PDP”).
- NISMOS are responsible for drawing and updating the Village/EA maps of the Villages/EAs allotted to them.
- PAMOs are responsible for making contact with the village chiefs, arranging the field work and accompanying the NISMOS to the assigned Village/EA for mapping activity. PAMOs who are familiar with the situation and have experience with the CIPS2013 Mapping Work is required to be involved in this work, in order to confirm the Village/EA boundary properly in accordance with the situation of real field. In this context, the methods described below are adopted taking into consideration budget limitation due to sampling survey.

IV. Organization Chart for the Mapping Work of the CIES2014

Chart 1 Organization for the Mapping Work



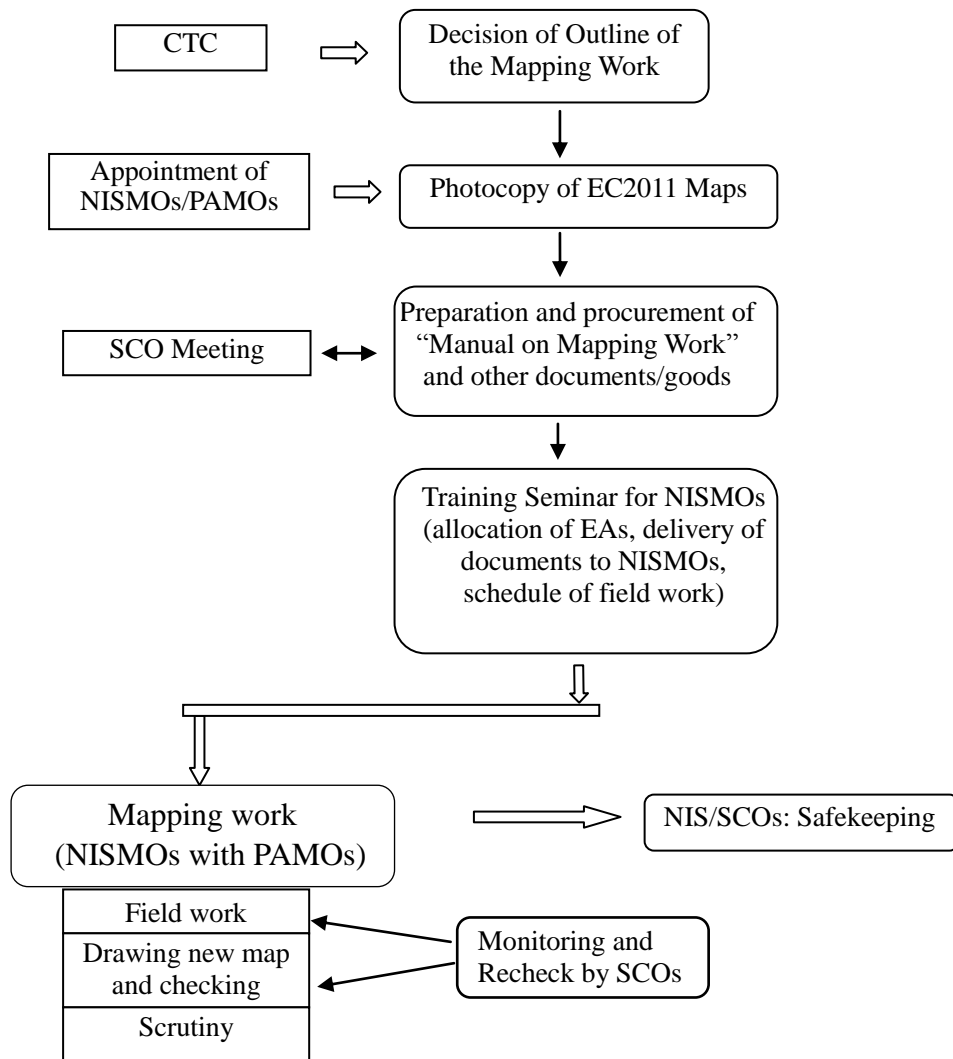
V. Target areas

The target Villages/EAs, as described above, are just the 30 Villages/EAs selected from those of the 2011 Economic Census for this mapping work of the CIES2014.

VI. Revision of the map

The mapping work of CIES2014 must be carried out within 3 days. After the mapping work, the areas concerned may happen to be changed. The changes can be found by the enumerators when they try to confirm the area of their in-charged Villages/EAs at their field survey of the CIES2014 and at the time they find the changes of area, they will be obliged to revise the map.

Chart 2 Whole Procedure of the Mapping Work for the CIES2014



Chapter 2

Tasks on the Mapping Work

I. Tasks of SCOs

SCOs have comprehensive responsibility on the overall mapping work and carry out the following tasks:

1. Organization and Supervision of photocopying team

SCOs organize a photocopying team and command them to photocopy maps of the 2011 Economic Census as follows:

- a. Maps to be photocopied:
 - ♦ Village/EA maps of all Villages/EAs selected for the mapping work of the CIES2014
- b. These photocopied maps should be stapled by village.
- c. Maps should be photocopied in darker colour so that they can be clear.
- d. The photocopied map should be checked by SCOs in order to confirm whether all the maps are photocopied or not.

2. Arrangement of Mission letter/Request letter for cooperation

SCOs arrange a mission letter and request letter for cooperation.

3. Holding a training seminar for NISMOS

SCOs hold a training seminar for 1 day on 8 November 2013 and instruct tasks which NISMOS should accomplish.

4. Monitoring the field work and checking maps

- a. To monitor the progress of activities of NISMOS and PAMOs, and give advices or instructions.
- b. To carry out the recheck on the newly-drawn maps and other related documents.

5. Receipt and Safekeeping of the documents

SCOs receive all the documents from NISMOS and keep safely them.

II. Tasks of DPDPs

DPDPs have overall responsibility in terms of administrative issues on the field work of the mapping work and carry out the following tasks:

- Appointment of the PAMOs
- Necessary coordination with the district offices, commune offices, village chiefs, etc.

III. Tasks of NISMOS

- a. NISMOS attend the training seminar to learn their duties and receive necessary documents and goods. And then, they confirm Villages/EAs where they are responsible for the mapping work.
- b. NISMOS carry out the mapping work in accordance with “Chapter 3 Procedure of the Mapping Work”.
 - NISMOS are responsible for all assigned Villages/EAs.
 - The mapping work should be done within one day for one Village/EA.
 - When NISMOS have problems or difficulties which they cannot solve on the spot,

they should make contact with SCOs to gain exact solution.

- c. NISMOS write down the name, address, number of persons engaged, etc. of the establishments with 50 persons engaged or more and submit it to the SCOs, if they find those establishments in the Villages/EAs in charge.

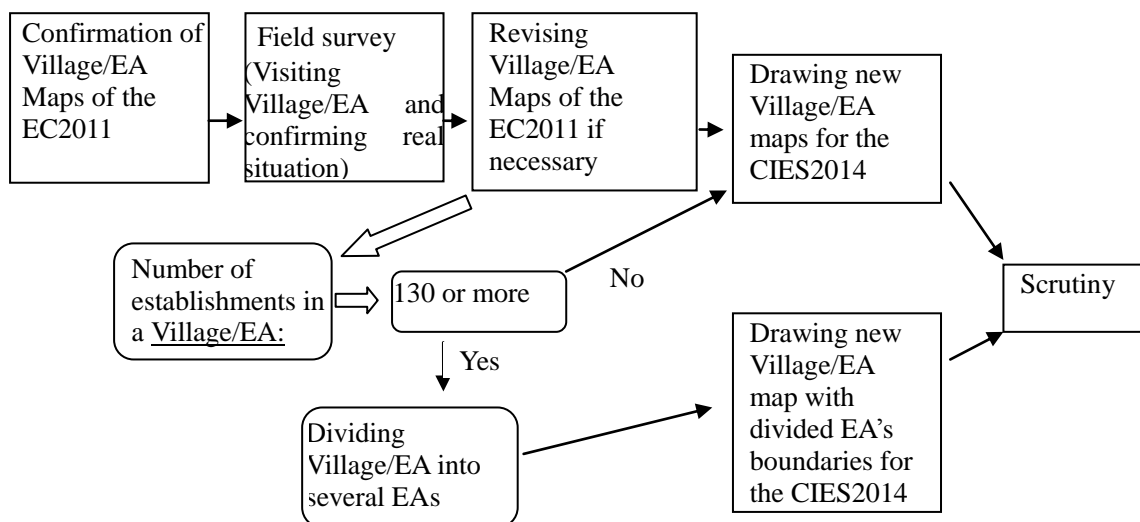
VI. Tasks of PAMOs

As mentioned before, PAMOs confirm the location of Villages/EAs, make contact with the village chiefs, arranging the field work and accompanying NISMOS to the field.

Chapter 3

Procedure of the Mapping Work

Chart 3 Flow of the Mapping Work



I. Confirmation and Check of the 2011 Economic Census map

- 1- NISMOs confirm all the documents which are used for their mapping work.
- 2- NISMOs check the 2011 Economic Census maps on the desk from the following viewpoints:
 - ♦ Landmarks are written clearly to present the location of boundaries of Village/EA or not; When they find some problems, they mark with colour pencil for confirmation in the field.
- 3- NISMOs confirm whether the Village/EA should be divided into two or more EAs.

Box 1. Criteria of division of EA

- a. In the following cases where the Village/EA should be divided into two or more EAs:
 - ♦ Number of establishments in a Village/EA is 130 or more.
- b. Data sources of the number of establishments:
 - 1- Results of the EC2011 which is informed in the training seminar.
 - 2- Information of the village chief.
 - 3- Field survey.

II. Field survey

- 1- NISMOs visit village chief' office to confirm the following issues:
 - a. Boundaries of Village/EA on the 2011 Economic Census map are real or not comparing with the village map which village chief owned;
 - b. Position, name etc. of landmarks on the 2011 Economic Census map are exact or not;
 - c. Number of establishments in the Village/EA is 130 or more or not;
 - d. Others.
- 2- NISMOs go to the field of Village/EA allotted to them to confirm boundaries, landmarks on the map.
Especially, the spots which have differences or problems should be checked carefully.

III. Revising Village/EA Map

NISMOs are obliged to revise the 2011 Economic Census map by the way of writing the exact boundaries, landmarks on the map with red colour pencil.

IV. Division of Village/EA

- 1- As mentioned above, if the number of establishments in a target Village/EA is 130 or more, the necessary division of EA should be done in accordance with “Box 2. **How to divide a Village/EA into two or more EAs**”.
- 2- Regarding the EA, the serial number of EA should be set and one of the EAs should be selected through the method explained in “Box 3 How to assign the serial number of EA to each divided EA”.

Box 2. How to divide a Village/EA into two or more EAs

- a. Village/EA to be divided is judged by the NISMO based on the number of establishments in the Village/EA.
- b. Basic points to consider regarding division of Village/EA are as follows:
 - ♦ Number of establishments of one divided EA should be 50 to 75.
This number of establishments is based on the EC2011, information from the village chief and field survey.
 - ♦ Boundaries of EA should be delineated by the clear landmarks such as road, street, canal, river, etc.

Box 3 How to assign the serial number of EA to each divided EA

- a. Horizontally, to assign the first serial number of EA to an EA situated at the top side of the Village/EA map.
 - b. Vertically, to assign the first serial number of EA to an EA situated at the left side of the village/EA map.
- For example, supposing there are 3 divided EAs in a Village/EA, we should give “EA1” to the left one, give “EA2” to the next one and “EA3” to the last one in horizontally.

<Examples>

EA1	EA2
EA3	

EA1	
EA2	EA3

EA1	EA2
EA3	

V. Drawing new map

1- After the field survey, NISMOs draw new map of the Village/EA on the blank sheet of the Village/EA map on the basis of the revised maps of the EC2011 in accordance with “legend”.

The maps to be newly drawn for the CIES2014 are as follows:

- the number of establishments in the Village/EA is 130 or more.

- ♦ Village map as a whole
- ♦ Village map with new boundaries of divided EAs
- ♦ EA map

2- Points of attention are as follows:

- a. Shape of area of Village/EA
- b. Boundaries (in red colour) and landmark
- c. North direction
- d. Number of establishments
- e. Code of EA/serial number of divided EA
- f. Others

3- Regarding the Village/EA map, it is to be drawn on the blank map from the revised map of the 2011 Economic Census by the following way:

- a. The EA should be enlarged.
- b. Code of EA should be put at the next of the Village code or EA code.

VI. Scrutiny of the newly-drawn map

NISMOs are requested to carry out the scrutiny of the maps and other documents after drawing the new maps by the following way:

1- Newly-drawn maps for the CIES2014:

- In case of the number of establishments in the village/EA is 130 or more.

- ♦ Village map for a whole village
- ♦ Village map with boundaries of EAs
- ♦ EA map

2- Points of scrutiny are as follows:

Regarding the newly-drawn maps for the CIES2014:

- ♦ Revisions are reasonable or not;
- ♦ Revised boundaries are clear with any landmarks or not;
- ♦ Revisions are done according to legend or not;
- ♦ Codes of Village and EAs are exact or not;
- ♦ Geographical shapes of Village/EA are similar to the revised one or not;
- ♦ Boundaries of Village/EA are clear with any landmarks or not;
- ♦ North direction is exact or not;
- ♦ Maps are drawn according to legend or not;
- ♦ Others.

3- Resurvey after the scrutiny and recheck by the SCO

As a result of the scrutiny and recheck by the SCO, when serious problems on the boundaries of Village/EA are found, NISMOS are obliged to resurvey for confirmation. If necessary, some revision of the maps should be done by the NISMOS.

VII. Arrangement and Submission of all documents

After the scrutiny, NISMOS are obliged to do the following tasks:

- 1- NISMOS collect and compile the Village/EA map by village and arrange them in order of the code of Village and EA.
- 2- NISMOS submit the List of Village/EA Maps and all the related documents to the SCOs by November 15, 2013.

VIII. Debrief Meeting

SCOs hold the debrief meeting and NISMOS report the results of mapping work at the meeting.

Mapping Work for CIES2014

List of Villages and EA

	Province
Name	
code	

	Map of EC2011 (to be revised)		Number CIES2014 (Newly drawn)
Total of Number of Map	Village	EA	EA

No.	Map of EC2011 (to be revised) Code				No. of Est in the Map of EC2011	Number CIES2014 (Newly drawn)	Other
	Dist	Comm	Village	EA		EA	
	1	2	3	4	5	6	7
1							
2							
3							
4							
5							

Name of NISMO :

Date:....., Signature.....