

**National Institute of Statistics, Ministry of Planning
The Kingdom of Cambodia**

Project on Improving Official Statistics in Cambodia Phase 3

Project Completion Report

MARCH 2015

Japan International Cooperation Agency (JICA)

**Statistical Information Institute for Consulting and Analysis
Japan Economic Research Institute Inc.**

IL
JR
15-034

Contents

Exchange Rate.....	iii
Abbreviation.....	v
Chapter 1. Background, purposes and targets of the project	
Section 1. Background and purposes of the project.....	1
Section 2. Targets, outputs and indicators of the project.....	2
Chapter 2. The structure and the schedule of the project	
Section 1. Project implementation framework.....	5
Section 2. Project team functional diagram.....	6
Section 3. Schedule of the project.....	7
1. Schedule of the whole project.....	7
2. Implementation of EC 2011.....	8
3. Implementation of CIPS 2013.....	16
4. Implementation of CIES 2014.....	23
5. Implementation of RSCIP.....	30
Chapter 3. Outputs and indicators of the project	
Section 1. EC 2011.....	33
Section 2. CIPS 2013.....	41
Section 3. CIES 2014.....	46
Section 4. RSCIP.....	51
Chapter 4. Outputs of technical assistance	
Section 1. EC 2011.....	53
Section 2. CIPS 2013.....	92
Section 3. CIES 2014.....	98
Section 4. RSCIP.....	115
Chapter 5. Inputs of technical assistance	
Section 1. Dispatch of Japanese experts.....	119
Section 2. Provision of technical equipment.....	121
Section 3. Expenditure in Cambodia.....	122
Section 4. Training course in JAPAN.....	123
Attachment	
1. Records of JCC.....	125
2. List of reports and technical equipment.....	183

3. Plan of operation 195

Exchange Rate

2010/10	: 1 US dollar	= 83.67 Yen
2010/11	: 1 US dollar	= 81.23 Yen
2010/12	: 1 US dollar	= 84.16 Yen
2011/1	: 1 US dollar	= 82.86 Yen
2011/2	: 1 US dollar	= 82.16 Yen
2011/3	: 1 US dollar	= 81.73 Yen
2011/4	: 1 US dollar	= 82.87 Yen
2011/5	: 1 US dollar	= 81.96 Yen
2011/6	: 1 US dollar	= 80.86 Yen
2011/7	: 1 US dollar	= 80.99 Yen
2011/8	: 1 US dollar	= 77.83 Yen
2011/9	: 1 US dollar	= 76.79 Yen
2011/10	: 1 US dollar	= 76.63 Yen
2011/11	: 1 US dollar	= 75.84 Yen
2011/12	: 1 US dollar	= 77.95 Yen
2012/1	: 1 US dollar	= 77.91 Yen
2012/2	: 1 US dollar	= 76.60 Yen
2012/3	: 1 US dollar	= 80.48 Yen
2012/4	: 1 US dollar	= 82.50 Yen
2012/5	: 1 US dollar	= 81.07 Yen
2012/6	: 1 US dollar	= 79.26 Yen
2012/7	: 1 US dollar	= 79.45 Yen
2012/8	: 1 US dollar	= 78.31 Yen
2012/9	: 1 US dollar	= 78.63 Yen
2012/10	: 1 US dollar	= 77.68 Yen
2012/11	: 1 US dollar	= 79.65 Yen
2012/12	: 1 US dollar	= 82.11 Yen
2013/1	: 1 US dollar	= 85.81 Yen
2013/2	: 1 US dollar	= 91.04 Yen
2013/3	: 1 US dollar	= 91.84 Yen
2013/4	: 1 US dollar	= 94.19 Yen
2013/5	: 1 US dollar	= 97.84 Yen
2013/6	: 1 US dollar	= 101.03 Yen
2013/7	: 1 US dollar	= 98.07 Yen
2013/8	: 1 US dollar	= 98.10 Yen
2013/9	: 1 US dollar	= 98.04 Yen
2013/10	: 1 US dollar	= 98.29 Yen
2013/11	: 1 US dollar	= 98.25 Yen

2013/12 : 1 US dollar = 102.19 Yen
2014/1 : 1 US dollar = 104.71 Yen
2014/2 : 1 US dollar = 102.46 Yen
2014/3 : 1 US dollar = 102.20 Yen
2014/4 : 1 US dollar = 102.82 Yen
2014/5 : 1 US dollar = 102.58 Yen
2014/6 : 1 US dollar = 101.68 Yen
2014/7 : 1 US dollar = 103.41 Yen
2014/8 : 1 US dollar = 102.39 Yen
2014/9 : 1 US dollar = 103.77 Yen
2014/10 : 1 US dollar = 109.45 Yen
2014/11 : 1 US dollar = 109.06 Yen
2014/12 : 1 US dollar = 117.58 Yen
2015/1 : 1 US dollar = 120.48 Yen
2015/2 : 1 US dollar = 117.93 Yen
2015/3 : 1 US dollar = 119.03 Yen

Abbreviation

ARO : Assistant Regional Officer

CIES : Cambodia Inter-Censal Economic Statistics Survey 2014

CIPS : Cambodia Inter-Censal Population Survey 2013

CJCC : Cambodia – Japan Cooperation Center

CTC : Census Technical Committee

EA : Enumeration Area

GIS : Geographic Information System

JCC : Joint Coordinating Committee

MOP : Ministry of Planning

NIS : National Institute of Statistics

NCC : National Census Committee

NSC : National Steering Committee for Census Information and Education Campaign

PDP : Provincial Department of Planning

PES : Post Enumeration Survey

RO : Regional Officer

SAS : Small Area Statistics

SCO : Senior Census Officer

TOT : Training of Trainer

Chapter 1. Background, purposes and targets of the project

Section 1. Background and purposes of the project

Development in Cambodia has been slow due to the effect by civil war. The country has tackled to improve implementation skills of National Institute of Statistics (NIS), responsible for the statistics of Cambodia, by placing promotion of good governance on the most important field to bring about the sustainable growth and stable society and development of statistics and information usable for planning and monitoring of development policies. Because NIS was lack of experience to implement the governmental statistics for all targets and needed to improve the skills to implement the governmental statistics and per the request of the Cambodian government, the Japanese government executed “Cambodian government statistical skills improvement project” from August 2005 to March 2007 and trained NIS staff, provincial planning departments staff and line ministries staff in charge of statistics about the government statistics. In addition, Japanese government has carried out the phase II of the same project from April 2007 to September 2010 and trained staff to improve implementation skills of NIS for Population Census by supporting implementation of Population Census 2008. These training helped improve the governmental statistical skills. But as population census is implemented once in ten years, how NIS can maintain the necessary skills and knowledge to implement Census till the time of the next population census remains the problem. Under the cooperation in Phase I and II it was confirmed that the central ministries analyzed statistical results in the details and utilized them for planning and monitoring of strategies, it was recognized that provincial governments was not yet developed the organization for analysis of the statistical results and therefore statistical information was not yet sufficiently provided to policy planners. In 2011 the first economic census was implemented in Cambodia and NIS needed professional skills and knowledge different from the one for population census. It was urgently necessary for NIS to master necessary skills and knowledge for economic census.

Section 2. Targets, outputs and indicators of the project

1. Purposes of the Project

1) Highly prioritized purpose

Statistical results provided by NIS and PDPs will be utilized for planning and implementation of policies, plans, and strategies of line ministries and provincial governments.

2) Project purpose

NIS and PDPs will be able to implement the Economic Census, the Inter-censal Population Survey, the Economic Statistics Survey, and other statistical activities.

2. Outputs and indicators of the project

1) Outputs

1. NIS and PDPs will be able to conduct planning and implementation of statistical censuses and surveys.
2. NIS will be able to conduct data processing and production of statistical tables from statistical censuses and surveys including the Economic Census.
3. NIS will be able to conduct analysis on the results of the Economic Census and other official statistical censuses and surveys.
4. NIS will be able to disseminate the results of Economic Census and other official statistical censuses and surveys, and will be able to improve people's understanding of official statistics including the Economic Census.
5. NIS will be able to implement small area statistics regarding the Economic Census.
6. PDPs will be able to tabulate and disseminate statistics for areas lower than the provincial level.
7. NIS and PDPs will be able to develop systems for maintaining necessary skills and knowledge about official statistics.
8. NIS and PDPs will be able to improve skills for coordination.

2) Indicators

1.1 Number of village maps and EA maps

1.2 Number of statistical censuses and surveys in which village maps and EA maps are used

1.3 Level of understanding of planning statistical censuses and surveys, and of delineating enumeration areas (EAs)

2.1 Number of statistical tables tabulated and released

2.2 Number of micro data records generated

2.3 Level of understanding of data processing and tabulation of results

3.1 Number of analytical reports published and/or released by NIS and PDPs

3.2 Level of understanding of analysis of results

4.1 Number of publications, CDs, web pages, statistical maps, and census atlases (published and/or released)

4.2 Number of trainees in the training courses

4.3 Level of trainees' understanding of preparation, implementation and tools regarding the dissemination of the results of censuses and surveys

- 4.4 Number of workshops and seminars conducted
- 5.1 Number of small area statistical tables for districts, communes, villages and EAs for the Economic Census (tabulated and/or released)
- 5.2 Number of trainees in the training courses on small area statistics
- 5.3 Level of trainees' understanding of the use of small area statistics
- 6.1 Number of training courses conducted for PDPs
- 6.2 Number of provincial trainees in the training courses or PDPs
- 6.3 Level of trainees' understanding of tabulation and release of the results of statistical censuses and surveys
- 6.4 Number of statistical tables tabulated and released
- 7.1 Number of detailed procedural documents prepared
- 7.2 Methods for maintaining and managing detailed procedural documents for statistical censuses and surveys in NIS and PDPs
- 8.1 Records of meetings with related organizations
- 8.2 Number of coordination meetings with related organizations

3. Target areas of the Project

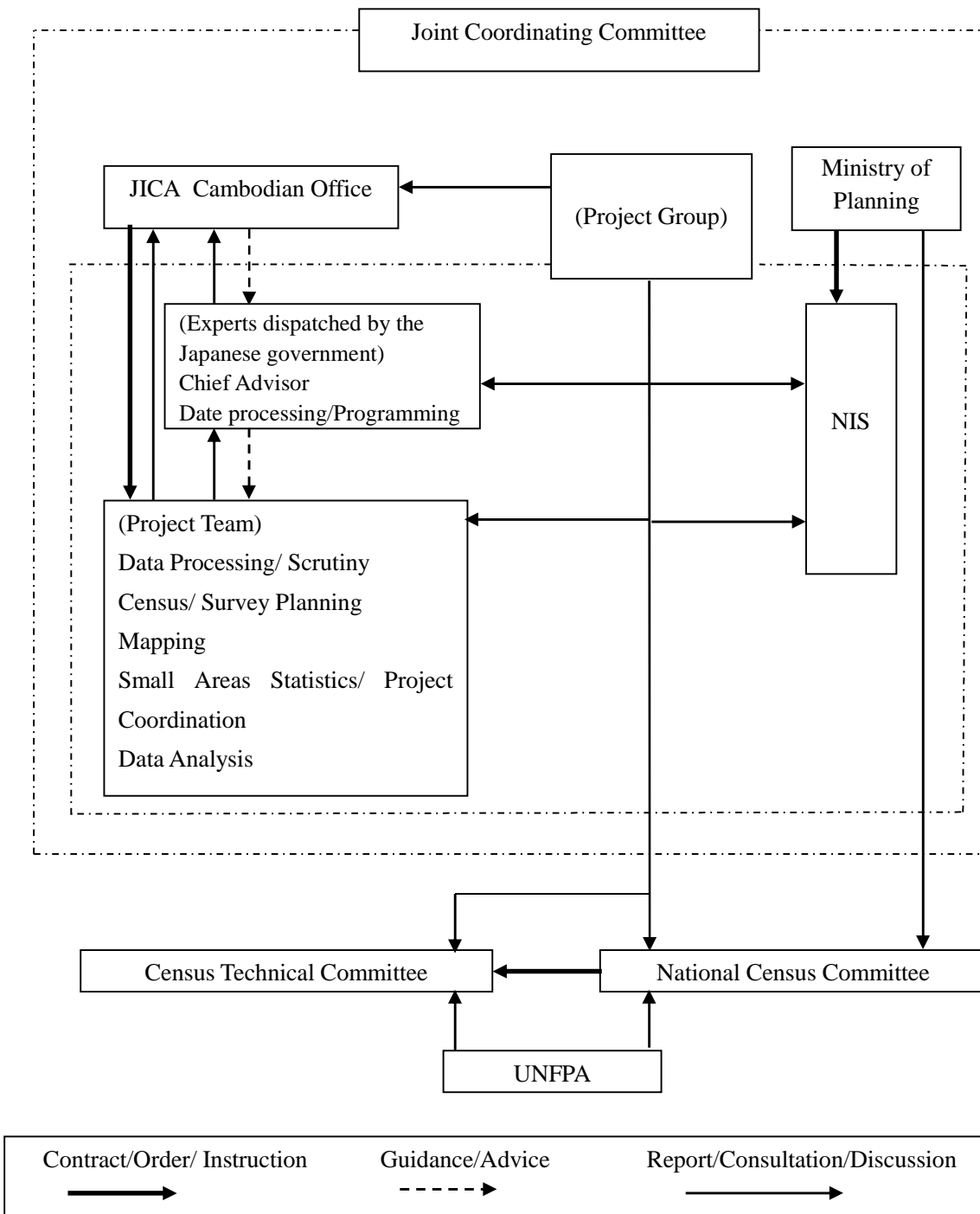
All the 24 provinces including Phnom Penh

4. Counterparts concerned

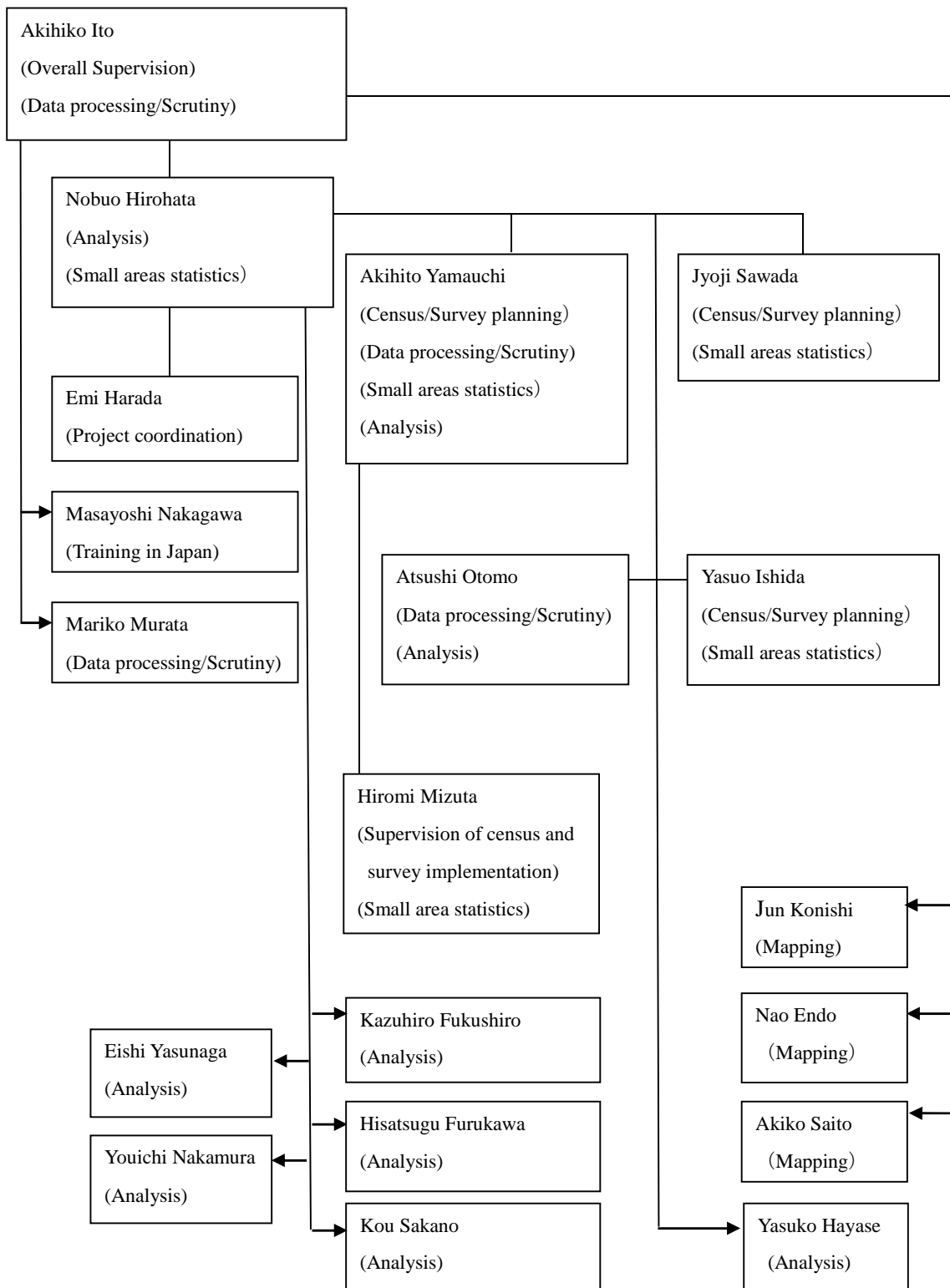
- 1) Ministries and agencies concerned
NIS and statistical divisions of PDPs
- 2) Counterparts organization
NIS
- 3) Target personnel and number of personnel
300 officials in NIS and 150 officials in all the 24 PDPs

Chapter2. The structure and the schedule of the project

Section 1. Project implementation framework



Section 2. Project Team functional diagram



Section 3. Schedule of the project

1. Schedule of the whole project

The objective of this project is to support the implementation of 1) Economic Census 2011 (EC2011), 2) Cambodia Inter-Censal Population Survey (CIPS2013), and 3) Economic Statistics Survey (CIES2014), and 4) Small Area Statistics (SAS) during the period from the second half of fiscal year 2010 to fiscal year 2014. Major work to be carried out in each fiscal year for the abovementioned three surveys is as shown in the table below. Flows of work for each survey are described in the following pages, with methods of implementation being explained according to the individual survey work flow charts.

Fiscal year	1) EC 2011	2) CIPS2013	3) CIES2014	4) SAS
2010	Implementation of EC 2011			
2011	Data processing and analysis	Implementation of a pre-test		6 provinces
2012	Compilation of analytical reports	Implementation of CIPS 2013		9 provinces
2013		Compilation of analytical reports	Implementation of a pre-test, Implementation of CIES 2014	5 provinces
2014			Data processing, Compilation of analytical reports	4 provinces

2. Implementation of EC 2011

Work related to the 2011 Economic Census of Cambodia was carried out based on ‘the Sub-decree on Defining, Organizing and Proceeding of Cambodia 2011 Economic Census’, which was promulgated and entered into force in 2009.

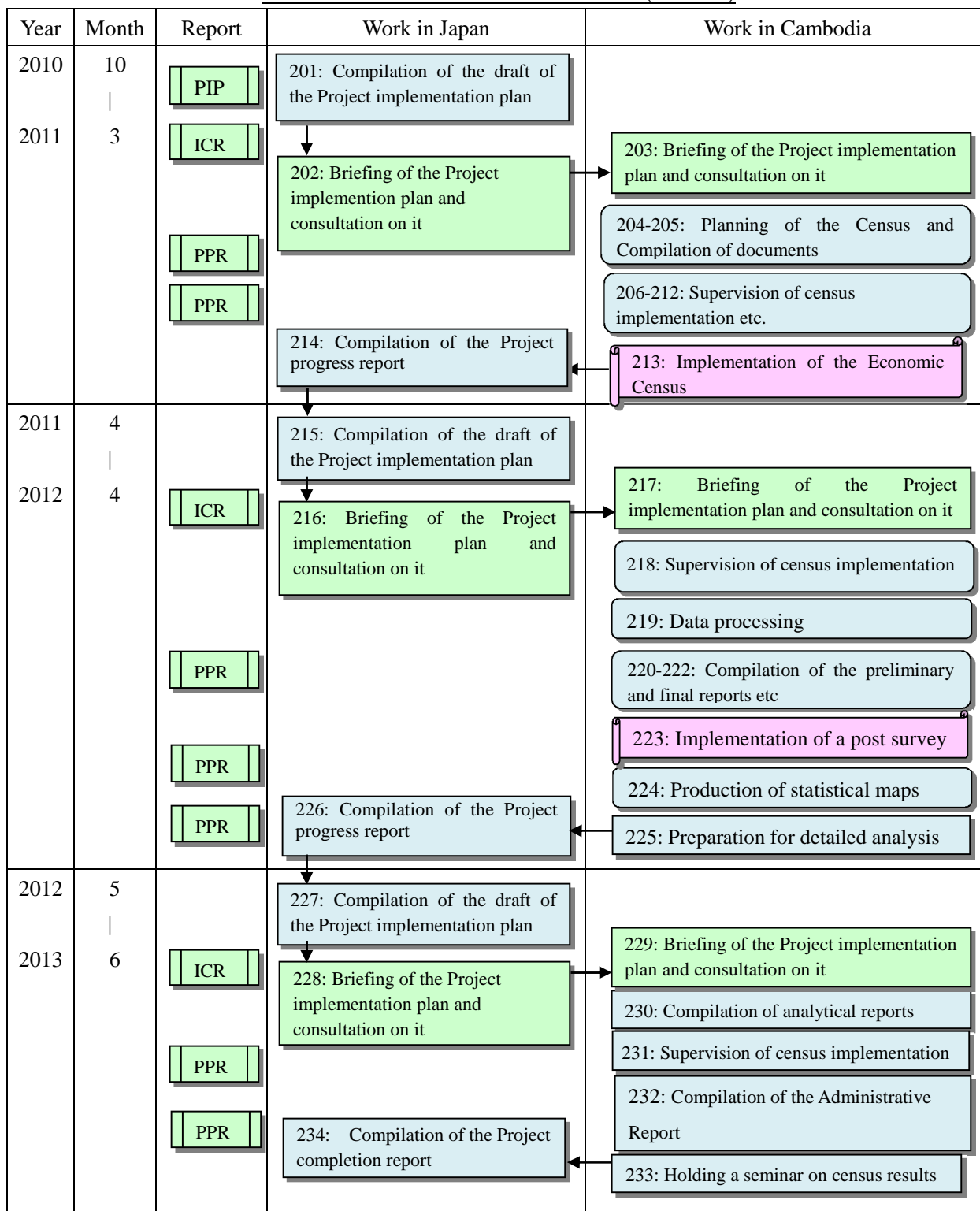
Of the work flows for the economic census, work related to [101] Creation of draft plan for survey implementation and implementation of test survey and [102] Establishment of EA and creation of outline of survey implementation were completed by September 2010. Also, JICA has already been providing advice and assistance under the Project on Improving Official Statistics in Cambodia Phase 2.

JICA expert team carried over the work described in the preceding paragraph in the form of assistance for the implementation of an economic census from October 2010 to September 2012, engaging in the work described as below.

Work flow chart for Economic Census (Phase 2)

Fiscal Year	Month	Work in Japan	Work in Cambodia
2009			101 : Creation of draft plan for survey implementation / implementation of test survey
2010	4 9		102 : Establishment of EA / creation of outline of survey implementation

Work flow chart for Economic Census (Phase 3)



PIP: Project Implementation Plan, ICR: Inception Report, PPR: Project Progress Report

[201] Compilation of the draft of the Project implementation plan

The Project Team compiled a draft for Project implementation plan. The plan was compiled based on of the achievements of “Phase 2”, and include such matters as the basic policy concerning the technical aspect of Project implementation, the implementation framework concerning the operational aspect, and the implementation schedule.

[202] Briefing of the Project implementation plan and consultation on it

The Project Team consulted with JICA and experts dispatched by the Japanese government on the draft plan to revise its contents according to comments raised during the consultation. After JICA authorizes the revisions, the Project Team finalized the plan and compiled the Inception Report in English.

[203] Briefing of the Project implementation plan and consultation on it (in Cambodia)

The Project Team presented the Inception Report to the Cambodian counterparts, and after consulting with the counterparts, sought the counterparts’ approval. A briefing meeting was held concurrently for JICA Cambodian Office and donors such as the United Nations and SIDA.

The Team organized a seminar on the Economic Census in cooperation with NIS in order to publicize Project activities among concerned officials of other ministries.

In the seminar, the Project Team explained the activities related to implementation, data processing, analysis, and data dissemination of the Economic Census, CIPS, and the Economic Statistics Survey as well as the regional statistical capability improvement plan.

[204] Detailed planning of the Census

The Project Team provided the following guidance and assistance based on the Economic Census Implementation Plan which was compiled in “the Project on Improving Official Statistics in Cambodia Phase 3”:

- (i) For the smooth implementation of the Economic Census, the Project Team provided guidance on the designs of the questionnaire and the Establishment List among other documents, and provided assistance on the compilation of these documents.
- (ii) The Project Team gave detailed guidance in such areas as scope of the enumeration target, definition of an establishment, enumeration methods including confirmation of EAs, interview method, enumeration-related administrative matters, questionnaire checking method, and procedures for the submission of questionnaires and other materials.

[205] Compilation of manuals

The Project Team provided assistance on the compilation of the Economic Census implementation manuals such as (i) enumerator’s (survey staff’s) manual, (ii) supervisor’s manual, and (iii) local government staff’s manual.

[206] Supervision of census implementation

The Project Team provided assistance to NIS in such areas as staffing, procurement of documents and

goods, preparation of equipments, securing of meeting rooms so that Economic Census-related work was carried out as planned. As necessary, the Project Team checked the status of progress, gave advice, and made adjustments.

In order to be able to evaluate the achievement and progress from the viewpoints of the project purposes, baseline indicators was measured, and the results was submitted to JICA and discussed with its Cambodian counterparts. The decisions thus agreed upon by both sides were written into minutes of meeting (M/M).

[207] Revision of EA maps

The Project Team provided guidance on the compilation of new EA maps for regions where commune and village boundaries have changed since the EA mapping work for the 2011 Economic Census was done.

[208] Procurement of documents and goods

The Project Team provided assistance on the planning of the procurement and delivery to local governments of documents and goods to be used in the Economic Census, and provided assistance on their actual delivery so that the following documents and goods was made available without fail at the training courses to be held for local government staff and enumerators, as well as at the time of enumeration in the Economic Census in March 2011.

- (i) Survey-related documents, including questionnaires and manuals
- (ii) Survey staff's bags, writing utensils, and bags to carry questionnaires, etc.

[209] Recruitment of survey staff (enumerators, etc.)

The Project Team provided assistance on the planning of recruitment and staffing of survey staff who engaged in such census implementation work in the field as interviewing establishments, supervising enumerators, and checking questionnaires. The Project Team also assisted in actual staffing.

[210] Training for local government staff and survey staff

The Project Team provided assistance on the formulation and conduct of training courses for census implementation for provincial supervisors and survey staff who engaged in census implementation in the field. Especially, the Project Team held a training course for ROs and AROs, giving them advice on training provincial supervisors and survey staff.

[211] PR activities

The Project Team compiled a PR plan for CIPS, and provided assistance on the procurement and circulation of PR goods and on other PR activities such as (i) banners, posters, booklets, T-shirts, etc., and (ii) PR activities utilizing mass media, etc. so that survey staff can conduct the enumeration smoothly in the field.

[212] Preparation for data processing

The Project Team provided assistance on the compilation of formats of statistical tables for data processing based on the Economic Census Implementation Plan.

For each work listed below, the Project Team provided assistance on the compilation of data processing plans which covered items such as data processing method, quality assurance method, period, staffing, and work place in order to ensure smooth data processing of the Census and production of adequate statistical tables. The Team also advised on the compilation of specific manuals for each work.

- (i) Receipt and storage of questionnaires, etc.
- (ii) Manual editing and coding of questionnaires, etc.
- (iii) Data entry, data processing, and production of statistical tables
- (iv) Quality assurance
- (v) Process management (Supervision of work efficiency)

The Project Team provided technical assistance to ROs and AROs in their construction of a village-specific detailed data processing system for six provinces where the regional statistical capability improvement plan is scheduled to be carried out and completed in fiscal 2011.

[213] Implementation of the Economic Census

The Project Team provided following assistance on the implementation of the Economic Census.

- (i) In addition to assisting survey staff in their survey activities, the Project Team helped NIS make adequate responses to various questions which supervisors and local government staff had during their work, and helped NIS resolve emerging issues quickly.
- (ii) The Project Team provided assistance so that the questionnaires and other documents was submitted in an orderly and smooth manner from survey staff to supervisors, to regional organizations including communes, districts and provincial departments of planning, and to NIS.

[214] Compilation of the Project progress report

The Project Team compiled a report on the status of progress of work of the Project for fiscal 2010, and also a report on the completion of the Project for fiscal 2010, and present them to JICA.

[215] Compilation of the draft of the Project implementation plan

The Project Team compiled the draft of the Project implementation plan covering the period from April 2011 to September 2012. The plan included matters such as the basic policy concerning technical aspects of the Project implementation, the implementation framework concerning operational aspects, and the implementation schedule.

[216] Briefing of the Project implementation plan and consultation on it

The Project Team consulted with JICA and experts dispatched by the Japanese government on the draft plan to revise its contents according to comments raised during the consultation. After JICA had authorized the revisions, the Project Team finalized the plan and compiled the Inception Report in English.

[217] Briefing of the Project implementation plan and consultation on it (in Cambodia)

The Project Team presented the Inception Report to the Cambodian counterparts, and after consulting with the counterparts, sought the counterparts' approval. A briefing meeting was held concurrently for JICA Cambodian Office and donors such as the United Nations and SIDA.

[218] Supervision of census implementation

The Project Team provided assistance to NIS in such areas as staffing, procurement of documents and goods, preparation of equipments, securing of meeting rooms so that Economic Census-related work was carried out as planned. As necessary, the Project Team checked the status of progress, gave advice, and made adjustments.

[219] Data processing

The Project Team provided assistance on the smooth implementation of work based on the table formats for data processing, the data processing plan, and the specific work implementation manuals.

- (i) Receipt and storage of questionnaires, etc.
- (ii) Manual editing and coding of questionnaires, etc.
- (iii) Data entry, data processing, and production of statistical tables
- (iv) Quality assurance
- (v) Process management (Supervision of work efficiency)
- (vi) Compilation of a database, including a sampling frame

The Project Team provided technical assistance to ROs and AROs in their construction of a village-specific detailed data processing system for 18 provinces where the regional statistical capability improvement plan is scheduled to be carried out and completed in fiscal 2011.

[220] Compilation of the preliminary reports

The Project Team assisted in analyzing and releasing the tabulated data which was produced based on the List of Establishments as the preliminary results. It also supported NIS in the compilation of the preliminary reports in CDs and website contents.

[221] Compilation of the final reports

The Project Team assisted in analyzing and releasing tabulated data which was produced based on the questionnaires as the final results. It also supported NIS in the compilation of the final reports in CDs and website contents. The final reports were compiled both for each province and the whole country.

[222] Holding of seminars on survey results

In cooperation with NIS, the Project Team held two seminars, one for the preliminary results and the other for the final results, for policy and decision makers, administrative officials, researchers, and donors in Cambodia with the goal of disseminating the results of the Economic Census and promoting their use. The Project Team also conducted two training courses, one for the preliminary results and the other for the final results, for staff of NIS and concerned officials of line ministries. In addition, it gave advice to

ROs and AROs when they held training seminars for staff of provincial planning departments.

[223] Implementation of a post survey

The Project Team provided guidance to some provinces on their implementation of a post survey which was conducted in order to measure coverage errors and content errors made in the Economic Census. It also helped them process the data and analyze the results.

[224] Production of statistical maps

The Project Team provided assistance on the formulation of the statistical map compilation plan that described objectives of producing maps, methods of mapping, and the production schedule among other things, and provided assistance on the actual production of statistical maps.

[225] Preparation for detailed analysis

The Project Team exchanged views with Cambodian officials in charge of analysis on the themes, objectives, and contents of the analytical reports, as well as the analysis methods so as to determine the outline of the analytical reports and the schedule of the compilation of the reports.

[226] Compilation of the Project progress report

The Project Team compiled a report on the status of progress of work of the Project for fiscal 2011, and also a report on the completion of the Project for fiscal 2011, and presented them to JICA.

[227] Compilation of the draft of Project implementation plan

The Project Team compiled the draft of the Project implementation plan. The plan included matters such as the basic policy concerning technical aspects of the Project implementation, the implementation framework concerning operational aspects, and the implementation schedule.

[228] Briefing of the Project implementation plan and consultation on it

The Project Team consulted with JICA and experts dispatched by the Japanese government on the draft plan to revise its contents according to comments raised during the consultation. After JICA had authorized the revisions, the Project Team finalized the plan and compiled the Inception Report in English.

[229] Briefing of the Project implementation plan and consultation on it (in Cambodia)

The Project Team presented the Inception Report to the Cambodian counterparts, and after consulting with the counterparts, sought the counterparts' approval. A briefing meeting was held concurrently for JICA Cambodian Office and donors such as the United Nations and SIDA.

[230] Compilation of analytical reports

The Project Team compiled the analytical reports based on the results of the Economic Census in cooperation with NIS.

Title
Analysis on 17 Industries
Comparative Analysis by Industry
Comparative analysis by Scale
Analysis on Large, Medium & Small and Micro Industry
Manufacturing Industry
Food Processing Industry
Textile Industry
Wholesale and Retail Industry
Women in Business
Street Business
Application to National Accounts

[231] Supervision of census implementation

The Project Team provided assistance to NIS in areas such as staffing, procurement of documents and goods, preparation of equipments, securing of meeting rooms so that Economic Census-related work was carried out as planned. As necessary, the Project Team checked the status of progress, gave advice, and made adjustments.

[232] Compilation of the procedural report

The Project Team provided guidance on the compilation of the procedural report which was described a series of work from the formulation of the draft plan of the Economic Census implementation to the publication of the final reports and the analytical reports so that the procedural report could give a guideline for future Economic Census and other economic statistics surveys. Assistance also provided on the publication of the Administrative Report.

[233] Holding a seminar on census implementation and results

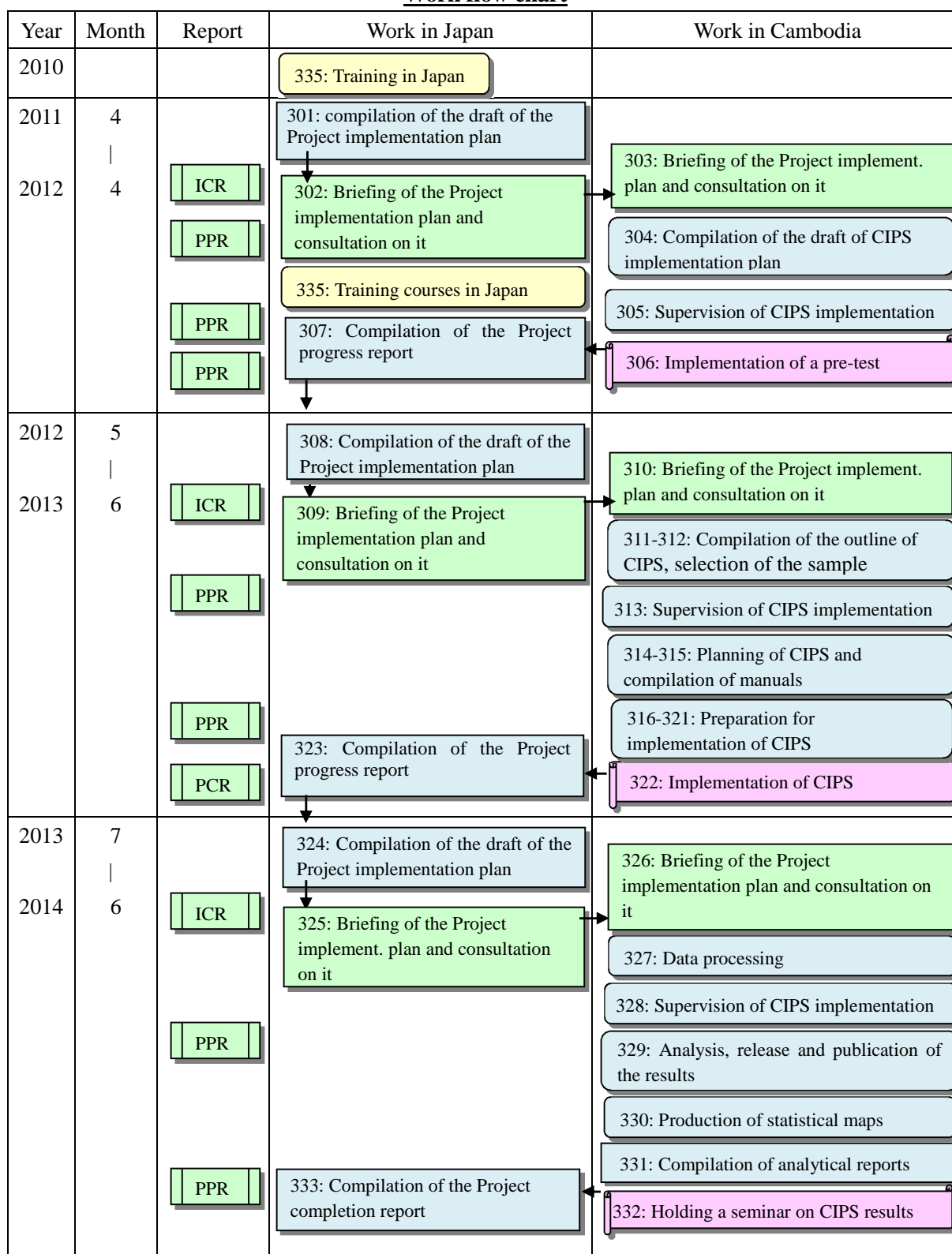
The Project Team held a seminar on the outcome of the Economic Census in cooperation with NIS in order to publicize the outcome of the Project to other ministries etc.

[234] Compilation of the Project completion report

The Project Team compiled a report on the status of progress of work of the Project relating to the Economic Census for the first half of fiscal 2012, and also a report on the completion of the Project for fiscal 2012, and presented them to JICA.

3. Implementation of CIPS 2013

Work flow chart



ICR: Inception Report, PPR: Project Progress Report

[301] Compilation of the draft of the Project implementation plan

The Project Team compiled the draft of the Project implementation plan. The plan was compiled based on of the achievements of “Phase 2”, and included such matters as the basic policy concerning the technical aspect of Project implementation, the implementation framework concerning the operational aspect, and the implementation schedule.

[302] Briefing of the Project implementation plan and consultation on it

The Project Team consulted with JICA and experts dispatched by the Japanese government on the draft plan to revise its contents according to comments raised during the consultation. After JICA had authorized the revisions, the Project Team finalized the plan and compile the Inception Report in English.

[303] Briefing of the Project implementation plan and consultation on it (in Cambodia)

The Project Team presented the Inception Report to the Cambodian counterparts, and after consulting with the counterparts, sought the counterparts’ approval. A briefing meeting was held concurrently for JICA Cambodian Office and donors such as the United Nations and SIDA.

[304] Compilation of the draft of CIPS implementation plan

The Project Team provided guidance on the draft of the entire CIPS implementation plan, covering matters such as the survey objective, period, scope, method, survey topics, sample selection method, data processing, release, dissemination, and other essentials of CIPS, as well as the outline of the pre-test.

[305] Supervision of CIPS implementation

The Project Team provided assistance to NIS in such areas as staffing, procurement of documents and goods, preparation of equipments, securing of meeting rooms so that CIPS-related work was carried out as planned. As necessary, the Project Team checked the status of progress, gave advice, and made adjustments.

[306] Implementation of a pre-test

The Project Team provided guidance on the implementation of a small-sample pre-test in order to examine the adequacy of the questionnaire design and survey method in the field. Mainly, it provided assistance in the following areas:

- 1) Compilation of the draft plan of the implementation of the pre-test
- 2) Compilation of the questionnaire, survey staff’s manual, etc.
- 3) Collection of problems which may emerge in the pre-test, and search for solutions
- 4) Collection of problems through meetings with survey staff etc. after the pre-test, and search for improvements to the implementation plan

[307] Compilation of the Project progress report

The Project Team compiled a report on the status of work in progress for the Project in fiscal 2011 and also a report on completed work for the Project in fiscal 2011, and presented them to JICA.

[308] Compilation of the draft of the Project implementation plan

The Project Team compiled the draft of the Project implementation plan. The plan included such matters as the basic policy concerning the technical aspect of Project implementation, the implementation framework concerning the operational aspect, and the implementation schedule.

[309] Briefing of the Project implementation plan and consultation on it

The Project Team consulted with JICA and experts dispatched by the Japanese government on the draft plan to revise its contents according to comments raised during the consultation. After JICA had authorized the revisions, the Project Team finalized the plan and compiled the Inception Report in English.

[310] Briefing of the Project implementation plan and consultation on it (in Cambodia)

The Project Team presented the Inception Report to the Cambodian counterparts, and after consulting with the counterparts, sought the counterparts' approval. A briefing meeting was held concurrently for JICA Cambodian Office and donors such as the United Nations and SIDA.

[311] Compilation of the outline of the implementation of CIPS

The Project Team reviewed the draft plan of CIPS implementation while taking into account the pre-test results and user needs, and provided assistance, in consultation with NIS, for the compilation and finalization of the outline of the implementation of CIPS.

[312] Selection of the sample

The Project Team provided guidance on the sampling design based on the outline of the implementation of CIPS, and provided assistance on sample selection using the 2008 population census sampling frame.

[313] Supervision of CIPS implementation

The Project Team provided assistance to NIS in such areas as staffing, procurement of documents and goods, preparation of equipments, securing of meeting rooms so that CIPS-related work was carried out as planned. As necessary, the Project Team checked the status of progress, gave advice, and made adjustments.

[314] Detailed planning of CIPS

The Project Team provided guidance and assistance based on the outline of the implementation of CIPS, specifically:

- 1) For the smooth implementation of CIPS, the Project Team provided guidance on the design of the questionnaire and household list, among other documents, and provided assistance on the compilation of these documents.
- 2) The Project Team gave detailed guidance in areas such as the scope of enumeration, definition of household, survey methods including confirmation of EAs, interviewing method, survey-related administrative matters, questionnaire checking method, and procedures for the submission of

questionnaires and other materials.

[315] Compilation of manuals

The Project Team provided assistance on the compilation of CIPS implementation manuals, which reflect detailed plans for CIPS described in the preceding paragraphs, specifically:

- 1) Survey staff's manual
- 2) Supervisor's manual
- 3) Local government staff's manual

[316] Compilation of EA maps

The Project Team provided guidance on the compilation of EA maps for CIPS mainly by copying the EA maps used in the 2008 population census. The Project Team also provided guidance on the compilation of new EA maps for areas where village boundaries had changed since the EA mapping work for the 2008 population was done.

[317] Procurement of documents and goods

The Project Team provided assistance on the planning of the procurement and delivery to local governments of documents and goods to be used in CIPS, and provided assistance on their actual delivery so that the following documents and goods were made available without fail at the training courses to be held for local government staff and enumerators, as well as at the time of enumeration in CIPS in March 2013.

- 1) Survey-related documents, including questionnaires and manuals
- 2) Survey staff's bags, writing utensils, and bags to carry questionnaires, etc.

[318] Recruitment of survey staff (enumerators etc.)

The Project Team provided assistance on the planning of recruitment and staffing of survey staff who engaged in such census implementation work in the field as interviewing households, supervising enumerators, and checking questionnaires. The Project Team also assisted in actual staffing.

[319] Training for local government staff and survey staff

The Project Team provided assistance on the formulation and conduct of training courses for CIPS implementation for provincial supervisors and survey staff who engaged in CIPS implementation in the field. Especially, the Project Team held a training course for ROs and AROs, giving them advice on training provincial supervisors and survey staff.

[320] PR activities

The Project Team compiled a PR plan for CIPS, and provided assistance on the procurement and circulation of PR goods, and on other PR activities such as 1) banners, posters, booklets, T-shirts, etc., and 2) PR activities utilizing mass media, etc. so that survey staff could conduct the enumeration smoothly in the field.

[321] Preparation for data processing

The Project Team provided assistance on the compilation of formats of statistical tables for data processing based on the outline of the implementation of CIPS.

For each work listed below, the Project Team provided assistance on the compilation of data processing plans which covered items such as data processing method, quality assurance method, period, staffing, and work place in order to ensure smooth data processing of CIPS and production of adequate statistical tables. The Team also advised on the compilation of a specific manual for each work.

- 1) Receipt and storage of questionnaires, etc.
- 2) Manual editing and coding of questionnaires, etc.
- 3) Data entry, data processing, and production of statistical tables
- 4) Quality assurance

[322] Implementation of CIPS

The Project Team provided the following assistance on the implementation of CIPS.

- 1) In addition to assisting survey staff in their survey activities, the Project Team helped NIS made adequate responses to various questions which supervisors and local government staff had during their work, and helped NIS resolved emerging issues quickly.
- 2) The Project Team provided assistance so that the questionnaires and other documents were submitted in an orderly and smooth manner from survey staff to supervisors, to regional organizations including communes, districts and provincial departments of planning, and to NIS.

[323] Compilation of the Project progress report

The Project Team compiled a report on the status of work in progress for the Project in fiscal 2012 and also a report on completed work for the Project in fiscal 2012, and presented them to JICA.

[324] Compilation of the draft of the Project implementation plan

The Project Team compiled the draft of the Project implementation plan. The plan included such matters as the basic policy concerning the technical aspect of Project implementation, the implementation framework concerning the operational aspect, and the implementation schedule.

[325] Briefing of the Project implementation plan and consultation on it

The Project Team consulted with JICA and experts dispatched by the Japanese government on the draft plan to revise its contents according to comments raised during the consultation. After JICA had authorized the revisions, the Project Team finalized the plan and compiled the Inception Report in English.

[326] Briefing of the Project implementation plan and consultation on it (in Cambodia)

The Project Team presented the Inception Report to the Cambodian counterparts, and after consulting with the counterparts, sought the counterparts' approval. A briefing meeting was held concurrently for JICA Cambodian Office and donors such as the United Nations and SIDA.

[327] Data processing

The Project Team provided assistance on the smooth implementation of work based on the table formats for data processing, the data processing plan, and the specific work implementation manuals.

- 1) Receipt and storage of questionnaires, etc.
- 2) Manual editing and coding of questionnaires, etc.
- 3) Data entry, data processing, and production of statistical tables
- 4) Quality assurance

[328] Supervision of CIPS implementation

The Project Team provided assistance to NIS in such areas as staffing, procurement of documents and goods, preparation of equipments, securing of meeting rooms so that CIPS-related work was carried out as planned. As necessary, the Project Team checked the status of progress, gave advice, and made adjustments.

[329] Analysis, release and publication of the results

The Project Team provided assistance on the analysis, release and publication of the results of CIPS.

[330] Compilation of statistical maps

The Project Team determined, in consultation with the Cambodian counterparts, indices to be presented in statistical maps. These indices were number of establishments, composition ratios of major industries, and sales per establishment to be obtained from CIPS. It also provided assistance on the formulation of the statistical map compilation plan that described objectives of producing maps, methods of mapping, and the production schedule among other things, and provided assistance on the actual production of statistical maps.

[331] Detailed analysis and compilation of analytical reports

The Project Team provided assistance on CIPS-related analysis. Specific themes for analysis deemed useful in light of the current situation in Cambodia were provided in the table below; they were finalized through exchanges of views with the Cambodian side.

Title
Literacy and Educational Attainment
Economic Activity and Employment
Housing and Household Amenity
Family and Household

[332] Holding a seminar on CIPS results

The Project Team held a seminar on the outcome of CIPS in cooperation with NIS in order to release and disseminate the outcome of the Project to other ministries etc. The Project Team also conduct a training course for ROs and AROs, on the utilization of CIPS results, and gave them advice on training provincial supervisors and survey staff (enumerators).

[333] Compilation of the Project completion report

The Project Team compiled a report on the status of progress of work of the Project relating to CIPS for fiscal 2013, and also a report on the completion of the Project for fiscal 2013, and presented them to JICA.

[334] Training courses in Japan

The Project Team held a training course in Japan on CIPS for fiscal 2010 and 2011 respectively.

4. Implementation of CIES 2014

Work flow chart

Year	Month	Report	Work in Japan	Work in Cambodia
2012 2013	5 6	ICR PPR PPR PPR	401: Compilation of the draft of the Project implementation plan ↓ 402: Briefing of the Project implementation plan and consultation on it ↓ 436: Training course in Japan ↓ 408: Compilation of the Project progress report ↓	403: Briefing of the Project implementation plan and consultation on it 404: Compilation of the draft of Survey implementation plan 405: Supervision of Survey implementation 406: Preparation for detailed analysis
2013 2014	7 6	ICR PPR	409: Compilation of the draft for the Project implementation plan ↓ 410: Briefing of the Project implementation plan and consultation on it ↓ 436: Training course in Japan ↓ 424: Compil. of the Project ↓	411: Briefing of the Project implementation plan and consultation on it 412-413: Compilation of the outline of Survey, selection of the sample 407: Implementation of a pre-test 414: Supervision of Survey implementation 415-416: Planning of Survey and compilation of manuals 417-422: Preparation for implementation of the Economic Statistics Survey 423: Implementation of the Economic Statistics Survey
2014 2015	7 3	ICR PPR FR	425: Compilation of the draft of the Project implementation plan ↓ 426: Briefing of the Project implementation plan and consultation on it ↓ 435: Compilation of the Project completion report	427: Briefing of the Project implementation plan and consultation on it 428: Data Processing 429: Supervision of Survey implementation 430: Compilation of statistical maps 431: Analysis, release and publication of the results 434: Holding a seminar on Survey results

ICR: Inception report, PPR: Project Progress Report, FR: Final report

[401] Compilation of the draft of the Project implementation plan

The Project Team compiled the draft of the Project implementation plan. The plan was compiled based on of the achievements of “Phase 2”, and included such matters as the basic policy concerning the technical aspect of Project implementation, the implementation framework concerning the operational aspect, and the implementation schedule.

[402] Briefing of the Project implementation plan and consultation on it

The Project Team consulted with JICA and experts dispatched by the Japanese government on the draft plan to revise its contents according to comments raised during the consultation. After JICA had authorized the revisions, the Project Team finalized the plan and compiled the Inception Report in English.

[403] Briefing of the Project implementation plan and consultation on it (in Cambodia)

The Project Team presented the Inception Report to the Cambodian counterparts, and after consulting with the counterparts, sought the counterparts’ approval. A briefing meeting was held concurrently for JICA Cambodian Office and donors such as the United Nations and SIDA.

[404] Compilation of the draft of the Economic Statistics Survey implementation plan

The Project Team provided guidance on the draft of the entire Economic Statistics Survey implementation plan, covering matters such as the survey objective, period, scope, method, survey topics, sample selection method, data processing, release, dissemination, and other essentials of the Economic Statistics Survey, as well as the outline of the pre-test.

[405] Supervision of Survey implementation

The Project Team provided assistance to NIS in such areas as staffing, procurement of documents and goods, preparation of equipments, securing of meeting rooms so that Survey-related work was carried out as planned. As necessary, the Project Team checked the status of progress, gave advice, and made adjustments.

[406] Preparation for detailed analysis

The Project Team provided assistance on the design of the questionnaire of the Economic Survey. The outline of the analytical reports and their publishing schedule were determined through exchange of views with the Cambodian counterparts on such matters as themes, objectives, contents, analytical methods, etc. of the reports.

[407] Implementation of a pre-test

The Project Team provided guidance on the implementation of a small-sample pre-test in order to examine the adequacy of the questionnaire design and survey method in the field. Mainly, it provided assistance in the following areas:

- 1) Compilation of the draft plan of the implementation of the pre-test

- 2) Compilation of the questionnaire, survey staff's manual, etc.
- 3) Collection of problems which may emerge in the pre-test, and search for solutions
- 4) Collection of problems through meetings with survey staff etc. after the pre-test, and search for improvements to the implementation plan

[408] Compilation of the Project progress report

The Project Team compiled a report on the status of work in progress for the Project in fiscal 2012 and also a report on completed work for the Project in fiscal 2012, and presented them to JICA.

[409] Compilation of the draft of the Project implementation plan

The Project Team compiled the draft of the Project implementation plan. The plan included such matters as the basic policy concerning the technical aspect of Project implementation, the implementation framework concerning the operational aspect, and the implementation schedule.

[410] Briefing of the Project implementation plan and consultation on it

The Project Team consulted with JICA and experts dispatched by the Japanese government on the draft plan to revise its contents according to comments raised during the consultation. After JICA had authorized the revisions, the Project Team finalized the plan and compile the Inception Report in English.

[411] Briefing of the Project implementation plan and consultation on it (in Cambodia)

The Project Team presented the Inception Report to the Cambodian counterparts, and after consulting with the counterparts, sought the counterparts' approval. A briefing meeting was held concurrently for JICA Cambodian Office and donors such as the United Nations and SIDA.

[412] Compilation of the outline of the implementation of the Economic Statistics Survey

The Project Team reviewed the draft plan of Survey implementation while taking into account the pre-test results and user needs, and provide assistance, in consultation with NIS, for the compilation and finalization of the outline of the implementation of the Economic Statistics Survey.

[413] Selection of the sample

The Project Team provided guidance on the sampling design based on the outline of the implementation of the Economic Statistics Survey, and provided assistance on sample selection using the 2011 Economic Census sampling frame.

[414] Supervision of Survey implementation

The Project Team provided assistance to NIS in such areas as staffing, procurement of documents and goods, preparation of equipments, securing of meeting rooms so that Survey-related work was carried out as planned. As necessary, the Project Team checked the status of progress, gave advice, and made adjustments.

[415] Detailed planning of the Economic Statistics Survey

The Project Team provided guidance and assistance based on the outline of the implementation of the Economic Statistics Survey, specifically:

- 1) For the smooth implementation of the Economic Statistics Survey, the Project Team provided guidance on the design of the questionnaire and household list, among other documents, and provided assistance on the compilation of these documents.
- 2) The Project Team gave detailed guidance in areas such as the scope of enumeration, definition of household, survey methods including confirmation of EAs, interviewing method, survey-related administrative matters, questionnaire checking method, and procedures for the submission of questionnaires and other materials.

[416] Compilation of manuals

The Project Team provided assistance on the compilation of Survey implementation manuals, which reflect detailed plans for the Economic Statistics Survey described in the preceding paragraphs, specifically:

- 1) Survey staff's manual
- 2) Supervisor's manual
- 3) Local government staff's manual

[417] Compilation of EA maps

The Project Team provided guidance on the compilation of EA maps for the Economic Statistics Survey mainly by copying the EA maps used in the 2011 Economic Census. The Project Team also provide guidance on the compilation of new EA maps for areas where village boundaries had changed since the EA mapping work for the 2011 Economic Census was done.

[418] Procurement of documents and goods

The Project Team provided assistance on the planning of the procurement and delivery to local governments of documents and goods to be used in the Economic Statistics Survey, and provided assistance on their actual delivery so that the following documents and goods were made available without fail at the training courses to be held for local government staff and enumerators, as well as at the time of enumeration in the Economic Statistics Survey in March 2014.

- 1) Survey-related documents, including questionnaires and manuals
- 2) Survey staff's bags, writing utensils, and bags to carry questionnaires, etc.

[419] Recruitment of survey staff (enumerators etc.)

The Project Team provided assistance on the planning of recruitment and staffing of survey staff who engaged in such census implementation work in the field as interviewing households, supervising enumerators, and checking questionnaires. The Project Team also assisted in actual staffing.

[420] Training for local government staff and survey staff

The Project Team provided assistance on the formulation and conduct of training courses for the Economic Statistics Survey implementation for provincial supervisors and survey staff who engaged in Survey implementation in the field. Especially, the Project Team held a training course for ROs and AROs, giving them advice on training provincial supervisors and survey staff.

[421] PR activities

The Project Team compiled a PR plan for the Economic Statistics Survey, and provided assistance on the procurement and circulation of PR goods, and on other PR activities such as 1) banners, posters, booklets, T-shirts, etc., and 2) PR activities utilizing mass media, etc. so that survey staff could conducted the enumeration smoothly in the field.

[422] Preparation for data processing

The Project Team provided assistance on the compilation of formats of statistical tables for data processing based on the outline of the implementation of the Economic Statistics Survey.

For each work listed below, the Project Team provided assistance on the compilation of data processing plans which cover items such as data processing method, quality assurance method, period, staffing, and work place in order to ensure smooth data processing of the Economic Statistics Survey and production of adequate statistical tables. The Team also advised on the compilation of a specific manual for each work.

- 1) Receipt and storage of questionnaires, etc.
- 2) Manual editing and coding of questionnaires, etc.
- 3) Data entry, data processing, and production of statistical tables
- 4) Quality assurance

[423] Implementation of the Economic Statistics Survey

The Project Team provided the following assistance on the implementation of the Economic Statistics Survey.

- 1) In addition to assisting survey staff in their survey activities, the Project Team helped NIS made adequate responses to various questions which supervisors and local government staff had during their work, and helped NIS resolve emerging issues quickly.
- 2) The Project Team provided assistance so that the questionnaires and other documents were submitted in an orderly and smooth manner from survey staff to supervisors, to regional organizations including communes, districts and provincial departments of planning, and to NIS.

[424] Compilation of the Project progress report

The Project Team compiled a report on the status of work in progress for the Project in fiscal 2013 and also a report on completed work for the Project in fiscal 2013, and presented them to JICA.

[425] Compilation of the draft of the Project implementation plan

The Project Team compiled the draft of the Project implementation plan. The plan included such matters

as the basic policy concerning the technical aspect of Project implementation, the implementation framework concerning the operational aspect, and the implementation schedule.

[426] Briefing of the Project implementation plan and consultation on it

The Project Team consulted with JICA and experts dispatched by the Japanese government on the draft plan to revise its contents according to comments raised during the consultation. After JICA had authorized the revisions, the Project Team finalized the plan and compiled the Inception Report in English.

[427] Briefing of the Project implementation plan and consultation on it (in Cambodia)

The Project Team presented the Inception Report to the Cambodian counterparts, and after consulting with the counterparts, sought the counterparts' approval. A briefing meeting was held concurrently for JICA Cambodian Office and donors such as the United Nations and SIDA.

[428] Data processing

The Project Team provided assistance on the smooth implementation of work based on the table formats for data processing, the data processing plan, and the specific work implementation manuals.

- 1) Receipt and storage of questionnaires, etc.
- 2) Manual editing and coding of questionnaires, etc.
- 3) Data entry, data processing, and production of statistical tables
- 4) Quality assurance

[429] Supervision of Survey implementation

The Project Team provided assistance to NIS in such areas as staffing, procurement of documents and goods, preparation of equipments, securing of meeting rooms so that Survey-related work was carried out as planned. As necessary, the Project Team checked the status of progress, gave advice, and made adjustments.

[430] Compilation of statistical maps

The Project Team determined, in consultation with the Cambodian counterparts, indices to be presented in statistical maps. These indices were number of establishments, composition ratios of major industries, and sales per establishment to be obtained from the Economic Statistics Survey. It also provided assistance on the formulation of the statistical map compilation plan that describes objectives of producing maps, methods of mapping, and the production schedule among other things, and provided assistance on the actual production of statistical maps.

[431] Analysis, release and publication of the results

The Project Team provided assistance on the analysis, release and publication of the results of the Economic Statistics Survey.

[432] Holding a seminar on Survey results

The Project Team held a seminar on the outcome of the Economic Census, CIPS and the Economic Statistics Survey in cooperation with NIS in order to release and disseminate the outcome of the Project to other ministries etc. The Project Team conducted a training course for ROs and AROs, on the utilization of Survey results, and gave them advice on training provincial supervisors and survey staff (enumerators).

[433] Compilation of the Project completion report

The Project Team compiled a report on the status of progress of work of the Project relating to the Economic Statistics Survey for fiscal 201, and also a report on the completion of the Project for fiscal 2014, and presented them to JICA.

[434] Training courses in Japan

The Project Team held a training course in Japan on the Economic Statistics Survey for fiscal 2012 and 2013 respectively.

5. Implementation of RSCIP (regional statistical capability improvement plan)

Cambodia organized its statistics activities in a way in which NIS functions as the central organization and statistics divisions of provincial planning departments function as regional organizations. While provincial governments had accumulated practical know-how on the field work of censuses and surveys through their implementation, they were still facing a lack of experiences and capabilities regarding data processing and data analysis of census and survey results, partially due to an insufficient number of computers possessed.

The Project Team provided assistance to provincial governments on their efforts to improve their capabilities of data processing and data analysis by providing guidance on computer processing of small-area statistics. Specifically, the Project Team provided assistance on the work described in the following pages in accordance with the flow chart below.

Work Flow Chart for the Regional Statistical Capability Improvement Plan

FY	Work in Cambodia
2010	1) Compilation of the outline of the implementation of RSCIP
	2) Briefing of the outline of the implementation of RSCIP
	(3) Construction of village-specific detailed data processing systems (6 provinces)
2011	3) Construction of village-specific detailed data processing systems (18 provinces)
	4) Implementation of RSCIP (6 provinces)
	5) Procurement of equipment (6 provinces)
2012	4) Implementation of RSCIP (9 provinces)
	5) Procurement of equipment (5 provinces)
2013	4) Implementation of RSCIP (5 provinces)
	5) Procurement of equipment (4 provinces)
2014	4) Implementation of RSCIP (4 provinces)

1) Compilation of the outline of the implementation of the regional statistical capability improvement plan (RSCIP)

The Project Team provided guidance to officials of NIS on the compilation of the implementation outline of the entire plan covering matters such as objectives, implementation period in each province, overview, development method, data processing method, and compilation of statistical reports. The Project Team took into account the actual situation and needs of NIS and regional organizations, and compiled the outline of the implementation of RSCIP.

2) Briefing of the outline of the implementation of RSCIP and consultation on it

The Project Team consulted with JICA and experts dispatched by the Japanese government on the outline of the implementation of RSCIP to revise its contents according to comments raised during the consultation. The revised outline was used for briefing and consulting with the Cambodian counterparts in order to obtain their approval. The Project Team also conducted a briefing to JICA Cambodian Office.

3) Construction of village-specific detailed data processing systems

The Project Team provided technical assistance to ROs and AROs for their construction of village-specific detailed data processing systems. The assistance was provided to six provinces in fiscal 2010 where the regional statistical capability improvement plan is scheduled to be carried out, and to the remaining 18 provinces in 2011 so that the system construction work was completed.

4) Implementation of RSCIP

(Supervision of the implementation)

The Project Team provided assistance to NIS including staffing, procurement of documents and goods, preparation of equipment, and securing of meeting rooms so that the implementation of RSCIP was carried out as planned. As necessary, the Project Team checked the status of progress, gave advice to NIS, and made adjustments.

(Holding of training courses)

The Project Team held training course for SCOs and gave them advice on training for ROs and AROs, and gave advice on training provincial supervisors, survey staff etc. The main subjects covered in the training course were:

- 1) Objectives and overview of RSCIP
- 2) Data processing and analysis methods for censuses and surveys
- 3) How to use computer programs
- 4) Exercises
- 5) Village-specific detailed data processing system

(Compilation of statistical and analytical reports by respective provinces)

The Project Team provided assistance to provincial governments in their compilation of statistical and analytical reports on the results of the small-area data processing work carried out in their own provinces.

5) Procurement of equipment

The Project Team procured equipment for the total of nine provinces, and provided guidance on the installation and use of the computers, and the installation of computer programs.

Chapter 3. Outputs and indicators of the project

Section 1. EC2011

1. Outputs of the Project

	Outputs	Outline
1	NIS and PDPs will be able to conduct planning and implementation of statistical censuses and surveys	<ul style="list-style-type: none"> • NIS and PDPs acquired knowledge and techniques of planning and implementation of the EC 2011.
2	NIS will be able to conduct data processing and production of statistical tables from statistical censuses and surveys including the Economic Census	<ul style="list-style-type: none"> • The experience of data processing of the EC 2011 led to the acquisition of knowledge and techniques for data entry, data checking, error detection and data correction methods. • Acquired knowledge of the production of statistical tables of the EC 2011.
3	NIS will be able to conduct analysis on the results of the Economic Census and other official statistical censuses and surveys	<ul style="list-style-type: none"> • NIS acquired analytical and tabulation methods of the EC 2011.
4	NIS will be able to disseminate the results of Economic Census and other official statistical censuses and surveys, and will be able to improve people's understanding of official statistics including the Economic Census	<ul style="list-style-type: none"> • NIS Acquired knowledge of the dissemination through making EC 2011 reports. • Improve people's understanding of official statistics through disseminating EC 2011 reports.
5	NIS will be able to implement small area statistics regarding the Economic Census	<ul style="list-style-type: none"> • NIS acquired practical knowledge of SAS through trainings and OJT's.
6	PDPs will be able to tabulate and disseminate statistics for areas lower than the provincial level	<ul style="list-style-type: none"> • PDPs tabulated and disseminated statistics of SAS for 24 provinces.
7	NIS and PDPs will be able to develop systems for maintaining necessary skills and knowledge about official statistics	<ul style="list-style-type: none"> • As a result of the completion of implementation manuals, NIS and PDPs were able to develop systems for maintaining necessary skills and knowledge on official statistics.
8	NIS and PDPs will be able to improve skills for coordination	<ul style="list-style-type: none"> • NIS and PDPs improved the ability of coordination of NIS and PDPs through the EC 2011 seminar.

2. Indicators of the Project

	Index	Outline
1-1	Number of village maps and EA maps	<ul style="list-style-type: none"> • Village maps: 14,104 • EA maps: 1,550
1-2	Number of statistical surveys in which village maps, EA maps and updated village frame are used	<ul style="list-style-type: none"> • EC 2011 pre-test • EC 2011 pilot survey • EC 2011 • EC 2011 post enumeration survey
1-3	Level of understanding of planning statistical censuses and surveys, and of delineating enumeration areas	<ul style="list-style-type: none"> • Promoted understandings of planning statistical censuses and surveys, and of delineating enumeration areas on the EC 2011
2-1	Number of statistical tables tabulated and released	<ul style="list-style-type: none"> • 1,945
2-2	Number of micro data records generated	<ul style="list-style-type: none"> • 505,134
2-3	Level of understanding of data processing and tabulation of results	<ul style="list-style-type: none"> • Promoted understandings of data processing of the EC 2011 including methods for data entries and data corrections • Promoted understandings of data tabulation of the EC 2011
3-1	Number of analytical reports published and/or released by NIS and PDPs	<ul style="list-style-type: none"> • NIS: 22 <ul style="list-style-type: none"> • Preliminary Results of the 2011 Economic Census of Cambodia (8/2011) • Preliminary Results of the 2011 Economic Census of Cambodia (No.2) (9/2011) • Economic Census of Cambodia 2011, National Report on Final Census Results (3/2012) • Economic Census of Cambodia 2011, District and Commune Report on Final Census Results (3/2012) • National Profile of Statistical Tables (2/2013) • Village Profile of Statistical Tables (2/2013) • Provincial Profile of Statistical Tables (2/2013) • Provincial Report (2/2013)

		<ul style="list-style-type: none"> • Economic Census of Cambodia 2011, No.1, Analysis on 17 Industries (2/2013) • Economic Census of Cambodia 2011, No.2, Comparative Analysis by Industry (2/2013) • Economic Census of Cambodia 2011, No.3, Comparative analysis by Scale (2/2013) • Economic Census of Cambodia 2011, No.4, Analysis on Large, Medium & Small and Micro Industry (2/2013) • Economic Census of Cambodia 2011, No.5, Manufacturing Industry (2/2013) • Economic Census of Cambodia 2011, No.6, Food Processing Industry (2/2013) • Economic Census of Cambodia 2011, No.7, Textile Industry (2/2013) • Economic Census of Cambodia 2011, No.8, Wholesale and Retail Industry (2/2013) • Economic Census of Cambodia 2011, No.9, Women in Business (2/2013) • Economic Census of Cambodia 2011, No.10, Street Business (2/2013) • Economic Census of Cambodia 2011, No.11, Application to National Accounts (2/2013) • Economic Census of Cambodia 2011, Provincial Profile (Kandal) (5/2013) • Economic Census of Cambodia 2011, Provincial Report (Kandal) (5/2013) • Economic Census of Cambodia 2011, Kandal village profile (5/2013)
3-2	Level of understanding of analysis of results	<ul style="list-style-type: none"> • Promoted understandings on analytical reports of EC 2011
4-1	Number of publications, CDs, web pages, statistical maps, and census atlases	<ul style="list-style-type: none"> • Report: 22 • Preliminary Results of the 2011 Economic Census of Cambodia (8/2011) • Preliminary Results of the 2011 Economic Census of Cambodia (No.2) (9/2011) • Economic Census of Cambodia 2011,

		<p>National Report on Final Census Results (3/2012)</p> <ul style="list-style-type: none"> • Economic Census of Cambodia 2011, District and Commune Report on Final Census Results (3/2012) • National Profile of Statistical Tables (2/2013) • Village Profile of Statistical Tables (2/2013) • Provincial Profile of Statistical Tables (2/2013) • Provincial Report (2/2013) • Economic Census of Cambodia 2011, No.1, Analysis on 17 Industries (2/2013) • Economic Census of Cambodia 2011, No.2, Comparative Analysis by Industry (2/2013) • Economic Census of Cambodia 2011, No.3, Comparative analysis by Scale (2/2013) • Economic Census of Cambodia 2011, No.4, Analysis on Large, Medium & Small and Micro Industry (2/2013) • Economic Census of Cambodia 2011, No.5, Manufacturing Industry (2/2013) • Economic Census of Cambodia 2011, No.6, Food Processing Industry (2/2013) • Economic Census of Cambodia 2011, No.7, Textile Industry (2/2013) • Economic Census of Cambodia 2011, No.8, Wholesale and Retail Industry (2/2013) • Economic Census of Cambodia 2011, No.9, Women in Business (2/2013) • Economic Census of Cambodia 2011, No.10, Street Business (2/2013) • Economic Census of Cambodia 2011, No.11, Application to National Accounts (2/2013) • Economic Census of Cambodia 2011, Provincial Profile (Kandal) (2/2013) • Economic Census of Cambodia 2011,
--	--	---

		<p>Provincial Report (Kandal) (2/2013)</p> <ul style="list-style-type: none"> • Economic Census of Cambodia 2011, Kandal village profile (5/2013) • Statistical maps : 32 • Census atlases : 1 • Census Atlas (11/2012)
4-2	Number of trainees in the training courses	<ul style="list-style-type: none"> • The First Training for Provincial Staff (14-15/12/2010), Number: 72 • The Second Training for Provincial Staff (17-21/1/2011), Number: 72 • The First Training for NIS Staff (6-14/1/2011), Number: 124 • The Second Training for NIS Staff (10-11/2/2011), Number: 124 • The First Training for NIS Staff (RO/ARO) (25-27/5/2011, 30/5-1/6/2011), Number: 18 • The Second Training for NIS Staff (RO/ARO) (16-17/8/2011, 18-19/8/2011), Number: 18 • The First Training of GIS (22-23/8/2011), Number: 3 • The Training of Post Enumeration Survey (PES) for Provincial Staff (27-28/6/2011), Number: 72 • The Third Training for NIS Staff (RO/ARO) (29/11/ - 1/12/2011), Number: 18 • The Second Training of GIS (11/2011), Number: 6 • The Third Training of GIS (3/2012), Number: 6 • The First Training of data analysis (27/10/2011), Number: 14 • The second Training of data analysis (20/2/2012), Number: 9 • The third Training of data analysis (12-19/7/2012), Number: 14 • The fourth Training of data analysis (9-17/8/2012), Number: 14 • The first Training of data analysis (5-6/4/2012), Number: 72

		<ul style="list-style-type: none"> • The second Training of provincial report (28-30/8/2012), Number: 72
4-3	Level of trainees' understanding of preparation, implementation and tools regarding the dissemination of the results of censuses and surveys	<ul style="list-style-type: none"> • Promoted understandings of the dissemination methods of preliminary results of the EC 2011
4-4	Number of workshops and seminars conducted	<ul style="list-style-type: none"> • Seminar of Releasing the Preliminary Results of Pilot Survey of 2011 Economic Census (27/10/2010), Number: 170 • Seminar of Releasing the Preliminary Results of 2011 Economic Census (8/8/2011), Number: 270 • Report Meeting of The Post Enumeration Survey for the The Economic Census 2011 (8-9/8/2011), Number: 110 • Seminar of Releasing the Results of 2011 Economic Census (13/3/2012), Number: 650 • Training on Releasing the Results of 2011 Economic Census (3/2012), Number: 250 • Seminar on data analysis of 2011 Economic Census in Kandal (5/2013), Number: 80
5-1	Number of small area statistical tables for districts, communes, villages and EAs for the Economic Census	<ul style="list-style-type: none"> • 638
5-2	Number of trainees in the training courses on small area statistics	—
5-3	Level of understanding of the trainees on the use of small area statistics	—
6-1 6-2	Number of training courses conducted for PDPs Number of provincial trainees in the training courses or PDPs	<ul style="list-style-type: none"> • The First Training for Provincial Staff (14-15/12/2010), Number: 72 • The Second Training for Provincial Staff (17-21/1/2011), Number: 72 • The training for lecturers of Seminar on data analysis of 2011 Economic Census in Kandal (22-23/5/2013), Number: 3
6-3	Level of understanding of the trainees on tabulation and scrutiny of data, and dissemination of the results of statistical surveys	<ul style="list-style-type: none"> • Promoted understandings about the tabulation and dissemination of the EC 2011

6-4	Number of statistical tables tabulated and released	<ul style="list-style-type: none"> • 1,945
7-1	Number of detailed procedural documents prepared	<ul style="list-style-type: none"> • Supervisor's Manual (3/2011) • Enumerator's Manual (3/2011) • Duties of Census Officials Engaged in the Local Organization (3/2011) • Supplementary Explanations and Questions & Answers (3/2011) • Editing Rules for Data Entry and Computer Editing (4/2011) • Manual on ISIC Dictionary System (2/2011) • Manual on Data Entry System (4/2011) • Editing and Coding Manual (5/2011) • Duties of SCO and DPDP (Post Enumeration Survey) (7/2011) • Enumerator's Manual (Post Enumeration Survey) (7/2011) • Supervisor's Manual (Post Enumeration Survey) (8/2011) • Report on Local Activities in the 2011 Economic Census (10/2011) • Post Enumeration Survey, Tabulation plan, 2011 Economic Census of Cambodia (10/2011) • Handbook of Financial ratios on Data Analysis (10/2011) • Data Analysis on EC 2011 (10/2011) • Handbook of the Implementation on Data Analysis (7/2012) • Post Enumeration Survey (2/2013) • Use of Directory of Establishments (2/2013) • Organization and Administration of the Census (3/2013) • Comprehensive report on the organization and administration
7-2	Methods for maintaining and managing detailed procedural documents for statistical censuses and surveys in NIS and PDPs	<ul style="list-style-type: none"> • NIS and PDPs Acquired knowledge and skills regarding the maintenance system of the EC 2011 Manuals

8-1	Records of meetings with related organizations	<ul style="list-style-type: none"> • 3rd NSC (15/10/2010) • 4th CTC (22/10/2010) • 5th CTC (13/12/2010) • 3rd NCC (10/2/2011) • 6th CTC (3/2011) • 7th CTC (3/6/2011) • 1st JCC (12/10/2010) • 2nd JCC (11/3/2011) • 3rd JCC (9/3/2012) • 4th JCC (14/12/2012) • 5th JCC (14/3/2014) • 6th JCC (12/9/2014) • 7th JCC (17/2/2015)
8-2	Number of coordination meetings with related organizations	<ul style="list-style-type: none"> • Technical discussions with UNFPA and SIDA experts

Section 2. CIPS 2013

1. Outputs of the Project

	Outputs	Outline
1	NIS and PDPs will be able to conduct planning and implementation of statistical censuses and surveys	<ul style="list-style-type: none"> • NIS and PDPs acquired knowledge and techniques of planning and implementation of the CIPS.
2	NIS will be able to conduct data processing and production of statistical tables from statistical censuses and surveys including the Economic Census	<ul style="list-style-type: none"> • The experience of data processing of the CIPS led to the acquisition of knowledge and techniques for data entry, data checking, error detection, and data correction methods. • NIS acquired knowledge of the production of statistical tables of the CIPS.
3	NIS will be able to conduct analysis on the results of the Economic Census and other official statistical censuses and surveys	<ul style="list-style-type: none"> • NIS acquired analytical and tabulation methods of the CIPS.
4	NIS will be able to disseminate the results of Economic Census and other official statistical censuses and surveys, and will be able to improve people's understanding of official statistics including the Economic Census	<ul style="list-style-type: none"> • NIS Acquired knowledge of the dissemination through making CIPS reports. • Improve people's understanding of official statistics through disseminating CIPS reports.
5	NIS will be able to implement small area statistics regarding the Economic Census	<ul style="list-style-type: none"> • NIS acquired practical knowledge of SAS through trainings and OJT's.
6	PPDs will be able to tabulate and disseminate statistics for areas lower than the provincial level	<ul style="list-style-type: none"> • PPDs tabulated and disseminated statistics of SAS for 24 provinces.
7	NIS and PDPs will be able to develop systems for maintaining necessary skills and knowledge about official statistics	<ul style="list-style-type: none"> • As a result of the completion of implementation manuals, NIS and PDPs were able to develop systems for maintaining necessary skills and knowledge on official statistics.
8	NIS and PDPs will be able to improve skills for coordination	<ul style="list-style-type: none"> • NIS and PDPs improved the ability of coordination of NIS and PDPs through the CIPS seminar.

2. Indicators of the Project

	Index	Outline
1-1	Number of village maps and EA maps	<ul style="list-style-type: none"> • Village maps: 955 • EA maps: 955
1-2	Number of statistical surveys in which village maps, EA maps and updated village frame are used	<ul style="list-style-type: none"> • CIPS pre-test • CIPS
1-3	Level of understanding of planning statistical censuses and surveys, and of delineating enumeration areas	<ul style="list-style-type: none"> • Promoted understandings of planning statistical censuses and surveys, and of delineating enumeration areas on the CIPS
2-1	Number of statistical tables tabulated and released	<ul style="list-style-type: none"> • 177
2-2	Number of micro data records generated	<ul style="list-style-type: none"> • 128,619
2-3	Level of understanding of data processing and tabulation of results	<ul style="list-style-type: none"> • Promoted understandings of data processing of the CIPS including methods for data entry, data entries and data corrections • Promoted understandings of data tabulation of the CIPS
3-1	Number of analytical reports published and/or released by NIS and PDPs	<ul style="list-style-type: none"> • NIS: 7 <ul style="list-style-type: none"> • Cambodia Inter-Censal Population Survey 2013, Provisional Report (8/2013) • Cambodia Inter-Censal Population Survey 2013, Final Report (11/2013) • Cambodia Inter-Censal Population Survey 2013, No.7, Literacy and Educational Attainment (2/2014) • Cambodia Inter-Censal Population Survey 2013, No.8, Economic Activity and Employment (5/2014) • Cambodia Inter-Censal Population Survey 2013, No.9, Housing and Household Amenities (3/2014) • Cambodia Inter-Censal Population Survey 2013, No.10, Family and Household (5/2014) • Cambodia Inter-Censal Population Survey 2013, National Profile (5/2014)

3-2	Level of understanding of analysis of results	<ul style="list-style-type: none"> • Promoted understandings on analytical reports of CIPS
4-1	Number of publications, CDs, web pages, statistical maps, and census atlases	<ul style="list-style-type: none"> • Report: 7 <ul style="list-style-type: none"> • Cambodia Inter-Censal Population Survey 2013, Provisional Report (8/2013) • Cambodia Inter-Censal Population Survey 2013, Final Report (11/2013) • Cambodia Inter-Censal Population Survey 2013, No.7, Literacy and Educational Attainment (2/2014) • Cambodia Inter-Censal Population Survey 2013, No.8, Economic Activity and Employment (5/2014) • Cambodia Inter-Censal Population Survey 2013, No.9, Housing and Household Amenities (3/2014) • Cambodia Inter-Censal Population Survey 2013, No.10, Family and Household (5/2014) • Cambodia Inter-Censal Population Survey 2013, National Profile (5/2014) • Statistical maps: 19 • Census atlas: 1 <ul style="list-style-type: none"> • Cambodia Inter-Censal Population Survey 2013, Statistical Atlas (3/2014)
4-2	Number of trainees in the training courses	<ul style="list-style-type: none"> • The training of mapping of CIPS (25/10/2012), Number: 48 • The training for enumerators of CIPS (18-22/2/2013), Number: 1,193 • The Training of editing and coding of CIPS, (3/2013), Number: 35 • The Training of data entry of CIPS, (3/2013), Number: 16 • The Training on data analysis of report No.7 and No.10, (26/3/2014), Number: 16
4-3	Level of trainees' understanding of preparation, implementation and tools regarding the dissemination of the results of censuses and surveys	<ul style="list-style-type: none"> • Promoted understandings of the dissemination methods of preliminary results of the CIPS

4-4	Number of workshops and seminars conducted	<ul style="list-style-type: none"> • Report Meeting of The Post Enumeration Survey of Cambodia Inter-censal Population Survey (15-16/8//2013), Number: 150 • Seminar of Releasing Preliminary Results of Cambodia Inter-censal Population Survey (15/8//2013), Number: 200 • Seminar of Releasing Final Results of Cambodia Inter-censal Population Survey (25/11//2013), Number: 180 • Seminar of Releasing data analysis of Cambodia Inter-censal Population Survey (6/6//2014), Number: 170
5-1	Number of small area statistical tables for districts, communes, villages and EAs for the Economic Census	—
5-2	Number of trainees in the training courses on small area statistics	—
5-3	Level of understanding of the trainees on the use of small area statistics	—
6-1 6-2	Number of training courses conducted for PDPs Number of provincial trainees in the training courses or PDPs	<ul style="list-style-type: none"> • The training for enumerators of CIPS (18-22/2/2013), Number: 1,193
6-3	Level of understanding of the trainees on tabulation and scrutiny of data, and dissemination of the results of statistical surveys	<ul style="list-style-type: none"> • Promoted understandings about the tabulation and dissemination of the CIPS
6-4	Number of statistical tables tabulated and released	<ul style="list-style-type: none"> • 177
7-1	Number of detailed procedural documents prepared	<ul style="list-style-type: none"> • Manual on Mapping Work (6/2012) • Cambodia Inter-Censal Population Survey 2013, Report on local activities (8/2013) • Report on Local Activities of CIPS 2013 (8/2013)
7-2	Methods for maintaining and managing detailed procedural documents for statistical censuses and surveys in NIS and PDPs	<ul style="list-style-type: none"> • NIS and PPDs Acquired knowledge and skills regarding the maintenance system of the CIPS Manuals
8-1	Records of meetings with related	<ul style="list-style-type: none"> • 1ST CIPS-TC (19/5/2011)

	organizations	<ul style="list-style-type: none"> • 2ND CIPS-TC (15/8/2011) • CIPS meeting (NIS, UNFPA, JICA) (29/8/2011) • 3RD CIPS-TC (8/12/2011) • 4TH CIPS-TC (9/2/2012) • 1ST JCC (12/10/2010) • 2ND JCC (11/3/2011) • 3RD JCC (9/3/2012) • 4TH JCC (14/12/2012) • 5TH JCC (14/3/2014) • 6th JCC (12/9/2014) • 7th JCC (17/2/2015)
8-2	Number of coordination meetings with related organizations	• Technical discussions with UNFPA and SIDA experts

Section 3. CIES 2014

1. Outputs of the Project

	Outputs	Outline
1	NIS and PDPs will be able to conduct planning and implementation of statistical censuses and surveys	<ul style="list-style-type: none"> • NIS and PDPs acquired knowledge and techniques of planning and implementation of the CIES.
2	NIS will be able to conduct data processing and production of statistical tables from statistical censuses and surveys including the Economic Census	<ul style="list-style-type: none"> • The experience of data processing of the CIES led to the acquisition of knowledge and techniques for data entry , data checking, error detection and data correction methods. • NIS acquired knowledge of the production of statistical tables of the CIES.
3	NIS will be able to conduct analysis on the results of the Economic Census and other official statistical censuses and surveys	<ul style="list-style-type: none"> • NIS acquired analytical and tabulation methods of the CIES.
4	NIS will be able to disseminate the results of Economic Census and other official statistical censuses and surveys, and will be able to improve people's understanding of official statistics including the Economic Census	<ul style="list-style-type: none"> • NIS Acquired knowledge of the dissemination through making CIES reports. • Improve people's understanding of official statistics through disseminating CIES reports.
5	NIS will be able to implement small area statistics regarding the Economic Census	<ul style="list-style-type: none"> • NIS acquired practical knowledge of SAS through trainings and OJT's.
6	PDPs will be able to tabulate and disseminate statistics for areas lower than the provincial level	<ul style="list-style-type: none"> • PDPs tabulated and disseminated statistics of SAS for 24 provinces.
7	NIS and PDPs will be able to develop systems for maintaining necessary skills and knowledge about official statistics	<ul style="list-style-type: none"> • As a result of the completion of implementation manuals, NIS and PDPs were able to develop systems for maintaining necessary skills and knowledge on official statistics.
8	NIS and PDPs will be able to improve skills for coordination	<ul style="list-style-type: none"> • NIS and PDPs improved the ability of coordination of NIS and PDPs through the CIES seminar.

2. Indicators of the Project

	Index	Outline
1-1	Number of village maps and EA maps	<ul style="list-style-type: none"> • Village maps: 553 • EA maps: 553
1-2	Number of statistical surveys in which village maps, EA maps and updated village frame are used	<ul style="list-style-type: none"> • CIES pre-test • CIES
1-3	Level of understanding of planning statistical censuses and surveys, and of delineating enumeration areas	<ul style="list-style-type: none"> • Promoted understandings of planning statistical censuses and surveys, and of delineating enumeration areas on the CIES
2-1	Number of statistical tables tabulated and released	<ul style="list-style-type: none"> • 192
2-2	Number of micro data records generated	<ul style="list-style-type: none"> • 12,178
2-3	Level of understanding of data processing and tabulation of results	<ul style="list-style-type: none"> • Promoted understandings of data processing of the CIES including methods for data entries and data corrections • Promoted understandings of data tabulation of the CIES
3-1	Number of analytical reports published and/or released by NIS and PDPs	<ul style="list-style-type: none"> • NIS: 2 <ul style="list-style-type: none"> • Preliminary Results of Cambodia Inter-Censal Economic Survey 2014 (9/2014) • Cambodia Inter-Censal Economic Survey 2014, National Report on Final Results (2/2015)
3-2	Level of understanding of analysis of results	<ul style="list-style-type: none"> • Promoted understandings on analytical reports of CIES
4-1	Number of publications, CDs, web pages, statistical maps, and census atlases	<ul style="list-style-type: none"> • Report: 2 <ul style="list-style-type: none"> • Preliminary Results of Cambodia Inter-Censal Economic Survey 2014 (9/2014) • Cambodia Inter-Censal Economic Survey 2014, National Report on Final Results (2/2015) • Statistical maps: 24
4-2	Number of trainees in the training courses	<ul style="list-style-type: none"> • The Training of the pretest for the CIES, (10/2013), Number: 25

		<ul style="list-style-type: none"> • The Training of the mapping work for the CIES, (11/2013), Number: 19 • The Training of CIES for RO/ARO and DPDP, (3/2/2014), Number: 144 • The traing on data coding of CIES (3/2/2014), Number: 15 • The traing on data entry of CIES (3/2/2014), Number: 22 • The Training of CIES for Supervisor/Enumerator, (17-21/2/2014), Number: 735 • Workshop on Data Analysis , (8-9/9/2014), Number: 169
4-3	Level of trainees' understanding of preparation, implementation and tools regarding the dissemination of the results of censuses and surveys	<ul style="list-style-type: none"> • Promoted understandings of the dissemination methods of preliminary results of the CIES
4-4	Number of workshops and seminars conducted	<ul style="list-style-type: none"> • Report Meeting of The Post Enumeration Survey of CIES (5/6/2014), Number: 150 • Ceremony of Releasing Preliminary Results of CIES 2014 (8/9/2014), Number: 230 • Ceremony of Releasing Final Results of CIES 2014 (27/2/2015), Number: 300
5-1	Number of small area statistical tables for districts, communes, villages and EAs for the Economic Census	—
5-2	Number of trainees in the training courses on small area statistics	—
5-3	Level of understanding of the trainees on the use of small area statistics	—
6-1 6-2	Number of training courses conducted for PDPs Number of provincial trainees in the training courses or PPDs	<ul style="list-style-type: none"> • The Training of CIES for Supervisor/Enumerator, (17-21/2/2014), Number: 735 • Workshop on Data Analysis , (8-9/9/2014), Number: 169
6-3	Level of understanding of the trainees on tabulation and scrutiny of data, and dissemination of the results of statistical surveys	<ul style="list-style-type: none"> • Promoted understandings about the tabulation and dissemination of the CIES

6-4	Number of statistical tables tabulated and released	<ul style="list-style-type: none"> • 192
7-1	Number of detailed procedural documents prepared	<ul style="list-style-type: none"> • Sampling Design (7/2013) • Implementation Plan of Pretest for the CIES2014 (8/2013) • Implementation Plan of Mapping Work for the CIES2014 (9/2013) • Cambodia Inter-Censal Economic Survey 2014, Manual on Mapping Work (10/2013) • Cambodia Inter-Censal Economic Survey 2014, Supervisor's Manual (3/2014) • Cambodia Inter-Censal Economic Survey 2014, Enumerator's Manual (3/2014) • Cambodia Inter-Censal Economic Survey 2014, Duties of RO/ARO, and DPDP (3/2014) • Supplementary Explanations and Questions & Answers (3/2014) • Computer Edit Rules (3/2014) • Cambodia Inter-Censal Economic Survey 2014, Manual on data entry (5/2014) • Cambodia Inter-Censal Economic Survey 2014, Manual on editing and coding (5/2014) • Cambodia Inter-Censal Economic Survey 2014, Manual on CSIC dictionary system (5/2014)
7-2	Methods for maintaining and managing detailed procedural documents for statistical censuses and surveys in NIS and PDPs	<ul style="list-style-type: none"> • NIS and PDPs Acquired knowledge and skills regarding the maintenance system of the CIES Manuals
8-1	Records of meetings with related organizations	<ul style="list-style-type: none"> • 1st CIES-TC (21/8/2012) • 2nd CIES-TC (11/3/2013) • 3rd CIES-TC (21/8/2013) • 4th CIES-TC (14/10/2013) • 5th CIES-TC (13/12/2013) • 6th CIES-TC (2/9/2014) • 1st JCC (12/10/2010) • 2nd JCC (11/3/2011) • 3rd JCC (9/3/2012)

		<ul style="list-style-type: none"> • 4th JCC (14/12/2012) • 5th JCC (14/3/2014) • 6th JCC (12/9/2014) • 7th JCC (17/2/2015)
8-2	Number of coordination meetings with related organizations	<ul style="list-style-type: none"> • Technical discussions with UNFPA and SIDA experts

Section 4. RSCIP

1. Outputs of the Project

	Outputs	Outline
5	NIS will be able to implement small area statistics regarding the Economic Census	<ul style="list-style-type: none"> • NIS acquired practical knowledge of SAS through trainings and OJT's.
6	PDPs will be able to tabulate and disseminate statistics for areas lower than the provincial level	<ul style="list-style-type: none"> • PDPs tabulated and disseminated statistics of SAS for 24 provinces.

2. Indicators of the Project

	Index	Outline
3-1	Number of analytical reports published and/or released by NIS and PDPs	<ul style="list-style-type: none"> • PDPs: 24 • Population, Households, and Establishments (6 reports: 12/2012) (9 reports: 8/2013) (5 reports: 8/2014) (4 reports: 12/2014)
4-1	Number of publications, CDs, web pages, statistical maps, and census atlases	<ul style="list-style-type: none"> • PDPs: 24 reports • Population, Households, and Establishments (6 reports: 12/2012) (9 reports: 8/2013) (5 reports: 8/2014) (4 reports: 12/2014) • PDPs: 288 statistical maps
5-1	Number of small area statistical tables for districts, communes, villages and EAs for the Economic Census	<ul style="list-style-type: none"> • 312
5-2	Number of trainees in the training courses on small area statistics	<ul style="list-style-type: none"> • The Training of Small Area Statistics (2011 second stage) , (8-9/2011), Number: 36 • The Training of Small Area Statistics (2011 second stage) , (12/2011), Number: 36 • The Training of Small Area Statistics (2012 second stage) , (8-9/2012), Number: 54 • The Training of Small Area Statistics (2012 second stage) , (10-11/2012), Number: 45 • The Training of Small Area Statistics (2013

		<p>second stage) , (8/2013), Number: 30</p> <ul style="list-style-type: none"> • The Training of Small Area Statistics (2013 second stage) , (10/2013), Number: 25 • The Training of Small Area Statistics (2014 second stage) , (5/2014), Number: 24 • The Training of Small Area Statistics (2014 second stage) , (6-7/2014), Number: 20
5-3	Level of understanding of the trainees on the use of small area statistics	<ul style="list-style-type: none"> • Promoted understandings of data compilation, analysis and analytical descriptions of small area statistics for 4 provinces
7-1	Number of detailed procedural documents prepared	<ul style="list-style-type: none"> • Basic Document for Producing Small Area Statistics in Provinces (8/2011) • SAS Subproject for Improvement of Statistical Technology in Provincial Developments of Planning (3/2012)

Chapter 4. Outputs of technical assistance

Section 1. EC 2011

1. Planning of the 2011 Economic Census

1) C/P

- Mr. Hor Darith (DDG)
- Mr. Khin Sovorlak (DDG)
- Economic Statistics Department
 - Mr. Mich Kanthul (Director), Mr. So Tonnere, Mr. Sok Borith, Mr. Mak Sovithea, Mr. Try Ritthea, Mr. Hom Sokunth, Mr. Try Socheat, Mr. Chek Pheakitzu, and Mr. Sok Borith
- Department of Demographic Statistics, Census and Survey: Mr. Sin Sereyvuth

2) Methods and effects of technological transfer

- Based on a pretest in December 2009, a pilot survey in March 2010, and demarcation of EAs in July 2010, the following plan was developed by the JICA expert in charge, and the plan documents were drawn in consultation with the counterparts. Compiled documents were explained to the C/Ps in the Regular Review Meeting set up to be held every Monday, and put to the C/Ps for translation into Khmer. The plan documents were explained by the C/Ps in the Census Technical Committee chaired by a Secretary of State, MOP and consisting of DG-class representatives of line ministries for final approval and decision.
 - 2011 Economic Census implementation outline (overall implementation plan)
 - Counter-measure plan for refusal establishments
 - Census publicity plan
 - Training plan
 - Enumerators and supervisors mobilization plan
 - Documents and goods/equipment procurement and distribution plan
 - Data processing plan
- Documents needed for the census implementation were designed and compiled in consultation with the C/Ps. They included Form, Establishment List, Special Establishment List, Enumeration Completion Certification Slip, Vinyl Bag, Label, Summary Sheet for Enumerator, and Summary Sheet for Commune/District, and were explained to the C/Ps in the Regular Review Meeting set up to be held every Monday, and put to the C/Ps for translation into Khmer.
- Manuals which described duties of personnel who were engaged in the census implementation were compiled in consultation with the C/Ps. They included Enumerator's Manual, Supervisor's Manual and Duties of Local Staff, and were explained to the C/Ps in the Regular Review Meeting set up to be held every Monday, and put to the C/Ps for translation into Khmer.
- The following points were instructed to the C/Ps concretely one after another in the Regular Review

Meeting:

-Census implementation plan

- The expert instructed the C/Ps that EA maps compiled in Delineation of EAs be photo-copied systematically by forming teams so that they could be allocated to enumerators.
- The expert instructed the C/Ps that translation teams and verification teams be formed so that various documents could be translated into Khmer correctly.

-Counter-measures for refusal establishments

- The expert instructed that a Special Survey Team be set up in each province so that it could persuade and enumerate refusal establishments according to the counter-measure plan for refusal establishments. Here, the Special Survey Team should consist of directors of provincial departments of line ministries.

-Census publicity plan

- The contents of TV spots and video clips were advised so that effective Census publicity could be realized according to the census publicity plan.

-Training plan

- Five levels of training were planned and recommended: they included (i) two times of training of staff of provincial departments of departments by NIS core staff, (ii) TOT: training of trainers (ROs and AROs) who would train enumerators and supervisors in provinces, (iii) training of chiefs of districts and communes, and (iv) training of enumerators and supervisors.
- A curriculum for each level of training was compiled. The curricula were explained to the C/Ps in the Regular Review Meeting and put for translation into Khmer. At the same time, the C/Ps were advised to decide soonest who would take charge of which subjects.
- The JICA expert recommended that NIS staff be lectures in principle for their capability building for such training held at NIS as training of staff of provincial departments of departments (two times) and training of trainers (TOT) for ROs/AROs. The expert was present at all the training sessions, advised lecturers and answered those questions which lecturers could not clarify. He also gave lectures when necessary. Every day after the training, a meeting of lecturers was held to solve problems and give advice for the next-day training. Moreover, the expert instructed that all the questions raised during training sessions be recorded and submitted to him.
- "Supplementary Explanations and Q and A" and "Additional Explanations" were compiled and explained by the expert, and were put for translation into Khmer so that it could be explained in the second TOT training to be held just before trainers' dispatch to provinces.
- The expert participated in as many sessions as possible of training of chiefs of districts and communes as well as of enumerators and supervisors, and gave advice and answered questions when needed.

-Recruitment of Enumerators and Supervisors

- Advice was given on criteria of recruitment of enumerators and their wages.

-Procurement and distribution of Census documents and goods

- The JICA expert estimated basic quantities such as numbers of target establishments and enumerators, and advised the C/Ps to procure Census documents and goods based on these basic quantities. As for their distribution to provinces, the expert recommended that proper measures of distribution be determined systematically: they could be directly delivered by suppliers, or hand-carried by provincial staff when going home after attending training sessions

-Data processing plan

- The JICA expert compiled a list of statistical tables to be produced from the Census returns together with their formats and groupings of variables, explained it to the C/Ps, and advised them to translate it into Khmer and to present it in a CTC meeting.
- As to the advice about the Census enumeration in the field, the JICA expert visited as many provinces as possible in order to give advice when necessary on confirmation of EAs, entry on maps, entry on Forms and so on by observing the results of enumeration at the field of Census taking where enumerators were working. A challenge encountered frequently was a case where the number of establishments had increased remarkably, especially in market areas, so that assigned enumerators could not cope with it. The expert held a Senior Census Officer (SCO) meeting during the Census period to discuss this matter, and determined three solutions: mobilization of enumerators of neighboring EAs; additional payment to enumerators who enumerated more than 150 establishments; and additional appointment of enumerators.
- As to the procedure of the receipt of Census documents such as Forms, a manual was compiled by the expert describing the site of safe-keeping of Census documents, the procedure of their receipt, and the way of their safe-keeping, and was explained in a SCO meeting for action.

2. Data processing of the Economic Census

2-1. Data processing methods

1) C/P

- ICT Department
Mr. Saint Lundy (Director), Mr. Chun Bonarith, and Mr. Sam Sok Sotheavuth
- Economic Statistics Department
Mr. So Tonnere, and Mr. Try Socheat
- Department of Statistical Standards and Methodologies
Mr. Treav Rongsa

2) Methods of technological transfer

- Technological transfer was realized on overall planning, work scheduling, manpower planning, equipment procurement and installation, quality control, computer programme development, and compilation of various manuals through the following stages of data processing:
 - (i) Receipt of Census documents such as Forms from April 2011 following the enumeration of the Economic Census held in March 2011;
 - (ii) Manual editing and coding of Census Forms starting in May 2011 for five months at most;
 - (iii) Data entry followed by computer data editing (checking and correction) to produce clean data of the Economic Census; and
 - (iv) Table generation, release, dissemination and publication of the results of the Census.
- Especially in order to determine editing rules for Census data, the JICA experts in charge trained the C/Ps through establishing allowable ranges for such variables as floor space and amount of sales scientifically by re-tabulating the returns of the plot survey.
- Through discussion with the C/Ps, the experts showed them how to make various plans on a trial and error basis under given human and financial constraints.

3) Effects of technological transfer

- As to the Economic Census, through the planning work for the data processing of Census data, the computer data editing rules, the data entry manual, and the editing and coding manual was drafted in Khmer in January 2011 enabling discussions within NIS staff. As a result, data processing training toward the end of April, and data processing operations from May were accomplished without delay.
- NIS became able to accomplish the above shown series of data processing work for the 2014 Cambodia Inter-censal Economic Survey and the like.
- In future, the NIS should work in such a way that the survey departments and the data processing department are independent but cooperative as stipulated in the NIS organizational chart, and that they will be engaged in large-scale surveys such as censuses in parallel throughout all stages. Then, transferred technologies will work much more.

2-2. Data cleaning (Fiscal 2011)

1) C/P

- ICT Department
Mr. Saint Lundy, Mr. Lay Sophat, and Mr. Chao Pheav
- Economic Statistics Department
Mr. So Tonnerre, and Mr. Oeur Sophal
- Department of Statistical Standards and Methodologies
Mr. Treav Rongsa

2) Methods of technological transfer

- Data cleaning is a data processing stage where various errors existing in the Form are detected by computer, and they are corrected (imputed) by computer, or corrected manually by referring to the original Form or to the establishment concerned after printing erroneous data on paper. Errors include mistakes in answers regarding the total and its components of number of persons or amount of money; conversion errors from riel to dollar; and absence of answers at the enumeration stage; as well as errors in industrial classification coding at the manual data editing and coding stage; and typing errors at the data entry stage. As data cleaning influences the quality of Census results greatly, the relevance, accuracy and comprehensiveness of the data cleaning guideline which describes the procedures and contents of the data cleaning concerned is a key factor.
- The methodology of data cleaning and its importance was stressed and lectured not only by JICA experts seconded by the Government but also the JICA experts in charge (private sector) so that the C/Ps could compile their “Data Cleaning Guideline”. However, it turned out that the “clean data” produced by the C/Ps for a province based on their “Data Cleaning Guideline” still contained a considerable amount of errors. Then, the experts showed such errors to the C/Ps, let them examine the definitions of and the operations at the manual editing and coding stage and at the data entry stage for the variables concerned of the Form, and let them see the original answers in the original Form which was extracted from the storage. Finally, the experts discussed correction methods with the C/Ps, and advised them to improve the “Data Cleaning Guideline” accordingly.
- In October 2011, the experts judged that the data cleaning work had not made a good progress, and decided to reorganize the data cleaning work system. On 2 November, the experts summoned the C/Ps including Mr. Khin Sovorlak, DDG to discuss and confirm responsible persons, work procedures, work contents, and so on.
- As to “Q.8 Business Hour”, a deviation from the manual editing and coding manual was found during the data cleaning work review. That is, starting and closing hours were answered in morning and afternoon hours, and 12 was added to afternoon hours at the manual editing and coding stage, but it turned out that part of this addition was wrong. Moreover, coding of “Business Hour band” based on “Q.8 Business Hour” was found partly wrong. Then, a data editing programming flow chart was developed and integrated into the data cleaning programme for “Q.8 Business Hour”, and the experts advised the C/Ps to print such errors and correct them by referring to the original Forms.

- As to data cleaning of the industrial classification, the experts tabulated the number of establishments by industry and kind of business place, and urged the C/Ps to review doubtful combinations and reveal industrial coding errors for themselves.
- As to data cleaning of the number of persons engaged, especially for that of Unpaid Family Workers, establishments with six Unpaid Family Workers or more were sorted by number of persons engaged, and/or were tabulated by industry and number of Unpaid Family Workers. Thus, the experts prepared data useful for detecting doubtful data, and gave guidance to the C/Ps on efficient data cleaning.
- As to data cleaning of amount of money such as sales and expenses, lack of chronological data or reliable related data resulted in inadequate data editing of such data as the Economic Census was conducted for the first time in Cambodia. Then, the adviser tabulated the sales and expenses by industrial class and whether having Income Statement or Balance Sheet to extract doubtful establishments for specific industry classes, and instructed the C/Ps to refer to the original Forms and make necessary corrections. Furthermore, in case of having Balance Sheet or Income Statement, treatment of negative values was considered by the experts, and the C/Ps were instructed to extract doubtful data using a method developed for checking the amount of assets, to consider their treatment, and to take necessary actions such as inquiries to the establishments concerned after referring to the original Forms. Moreover, maximal and minimal amounts of sales, expenses, etc. by industrial class were tabulated by the experts to extract doubtful data, and doubtful topics with reasons for doubtfulness were shown after referring to the original Forms. Then, the C/Ps were instructed to make necessary corrections. In this aspect, for data cleaning of amounts of sales, expenses, etc., the other experts had recommended the C/Ps to perform range checks based on the results of the pilot survey, but it had not been followed by the C/Ps based on their views that the pilot survey data had not been cleaned enough, and that the sample size had not been large enough.
- It is inevitable to clarify at which stages and from what causes the error has arisen to find out the method of correcting it. For example, conversion errors at the enumeration stage or data entry errors can be corrected by referring to the original Form concerned. Therefore, it is necessary to confirm how the topic is entered on the Form in order to correct the error properly although this method takes time to locate the original Form. Thus, the experts instructed the C/Ps to prepare original Forms with them to the extent possible when the experts gave guidance to the C/Ps.
- In order to capture the current status of treatment of problems and to determine responsible C/Ps, as well as to share common information with the C/Ps, the experts instructed the C/Ps to make a problem managing table and update it regularly.
- Whenever the C/Ps submitted clean data after data cleaning, the experts checked that no more errors remained and that new errors had not arisen, and instructed the C/Ps to perform data cleaning again when overlooked errors were found.

3) Effects of technological transfer

- “Data Cleaning Guideline” was revised to make the 11th revision. The revision was made by the C/Ps after they recognized the necessity for revision every time, and thus they made progress in understanding the importance of “Data Cleaning Guideline” and knowhow of its compilation. Moreover, as the experts summoned the C/Ps whenever errors were detected, and discussed the treatment by referring to the definitions etc. stipulated in “Enumerator’s Manual” etc. with the C/Ps. Thus, the C/Ps recognized that it was important to understand the necessity for understanding the definitions of Census topics and the contents of work of manual editing and coding and data entry in order to compile “Data Cleaning Guideline”.
- At the beginning when the discussion with the C/Ps started, they tended to reach conclusions and wanted to correct errors in any way, but the experts stressed many times that the investigation of causes of errors was needed, and that error correction methods should be sought according to the situations of errors after referring to original Forms. As a result of discussions referring to original Forms etc., it can be said that the C/Ps understood the importance of investigation of causes of errors and reference to original Forms for proper error correction.
- Raised were the C/Ps’ awareness to the importance of quality of data and the necessity for proper actions to improve data quality by contacting or re-interviewing establishments when needed
- Detection and correction of erroneous data moved ahead owing to the efforts made by the C/Ps and by officials in charge of safe-keeping of the Forms.

2-3. Data cleaning (Fiscal 2012)

1) C/P

- Mr. Hor Darith (DDG)
- Mr. Khin Sovorlak (DDG)
- ICT Department
 Mr. Saint Lundy, Mr. Lay Sophat, and Mr. Chao Pheav
- Economic Statistics Department
 Mr. So Tonnere
- National Accounts department
 Mr. Oeur Sophal

2) Methods of technological transfer

- Data cleaning was continued concerning amounts of sales, expenses, etc. and man-to-man training was provided to detect doubtful data, to refer to original Forms, to correct errors, and so on.
- Some detected errors were shown to the C/Ps when it was felt necessary to share problems/difficulties and to discuss counter-measures.
- Whenever the C/Ps submitted clean data after data cleaning, the experts checked that no more errors remained and that new errors had not arisen, and instructed the C/Ps to perform data cleaning again when overlooked errors etc. were found.

3) Effects of technological transfer

- The importance of “Data Cleaning Guideline” based on which data cleaning was performed and the importance of the degree of perfection of “Data Cleaning Guideline” which determined data quality became more understood by the C/Ps.
- Raised were the C/Ps’ awareness to the importance of quality of data and the necessity for proper actions to improve data quality by contacting or re-interviewing establishments.
- The data quality and the usefulness of the results were improved by the efforts made by the C/Ps and by officials in charge of safe-keeping of the Forms although the data cleaning work required a lot of time.

2-4. Data tabulation (Fiscal 2011)

1) C/P

- Mr. Khan Sovorlak (DDG)
- ICT Department
 - Mr. Saint Lundy, Mr. Chun Bonarith, Mr. Lay Sophat, Mr. Chao Pheav, Mr. Sam Sok, Mr. Sotheavuth, and Mr. Ouk Chay Panhara
- Economic Statistics Department
 - Mr. So Tonnere, and Mr. Try Socheat
- Department of Statistical Standards and Methodologies
 - Mr. Treav Rongsa
- Social Statistics Department
 - Mr. Kim Net
- Department of Demographic Statistics, Census and Survey
 - Mr. Nit Sarun

2) Methods of technological transfer

- The JICA experts drafted a tabulation plan including topics to be tabulated, groupings of quantitative topics and table formats and showed it to the C/Ps for discussion. Then, about 600 draft table formats were compiled consisting of 9 parts from Part I to Part IX.
- At a stage when data cleaning made progress to some extent, micro data were tabulated to produce tables so that the groupings were reviewed; treatment of “Not Reported” cases were determined; and the table formats were revised. Then, Part X was created.
- As to table generation tools, SCS (Simple Calculation System: developed by National Statistics Center, Japan and provided to NIS) was selected in consultation with the C/Ps.
- SCS was adjusted with respect to functions for smooth tabulation of the Economic Census by Government-side experts after consultation with the private-side experts, and provided to NIS. Then, the Government-side experts trained the C/Ps on the use of SCS.
- Following the above training, tabulation parts from I to X were allocated to the C/Ps.
- Mr. Nit Sarun was the first C/P that defined tables using SCS among the C/Ps, and the experts checked the coded table formats and tables. Then, the experts found out common problems in coding table formats, and started reviewing the table format coding work to improve it in general.

3) Effects of technological transfer

- The C/Ps’ understanding of tabulation topics and statistical tables concerning the Economic Census deepened.
- The C/Ps’ understanding of methods of operation of SCS deepened.

2-5. Data tabulation (Fiscal 2012)

1) C/P

- ICT Department
Mr. Saint Lundy, Mr. Lay Sophat, Mr. Chao Pheav, Mr. Sam Sok Sotheavuth, Ms. Bou Srey Lun, Ms. Chum Puthivan, and Ms. Chea Narun
- Department of Demographic Statistics, Census and Survey
Mr. Nit Sarun

2) Methods of technological transfer

- Taking into consideration the capability of each C/P, the statistical tables were allocated to the C/Ps so that they felt responsible for the allocated tables, and man-to-man training was provided at NIS upon request and by e-mail when the experts were not in Phnom Penh.
- In order to save time and make manual work efficient for coding formats of a huge amount of statistical tables, the experts asked Government-side experts to provide a new version of SCS and to improve its capabilities; to develop an ancillary program for simplifying SCS definitions; and to convert a table format matching program developed by the National Statistics Center of Japan so as to adapt it for SCS after consultation with the C/Ps.
- Bugs found in SCS during table formatting work were solved in consultation with Government-side experts by asking them to amend SCS, etc.
- The experts advised the C/Ps to check their work progress each other regularly.

3) Effects of technological transfer

- The C/Ps' practical knowhow of using SCS was accumulated in NIS through actual application work to the Economic Census.
- The C/Ps' understanding of tabulation topics and statistical tables of the Economic Census deepened.

3. Organizational and systematic management of the Forms, etc. of the Economic Census

1) C/P

- 7 SCOs and NIS members of 6 teams in charge (see below)

2) Methods of technological transfer

- Forms and Establishment Lists compiled by Enumerators were arranged in the order of establishment number and contained in Plastic Bags, and were sent finally to NIS in the order of Village/EA code through Supervisors, Commune/District officials and chiefs, officials and directors of Planning Departments of Provinces. At each stage, counts were checked according to “Control Sheets of Numbers of Forms and Plastic Bags by Village and EA”. The number of Plastic Bags exceeded 20,000 for the whole country. This huge amount of Plastic Bags had to be confirmed when they were submitted to NIS from a province with respect to the number (quantity); to be arranged in the order of area code; and to be stored so as to be retrieved without delay when needed. Moreover, they had to be retrieved and returned systematically to cope with such work as manual editing and coding, data entry, etc. which were to be performed province by province. In this regard, at the 1998 and 2008 Population Censuses, Forms were processed randomly to some extent for manual editing and coding as well as for data entry; and piles of Plastic Bags containing Forms scattered in the working room. Then, data missing was not recognized; data processing work had to be monitored by a special software system saying, for example, “XXX province had been finished 97%”; thus even one province of data were not processed completely for a long time; and so on, causing a lot of difficulties in data processing. This shows that even if the importance of the receipt, arrangement and safe-keeping of Forms were recognized by NIS staff to some extent, they lacked in knowhow to handle this matter.
- At this Economic Census, such confusions as occurred at the previous censuses as stated above should be avoided, and the following documents were compiled by the experts to explain them to the C/Ps at As-needed Meetings of the SCOs (Senior Census Officers: 7 officials stated below), and to ask and answer questions. In this way, the experts made efforts to make NIS staff to be aware of the importance of the receipt and safe-keeping of Forms, and to transfer knowhow for drafting plans, establishing procedures, etc. systematically concerning the receipt and safe-keeping of Forms. Moreover, as the tabulation for the Preliminary Report was related to this work, knowhow concerning the procedures for compiling the Preliminary Report was transferred in a similar way.
 - Work Procedure for Receiving and Safe-keeping (Initial Stage) of Documents)
 - Way of Safe-keeping during Editing/Coding and Data Entry Work
 - Work Procedure for Preliminary Tabulation)
- 7SCOs (Senior Census Officers were selected specially from among DDGs, directors and deputy directors of NIS departments to promote/guide such important work as preparatory work and implementation work) were the direct targets of technological transfer.
 - Mr. Hor Darith (Deputy Director General of NIS: DDG): Chief SCO
 - Mr. Khin Sovorlak (Deputy Director General of NIS: DDG): Deputy Chief SCO

Mr. Mich Kanthul (Director of Department of Economic Statistics)

Mr. Saint Lundy (Director of Department of ICT)

Mr. So Tonnere (Deputy Director of Department of Economic Statistics)

Mr. Sin Sereyvuth (Deputy Director of Department of Demographic Statistics, Census and Survey)

Mr. Kim Net (Deputy Director of Department of Social Statistics)

- The following teams were set up with the above shown SCOs as chiefs, and the chiefs trained members of their respective teams according to the knowledge and documents obtained in the above mentioned meetings of SCOs.

Receipt and Safe-keeping Team: General Chief - Mr. Hor Darith

Receipt Team: Chief - Mr. So Tonnere with 6 members

Safekeeping Team: Chief - Mr. Duch Chamroeun (DD of Logistics in NIS) with 4 members

Preliminary Report Special Team: General Chief - Mr. Khin Sovorlak

Checking Team: Chief - Mr. So Tonnere with 10 persons

Data Entry Team: Chief - Mr. Saint Lundy with tens of people

3) Effects of technological transfer

- As the final objectives of this subject were achieved as shown below, it can be said that the intended accumulation of knowhow and transfer of technologies were successfully accomplished.
 - 25,000 Plastic Bags containing 500 thousand Forms were finally received, arranged in the order of area code, and safe-kept systematically according to the area codes. Afterwards when data processing work for the Final Report was conducted, the safe-kept Forms were carried out and carried back in an orderly fashion by the Receipt and Safe-keeping Team.
 - The work for the Preliminary Report performed in conjunction with the receipt and safe-keeping work was accomplished with no confusion.

4. Economic Census Post Enumeration Survey

1) C/P

- NIS staff

2) Methods of technological transfer

- A post enumeration survey (PES) is a small-size sample survey conducted in most cases after a census to evaluate the accuracy of the census. It is recommended in one of the recommendations of UN Statistics Division. Moreover, a PES is stipulated in the regulations for the Economic Census. Therefore, the Economic Statistics Department responsible for the Economic Census recognized the significance of and necessity for a PES. However, this Economic Census was conducted for the first time in the history of Cambodia, and therefore they did not possess any knowhow concerning what to investigate and by what kind of form to conduct it; how to implement it; or how to analyze the results.
- The following documents were compiled by the experts to explain them to C/Ps at the As-needed Meeting of the SCOs (Senior Census Officers: 7 officials stated earlier), and to ask and answer questions. In this way, the experts made efforts to make NIS staff to transfer knowhow systematically for drafting plans; designing a form); implementing the survey; designing statistical tables to produce; establishing procedures and contents of data processing work and so on.
 - Implementation plan of the Post Enumeration Survey of the 2011 Economic Census to explain the overall work of the PES including sampling and data processing
 - Form containing survey topics to measure the coverage and content errors of the Economic Census, and Establishment List containing topics by which to match PES forms with Economic Census forms and other survey goods
 - Enumerator's Manual which described the significance of PES, PES methodologies, etc. and Supervisor's Manual which described supervisor's duties
 - Training Curriculum for Enumerators, Supervisors and DPDPs which showed how and on what to train 60 enumerators, 15 supervisors, and 12 Directors of Provincial Departments of Planning (DPDPs)
 - Duties of SCOs and DPDPs: Matters for Special Attention regarding Identification and Listing of Establishments)
 - Work Procedures for Receiving and Safe-keeping of Documents, Tabulation Plan, Manual for Handwork Matching of Establishments (between the Economic Census and PES), Manual for Editing and Coding, Formats of Statistical Tables for PES, Explanatory Notes on Data Sources etc.
- The above English documents were translated into Khmer and used to train enumerators, supervisors, directors and staff of PDPs, and data processing staff, and at the same time as guidelines of actual work. It can be said that through this translation process, understanding and acquirement of knowhow or technologies on PES deepened.
- In addition to transfer of knowhow or technologies to SCOs through discussions in meetings,

knowhow and technologies was transferred on the spot during actual work in the following way:

- How to stratify provinces, districts, villages and EAs to select 12 sample provinces and 60villages/EAs randomly
- How to divide a sample village/EA when it contains too many establishments; how to select an EA from these EAs newly established by division; and how to draw Village/EA division maps.
- In the seminar for enumerators and supervisors, directors of DPDs, etc. C/Ps (SCOs) gave lectures based on knowhow obtained in the above mentioned meeting-type training sessions. The experts helped lecturers answer questions raised.
- During the PES period from 1-14 July 2012, the experts observed enumerators' activities, and answered questions from enumerators and supervisors. Advice was given on the problems encountered individually and concretely.
- Advice was given on questions raised during matching work between PES establishments and Economic Census establishments.

3) Effects of technological transfer

- As the final objectives of this subject were achieved as shown below, it can be said that the intended accumulation of knowhow and transfer of technologies were successfully accomplished.
 - The training seminars on PES for enumerators and supervisors, directors and staff of PDPs were lectured properly with no difficulties by the SCOs who had acquired the above mentioned transferred knowhow.
 - Enumeration by enumerators was completed as instructed in the training sessions with respect to confirmation of EA boundaries, listing of establishments, interview, verification, etc., and the filled-in Forms were submitted to supervisors by the designated date.
 - Inspection by supervisors, directors and staff of PDPs was also smoothly made and 4,657 Forms were submitted to NIS by the designated date, i.e. 15 August 2012.
 - Receipt, arrangement, and safe-keeping of Forms, manual editing and coding work on Forms, matching of PES establishments and Economic Census establishments, etc. were successfully accomplished at NIS.

5. Debriefing meetings on the Economic Census and reports thereon

1) C/P

- NIS staff

2) Methods of technological transfer

- The next Economic Census will be conducted 10 years later in 2021, when most of the present senior officials of NIS will have retired. Therefore, experiences gained in this Census should be properly documented so that the next Census will be well planned based on the records. Especially, experiences at the local level are extremely important for successful implementation of the next Census and other similar statistical surveys. Although this recognition was possessed by NIS senior staff, especially by the SCOs, they did not know how to collect experiences in Census enumeration at the local level, and how to leave them for future reference.
- Thus, the experts compiled the following documents, explained them in the As-needed SCO Meetings to the SCOs, and asked and answered questions so that the SCOs understood systematically the importance of capturing the situations of Census implementation at the local level, the capturing method of the situations, the overall work procedures, and so on.
 - Report on Local Activities in the 2011 Economic Census Implementation which recorded the overall plan to capture the situations of Census implementation at the local level
 - Compilation of “Report from DPDPs and ROs/AROs on the Implementation of the 2011 Economic Census” which described local activities for the implementation of the 2011 Economic Census: more concretely speaking, the contents, the compilation method and the responsible persons of this report
 - “Written Report on Local Activities in the 2011 Economic Census implementation” which described what directors of PDPs and ROs/AROs would report.
- “Verbal Reports” were recorded in Khmer by junior staff of NIS Economic Statistics Department who would bear the future of NIS, and then were translated into English producing bilingual “Report on Local Activities in the 2011 Economic Census”. The experts checked the English version of this report and told SCOs to correct them when needed. Through this work, the SCOs recognized the importance of this report more deeply.

3) Effects of technological transfer

- The Report on Local Activities in the 2011 Economic Census was compiled both in Khmer and English by the SCOs and junior staff of the Economic Statistics Department as expected, and published in August 2011 both in Khmer and English. It can be said that the intended accumulation of knowhow and transfer of technologies were successfully accomplished.

6. Sampling design of PES of the Economic Census and calculation of multipliers

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)

2) Methods of technological transfer

- The experts advised the C/Ps on the following sampling design for PES in consultation with them in May 2011 just when the data processing of the Economic Census started. 60 EAs containing about 5,000 establishments (sampling ratio: 1%) were selected for PES which was conducted in July 2011 to evaluate the coverage and accuracy of the Census enumeration.
 - Stratifying all the 24 provinces into 12 strata according to number of establishments and geographical location
 - Selecting randomly one district (3 for Phnom Penh and 2 for Kampong Cham) from each stratum
 - Selecting from each district 4 EAs which were different in characteristics
- From October through December 2011 when the data entry was completed, the experts stratified all the EAs in the whole country into those strata which corresponded the above mentioned 4 kinds of PES EAs using the data (although not thoroughly cleaned yet) to calculate provisional multipliers. Final multipliers were calculated using adjusting factors which equalized PES estimates with Census figures by number of persons engaged.

7. Compilation of Provincial Reports

1) C/P

- Mr. Hor Darith (DDG)
- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)
- Mr. Kim Net (Social Statistics Department)
- ROs: 24 (1 for each province) and AROs: 48 (2 for each province)

2) Methods of technological transfer

- The Provincial Report contains statistical analysis of the Census results together with charts and summary tables as well as basic statistical tables of the province concerned. In order for the counterparts to tackle this work/training, one expert compiled a sample provincial report for one province (Phnom Penh), and provided training on techniques and methodologies to the C/Ps using the sample report.
- The training was held for ROs and AROs twice: first on 5-6 April 2012 and second on 28-30 August 2012. As PCs were used for the training, 72 ROs/AROs were divided into 3 groups consisting of 8 provinces of ROs/AROs. At the second training session, the expert explained about the overall work of compilation of a provincial report.
- The RO and AROs worked on the assigned province using basic statistical tables for the province and districts concerned from the Economic Census (provided by other experts). The RO and AROs tabulated summary tables and charts; analyzed the results of the Economic Census; and wrote a report in English for the province concerned following the sample report. The reports were then checked by the SCOs and the JICA experts, and modified when needed.
- Man-to-man training was provided when the experts judged that corrections were needed, pointing out mistakes in summary tables, charts, etc.; inappropriate, unclear or insufficient descriptions; or necessity for descriptions peculiar to the province; or deletion of descriptions peculiar to the model province of Phnom Penh.

2) Effects of technological transfer

- Through the training sessions, the C/Ps understood their responsible work and deepened their capability of drawing charts and statistical analysis.
- The experience and knowhow of drawing charts, analyzing data and compiling a report can be applied to other statistical censuses and surveys. At the same time, the C/Ps realized that the sample report should not be “copied”, but only gave them hints on analysis.

8. Construction of Directories of Establishments

1) C/P

- Mr. Hor Darith (DDG)
- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)

2) Methods of technological transfer

- There are two major objectives of a census. One is to provide accurate and therefore legally effective statistics for large areas such as the whole country and provinces, as well as to produce statistics for small areas such as communes, villages and EAs which cannot be obtained from a sample survey. The other is to provide sampling frames for sample surveys.
- Lists of EAs obtained from a population census serve as sampling frames for sample surveys on households and population, while lists of EAs and lists of establishments (especially large-scale establishments) need to be provided from an economic census.
- In this project, after data cleaning of the Economic Census, in parallel with compilation of a statistical atlas, production of statistical tables and statistical analysis, lists of EAs and lists of establishments were compiled. Then, a report titled “Use of Directory of Establishments” was published to explain the outline, use, maintenance of lists of establishments and EAs, and was introduced in the seminar following the ceremony for releasing the results of the 2011 Economic Census held on 15 March 2012.

2) Effects of technological transfer

- Through the above work, the C/Ps understood the necessity for more frequent small-scale sample surveys such as monthly or quarterly surveys on larger-scale establishments engaged in specific industries to catch economic data which are much more dynamic than demographic data. Then, they acquired technologies for sampling design and compilation and maintenance of sampling frames. It can be said that NIS is technically ready for economic surveys which are necessary to monitor the economic development of Cambodia.
- The first application of “Use of Directory of Establishments” was for the 2014 CIES (Cambodian Inter-censal Economic Survey), where 540 EAs (16 establishments for one EA) were selected for small-scale establishments with less than 50 persons engaged, whereas large-scale establishments with 50 persons engaged or more were 100% enumerated. This sampling design for CIES was proposed to a session of the Census Technical Committee, and adopted.

9. Analysis of the results of PES

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)

2) Methods of technological transfer

- PES was conducted as a 1% sample survey for about 5,000 establishments in 60 sampled EAs in July 2011 in order to evaluate the accuracy of the Economic Census enumeration with respect to its coverage and content. The data entry was completed in October, and guidance was given on calculation of multipliers from October to December 2011. The PES tabulation was scheduled after the data cleaning of the Economic Census and further after the production of the planned statistical tables, but guidance had been given to Mr. Saint Lundy, Mr. Lay Sophat, and Mr. Chao Peav of ICT Department in February 2012 on matching data from the first and second data entries, attaching multipliers to data, generating tables using and not using multipliers.
- The PES report was planned to be compiled in the same style as statistical profiles and analytical reports of the Economic Census. As to coverage error, 9 tables were tabulated, and the omission rate was estimated to be 7%. In discussion with the C/Ps, it was concluded that the rate would be smaller taking into consideration that most of the omitted establishments were smallest establishments such as 1-person establishments and home business establishment; that 4 months had elapsed since the Economic Census; and that interviewees might not be the same as PES interviewees. Another important finding was that training of ROs and AROs was a critical factor as the deviation of coverage error was found large among provinces.
- As to content error, the degree of consistency of data between matched establishments was high in general for 5 major topics. Looking into the inconsistencies between the Census and PES, unstable answers were noticed on Kind of Business Place, etc., for example, between Home business and Business in apartment, and the C/Ps recognized the necessity for more precise definitions of topics/terms in the next Census.

2) Effects of technological transfer

- PES was the first sample survey using a list of EAs of the Economic Census, and the expert taught the C/Ps how to stratify provinces and EAs, how many sample establishments to allocate to strata, and how to calculate multipliers.
- Through the analysis of coverage error and content error, challenges to be overcome for the 2014 CIES and the 2021 Economic Census were found. That is to say, those establishments which might be omitted are smallest-scale establishments such as “Not registered”, “Home business,” “1-person establishment” and “G Wholesale and retail shops, etc.” in terms of industrial classification. Moreover, large deviations among provinces suggested the necessity for improving the selection and assignment of ROs and AROs. As to content error, headquarter and branch offices might be treated as single establishments, and street businesses, home businesses and businesses in apartments might

not be distinguished properly.

10. Compilation of the Census Atlas

10-1. Production of statistical maps (October 2010)

1) C/P

- Mr. Kim Net (Economic Statistics Department)

2) Methods of technological transfer

- One expert trained the C/P on the method of production of a census atlas in an OJT way using the final results of the 2009 Nation-wide Establishment Listing. This training was to improve GIS capabilities of NIS of software handling and drawing statistical maps for compiling an atlas for the Economic Census.

3) Effects of technological transfer

- This atlas was utilized to show the distribution of establishments and persons engaged in Cambodia before the results of the Economic Census were released. In addition, the atlas was used to promote the Economic Census.
- The C/P was a trainee in the "Project on Improving Official Statistics in Cambodia (Phase 2)". Hence, he had acquired basic capabilities of handling ArcGIS, but he had not mastered skills such as compilation of statistical data using GIS software. Through the work of compiling an atlas using the final results of the 2009 Nation-wide Establishment Listing before the Economic Census, the expert trained the C/P on the compilation of data using ArcGIS. Finally, the C/P's capabilities of statistical data mapping and data compilation using ArcGIS reached a level where simple thematic maps could be compiled for himself.
- The expert could not train all the C/Ps responsible for GIS due to her limited assignment period. Thus, some C/Ps were capable of GIS handling, but did not know how to manage geographical data or how to compile maps. Others did not master how to compile statistical maps, or were not good at GIS software operations. Therefore, the expert hoped to train C/Ps according to their own skill so that they could become trainers at NIS on data management and map compilation by GIS.

10-2. Production of statistical maps (August 2011)

1) C/P

- Mr. Sin Sereyvuth (Department of Demographic Statistics, Census and Survey)
- Mr. Pen Socheat (Department of Demographic Statistics, Census and Survey)
- Mr. Chun Bonarith (ICT Department)
- Mr. Chea Sovann (Department of Statistical Standards and Methodologies)
- Mr. Try Socheat (Economic Statistics Department)

2) Methods of technological transfer

- A0-size statistical maps were drawn to exhibit at the ceremony for releasing the preliminary results of the 2011 Economic Census. They were on 10 topics released as the preliminary results, and 10 maps were displayed in the hall where the ceremony took place.
- A database was constructed in parallel with these wall maps, and the method of its construction was explained to the C/Ps. At the same time, the experts instructed the C/Ps to translate the statistical maps into Khmer (enter necessary explanatory data on the maps by computer) and to draw a new statistical map using Table 5 so as to evaluate how much the C/Ps acquired GIS application capabilities. 10 days later, the experts received the products made by Mr. Pen Socheat, and checked them. The translation was accomplished with no problems, and the degree of acquirement of GIS application capabilities was judged as good. However, as to the GIS mapping, a few problems were found regarding to setting of ceiling values and drawing maps on ratios.
- First training on GIS

The following topics were lectured, and short tests were given every time to confirm the degree of transfer of technologies and knowledge. Effects were confirmed especially on technical aspects. But, the third topic below was skipped judging from the lecture on the previous day, and practical training was given on practical map drawing skills instead.

- A Brief History of the use of GIS at NSO
- Overview of Geographic Information Systems (GIS)
- A future role of the use of GIS in NSO (Changed to “Statistical map drawing”)
- Maintenance of the national census geography

10-3. Production of statistical maps (October 2011)

1) C/P

- Mr. Sin Sereyvuth (Department of Demographic Statistics, Census and Survey)
- Mr. Pen Soheat (Department of Demographic Statistics, Census and Survey)
- Mr. Som Bony (Department of Statistical Standards and Methodologies)
- Mr. Try Soheat (Economic Statistics Department)

2) Methods of technological transfer

- The expert aimed to improve NIS staff's skills of GIS software operation and statistical map compilation in order to compile and manage a census atlas consisting of thematic and index maps for the Economic Census. The compilation of maps by GIS software requires such technical knowledge of grading and coloring for thematic maps, presentation of explanatory notes or legends, and layout in addition to software operation. Since the C/Ps lacked especially in capability and knowhow of grading for thematic maps concerning map compiling, training was given twice for one day and half in total focusing on these topics. In a half-day training session on 26 October 2011, after explaining the outline of the training, the C/Ps were requested to compile the same maps as the sample maps using given data for themselves so that the experts could evaluate the C/Ps' map generating capability. In the one-day training session on 3 November, the experts gave an examination to the C/Ps to confirm their basic knowledge of map generation by GIS, and gave lectures and practices on map generation afterwards. Towards the end of the training, another examination similar to the prior examination was given, and also another practice was given on map generation for themselves.
- As the C/Ps had had opportunities of using GIS software in daily work, they had acquired basic capabilities of using ArcGIS, and all of them knew how to handle shape files to some extent and how to modify maps by software. But, judging from the prior examination, the C/Ps' capabilities of producing statistical maps had varied widely from a level insufficient to produce maps suitable for official release to a level at which statistical maps could be produced properly to some extent. As to technical knowledge on producing maps, judging from the prior examination, all the C/Ps had not recognized basic techniques such as avoidance of the simultaneous use of red and green considering red-green colorblind people and grading methods. The above mentioned topics were covered in the training sessions. Moreover, technical training was provided to individual C/Ps through actual practices of generating maps by GIS software. The training was evaluated by the C/Ps to be high, and the C/Ps wanted to translate lecture notes and documents into Khmer.

3) Effects of technological transfer

- The C/Ps' map generating capabilities were improved, and the maps submitted at the end of the training met the target level with respect to presentation of explanatory notes or legends, and grading or coloring. At the same time, the technical knowledge of map generation was improved considerably from 37.5% to 53.8% in terms of percentage of questions answered correctly in the confirmation test. Thus, it can be said that all the C/Ps reached a level at which all the C/Ps could

draw simple thematic maps for themselves.

10-4. Management of data of changes in administrative boundaries

1) C/P

- Mr. Sin Sereyvuth (Department of Demographic Statistics, Census and Survey)

2) Methods of technological transfer

- The following changes in administrative boundaries occurred in Cambodia after the release of the preliminary results of the Economic Census. It had been agreed by NIS to reflect these changes to maps for the final results of the Economic Census. Thus, the expert advised the C/P to confirm the boundary changes and correct the boundary data if needed. Since the release of the preliminary results of the Economic Census, the number of districts had increased from 193 to 194, and that of communes had increased from 1,621 to 1,633.

< Administrative boundary changes after the Economic Census >

- District level: one district of Phnom Penh Capital City was divided into two, and one district in Prey Veng Province was renamed.
- Commune level: One commune was divided into two in Banteay Meanchey Province, Kampot Province, Preah Sihanoukville Province, Preah Vihear Province, Battambang Province (3), and Ratanak Kiri Province.

3) Effects of technological transfer

- The C/P was at a stage of working on these boundary changes on 24 October 2011, and the expert reviewed the work. Then, the C/P completed it by 26 October and gave the expert the updated province, district and commune boundary data in shape files on 26 October 2011 together with the new commune list.

10-5. Production of statistical maps (February 2012)

1) C/P

- Mr. Pen Soheat (Department of Demographic Statistics, Census and Survey)
- Mr. Chea Sovann (Department of Statistical Standards and Methodologies)

2) Methods of technological transfer

- The experts selected statistical maps to be contained in the census atlas of the Economic Census referring to the tabulation plan. In the selection of maps, almost all topics of tabulation were selected for mapping the distribution of establishments and persons engaged so that the census atlas could contribute to promoting the enumeration and use of the Cambodian first Economic Census. In the 2008 Population Census, as C/Ps' knowledge and capabilities of GIS were not enough, the census atlas was compiled only in English. However, in 2011 Economic Census, as their technical capabilities had risen, the experts decided to compile the atlas both in English and Khmer, where the Khmer version atlas should be produced by Mr. Pen Soheat.
- As the tabulation for regional breakdowns were under progress as of the period of the experts' assignment, the experts produced statistical data needed for statistical mapping by SAS using micro data of the Economic Census. As the way of tabulation of the topics of the Economic Census differed according to characteristics of establishments, topics for statistical mapping were selected and tabulated taking into consideration the results of experimental mapping, and the usefulness of topics when being mapped.
- Third training on GIS
Training was provided on how to compile the Khmer version of census atlas. In the first and second training, a similar type of maps to those in the atlas of the Population Census were used to train on the management of geographical and statistical data and the grading/coloring techniques. The third training focused on statistical maps which were to be newly introduced.
- Questions were answered on saving Khmer version statistical maps in pdf and on drawing round graphs.

10-6. Production of statistical maps (March 2012)

1) C/P

- Mr. Pen Soheat (Department of Demographic Statistics, Census and Survey Census and Survey)
- Mr. Chea Sovann (Department of Statistical Standards and Methodologies)

2) Methods of technological transfer

- Data were being processed at that time for the first Economic Census conducted in Cambodia in March 2011, and it was scheduled to publish a census atlas in July 2012 similarly for the Population Census. In this assignment, the JICA expert first compiled a list of maps to be contained in the Economic Census Atlas in successive consultation with the team of NIS officials and other JICA experts who were responsible for data cleaning and tabulation and also with the analysis team. Then, using extracted statistical data for maps, the expert drew 158 maps to be included in the Census Atlas so that the C/Ps could imitate them. In more detail, the maps included 132 maps to be contained in the English version Census Atlas, 24 commune index maps by province as of May 2011, and 2 index maps (one for provinces and the other for districts).
- For the compilation of the Economic Census Atlas including index maps in English and Khmer, the expert set out the compilation of the Economic Census Atlas after confirming the work procedures and NIS staff's skills of GIS software operation and map drawing. Two sessions of GIS training had been held in August and November 2011, and the expert confirmed NIS staff's technologies acquired so far; clarified challenges to overcome to compile the Census Atlas; and explained the work procedures to compile the Census Atlas in a 0.5-day training session. In addition, the expert continued to trained NIS staff on the compilation of the Economic Census Atlas on an ad-hoc basis.
- In the training, firstly, in order to confirm the C/Ps' capabilities of drawing maps, they were asked to draw a map in Khmer imitating a sample map given by the expert in English. The outcome of the practice showed that they could be said to have acquired capabilities of drawing statistical maps although the compilation procedures had been explained beforehand. However, the achievement level varied largely from staff who could draw maps without JICA experts' advice to others who needed some advice from JICA experts on detailed points on software operation. Therefore, at the compilation work for the Census Atlas, it was revealed that some adjustment of contents and amounts of work among C/Ps would be needed. In addition, the work procedures towards the compilation of the Census Atlas in July were explained. Furthermore, the JICA expert instructed the C/Ps to compile Khmer version maps in one week after the end of the training based on 17 English version maps compiled by the JICA expert. For this issue, some C/Ps finished the work and submitted the maps two days after the training, but others could not finish the work. Moreover, some of the maps that were submitted within the time limit had some deficiencies of having too long a title box to contain the title, for example. In this way, C/Ps had acquired basic capabilities of drawing maps, but they still lacked in paying attention to produce official maps which should have user friendly and beautiful layouts.
- At the moment, C/Ps were drawing maps to be included in the Census Atlas following the expert's

sample maps. The work had been allocated taking into consideration the C/Ps' capabilities. In addition, more capable C/Ps were requested to support other C/Ps on technical matters. Deficiencies in layouts found by the JICA expert in submitted maps were corrected according to the expert's explanation and advice.

10-7. Production of statistical maps (August 2012)

1) C/P

- Mr. Pen Soheat (Department of Demographic Statistics, Census and Survey Census and Survey)
- Mr. Kim Net (Social Statistics Department)

2) Methods of technological transfer

- The experts produced statistical tables needed for the Economic Census Atlas using micro data of the Census, compiled the Census Atlas in English and Khmer, and published it as an official report. In the previous fiscal year, the JICA experts had compiled 130 maps based on the clean micro data (Ver. 1.0; as of February 2012), and had asked Mr. Pen Soheat to translate them into Khmer using data containing the English version maps. Mr. Kim Net, Social Statistics Department helped Mr. Pen Soheat check the use of terms and spelling of words.
- As data cleaning proceeded from April to July 2012, new errors were detected especially on value data such as sales and expenses. Statistical maps concerning value data were “Annual Amount of Sales”, “Annual Amount of Employees’ Salaries and Wages per Employee” and “Composition of Organizations by Scale of Sales”, and they had to be drawn again upon the completion of data cleaning.
- The Census Atlas consisted of contents, Foreword, Statistical Maps, and Appendices, all of which had to be prepared for its publication. These components had been prepared in March 2012, but had to be reorganized to conform to the standard structure of the Economic Census reports. “Introduction to the Census Atlas” was a special addition for the Census Atlas, and documents concerning administrative boundary changes were prepared as an annex.
- Based on the Ver. 12.1 of clean data, statistical maps were drawn, and doubts rose concerning “Annual Amount of Employees’ Salaries and Wages per Employee”, and after consultation with C/Ps the experts decided that the Ver. 12.1 data had to be corrected. On the other hand, value related data related to enterprises, and might not be applicable to regional breakdowns, hence to mapping. Therefore, the experts decided that the three maps concerned should not be included in the Atlas.
- Before handing over the drafts to the printing office, it was necessary to number pages for the entire publication or for respective chapters. As ArcGIS can only output one pdf file for one map, it was necessary to concatenate all the pdf map files into one file and to number the pages using a pdf editing program before handing the draft to the printing office. Document numbers such as “Annex1” were added using a similar program to the annexes.
- The above knowhow on concatenating pdf files and numbering pages was taught to C/Ps by the expert.

11. Analysis of the results

11-1. Analysis of the results (October 2011)

1) C/P

- Mr. Khin Sovorlak (DDG)
- NIS staff: 13 officials

2) Methods of technological transfer

- As analysis of the results could not start before the data processing work was completed, the JICA experts held a preparatory seminar for the C/Ps in October 2011 to transfer technologies concerning statistical analysis.
- In the Economic Census, individual establishments were enumerated, and various information on business activities were collected to generate a data base of establishments. Based on the data base, statistical table production and analysis were planned from various aspects, and analytical reports were scheduled on specific topics. In order to provide basic knowledge necessary for the compilation of analytical reports, five JICA experts responsible for analysis of the results were seconded to NIS to organize a seminar in October and December 2011. In more detail, the experts considered about the contents of each of the analytical reports and about tables and charts to be included therein, and asked the C/Ps to produce those tables and charts. Then, an introductory training seminar was given to the C/Ps on 27 October 2011 on analysis of the results.

09:15-10:15 : Briefing of the training seminar
- Outline of the program
- Introduction of the JICA experts
- Introduction of the NIS officials responsible for analysis (C/Ps)
- Explanation of the analytical reports
10:30-11:30: Basic training on analytical methods on enterprise activities
11:30-11:45: Questions and answers
14:00-15:00: Basic training on financial analysis
15:30-16:30: Case study on financial analysis
16:30-17:00: Questions and answers

- The seminar provided basic training on methodologies of analysis of enterprise activities, covering economic development and associated changes in business activities of enterprises as well as support needed; viewpoints and data needed for capturing and analyzing them taking into consideration political planning aspects and application to compilation of analytical reports.
 - On economic development process and changes in business activities as well as necessity for improvement of dissemination and analysis of official statistics:
 - Explained were stages of economic development and changes in methods of enterprises' financial resource acquisition using a theoretical model chart of economic development. More

concretely, the lecture covered changes in the quality of production components such as capital, labour and technologies caused by economic development, changes in the financial system, and enlargement of business activities. In addition, in order to investigate bottle necks and causes of worsening of profits, it would not be enough to check own business and financial situations, but it would be necessary to look into the surrounding business environment. Therefore, various statistics should be prepared, and the government itself should check and analyze various statistics such as industrial production, financing balance, household consumption trend, and research and development investment, and catch changes or their signs in business activities, thus supporting enterprises' activities.

-On the importance of and necessity for analysis by scale of enterprise:

The scale of enterprise determines fund procurement, amount of required fund, quality of labour required, procurement of materials, inventory adjustment, sales planning, investment planning, research and development planning, and so on. Therefore, the lecturers (experts) pointed out the importance of and necessity for analysis by scale of enterprise, the importance of analysis of small and medium-scale enterprises which occupied more than the existing enterprises in number, the importance of analysis from the viewpoint of their transactions with large-scale enterprises, and so on. In addition, when international comparison takes place, attention should be paid to possible differences in the definition of small and medium-scale enterprises. This issue was lectured on showing different definitions of SMEs in Japan, Vietnam, China, etc.

-On points of view of analysis:

The experts explained about viewpoints of analysis such as what kind of approaches were possible for the Economic Census, and how to utilize cross tables, and pointed out possibilities of the use of the results of analysis from a political planning viewpoint such as a taxation system to promote direct inward investment, selective allocation of budgets to specific areas, and industrial location and intensification. Furthermore, the experts explained about points of attention using financial analysis that efficient management indicators might be different among industries, and further pointed out that more detailed analysis would be possible after the next Census, because time series comparison would be feasible between Census results.

-On the usefulness of economic statistics:

Taking for example the JICA project to support small and medium-scale enterprises in Vietnam for developing supporting industries, and the industrial structure of the automobile industry which consists of many enterprises such as Tier 1 and Tier 2, the experts explained, following the policy decision process, that dissemination and analysis of statistics could be a powerful tool for policy making focusing on specific industries. They also explained about "TANKAN: Bank of Japan's quarterly short-term economic survey". It is a sample survey, but provides useful information by which enterprises can judge the current business environment and its prospect. In addition, the following information was given for their reference: (i) Japanese cases such as a menu of financial supports corresponding to development stages of enterprises, and the enterprise's lifecycle and associated financial procurement; (ii) statistical data needed for implementing economic policies taking financial policy making and associated economic effects

for example.

- The experts explained about the composition of financial statements, the way of understanding them, methods of deriving indicators from them, and meanings of the indices. Then, they gave case studies to the C/Ps on financial analysis so that they could acquire basic knowledge needed for analysis of the results.

-On the positioning of financial statements:

The experts explained that the aim of an enterprise was to maximize the profit through production activities cultivating various stakeholders, and that these elements could be put in the financial statements, or conversely, a quick overview of an enterprise's business activities could be got from the financial statements. It was also pointed out that financial statements could be utilized subjectively and purposively by managers, loan officers, investors, and so on since various information on an enterprise including its strong and weak points could be obtained by analyzing financial statements.

-On the viewpoints of analysis:

It was explained that through analysis of financial statements, an enterprise's current situations and future prospects could be overviewed, and that there were three aspects of analysis: industrial analysis such as enterprises' positioning, industrial structure and competitiveness; enterprise analysis from qualitative and quantitative views; and analysis from financial aspects for investment or capital policy making.

-On the profit-and loss statement (P/L) and the balance sheet (B/S)

The experts explained about the P/L and B/S (outline, components, rules of compilation, etc.) and the relationship of P/L and B/S. They then explained that using various indicators such as return on capital employed and current ratio which are obtained from financial statements, an enterprise's profitability, stability, efficiency and growth potential could be captured. The various indicators were also explained with respect to calculation formula and meaning. It was also noted that these indicators were not only used as benchmarks but also used for international comparison.

-Case study:

Using a pseudo enterprise's financial statements, relationships between items, implications of indicators and numbers, and remarkable points were made more understood the C/Ps in order for them to prepare for the actual analysis in future.

-On the usefulness of economic statistics

Ten years ago, few Japanese enterprises paid attention to Cambodia, but nowadays there are potentially many Japanese enterprises which want to develop and operate businesses. But, they lack in basic information on industry and enterprise such as what enterprises the main players are, and how big the market size is, so that they have not expanded their businesses to Cambodia. The release of the results of the Economic Census has given plenty information to enterprises which are interested in Cambodia. Thus, the improvement in official statistics is important not only for Cambodia but also for the world.

3) Effects of technological transfer

- In the training, the experts mainly lectured showing documents by power point, but set up questions and answers sessions to deepen the C/Ps' understanding. Also during a lecture, the experts accepted questions, and the lecturer and other experts attending gave supplementary training from various viewpoints. Thus, the project team in charge made efforts to raise the quality of training.
- As a result, the importance and significance of the Economic Census, changes in business activities according to enterprises' development process and required support, analytical methods and viewpoints/implications to capture them, and basic and applied financial analysis were understood more by the C/Ps. After the training, they wanted to know reference books, which indicated that the training invoked interests in various knowledge and technologies for the compilation of the analytical reports.

11-2 Analysis of the results (February–March 2012)

1) C/P

- Mr. Khin Sovorlak (DDG)
- NIS staff: 8 officials

2) Methods of technological transfer

- The experts drafted model charts and tables to be used for the analysis of the results, and explained about the purposes, sources (topic numbers in the Form), and values to be used in order to transfer technologies needed for the analysis of the results.
- The expert compiled statistical tables which would be needed for the compilation of the analytical reports according to the model content and composition. Specifically, 67 model tables were produced for 6 categories: summary, establishments, kind of business activities, persons engaged, financial situation, and financial analysis.
- Training was provided on tabulation and analytical viewpoints on 20 February 2012 to C/Ps assigned to the compilation of the analytical reports.
- The expert explained that what was important when looking into statistical data was to look at values from various angles and to imagine or wonder why such values were brought out, or how they would change in future. It was also pointed out that one could catch various things from statistical data only, but could judge whether the situation was good or bad, or what kind of characteristics or differences existed by reprocessing or comparing them with other data, although attention should be paid to whether data had been produced in the same standards and methods. However, it should be noted that a typical analysis of economic census data was to observe chronological changes of data, but that the 2011 Economic Census of Cambodia was the first in its history, and therefore the results could not be compared chronologically. Of course, the next Census data could be compared with the present Census data allowing time series comparison. The expert explained to the C/Ps about considerations on tabulation and viewpoints of analysis. When needed, the C/Ps compiled additional model tables in contact with the expert team taking the model tables given into consideration.

11-3. Analysis of the results (July-August 2012, and March 2013)

1) C/P

- Mr. Khan Sovorlak (DDG)
- NIS staff: 15 officials

2) Methods of technological transfer

- Based on the basic training on the analysis of enterprises' activities and on financial analysis in October and December 2011, and based on the training on the analysis of the results focusing on knowledge on tabulation and analytical viewpoints, showing model tables to be needed, the expert team started advising on analytical work.
- Follow-up training concerning analysis was held twice in mid-June and mid-August. Each group had at least three meetings in parallel in order to familiarize all C/Ps with the work. Based on the two follow-up training sessions, work contents and tables and charts to be tabulated were presented to each group of C/Ps.
- A specially hard challenge at the start of the analytical work was insufficient understanding of financial analytical aspects. C/Ps repeatedly wanted to explain about the concepts of indicators related to financial analysis and the calculation methods, which indicated that most of the C/Ps were inexperienced in financial analysis. As this fact was revealed once again, the experts compiled and gave explanatory notes on concepts, calculation formulae, and meanings of analytical indicators, and organized intensive 10-day follow-up training on basic concepts twice in July and August. The follow-up training was implemented in the following way for 28 NIS officials with two officials absent due to official trips and training of another donor agency. More precisely, the training was held separately to each analytical group by the expert in charge.

Session 1: Explanation of the analytical work from 11-20 July 2012
1) 1st discussion: deciding on chapters and sections of each report
2) 2nd discussion: deciding on tables of each report
3) 3rd discussion: deciding on figures of each report

Session 2: Explanation of tables and charts to be compiled, from 8-16 August 2012
1) 1st discussion: deciding on summary tables of each report
2) 2nd discussion: deciding on summary figures and maps of each report
3) 3rd discussion: deciding on the process to compile each report in detail

- The assignment of NIS staff to analytical groups was entrusted to Mr. Khin Sovorlak, DDG on one condition that at least one staff should be included in each group who possessed IT knowledge and were experienced in data processing (tabulation and cleaning). The reason for setting this condition was as follows: (i) they need to select proper data for analysis of target entities; (ii) they need to

select proper data sets to tabulate tables and charts when two or more data sets exist; (iii) they need to go back to the original data to check their veracity in some cases where unreasonable analytical results are obtained. However, when the work started, C/Ps differed in skills, and cases occurred which could not be overcome without assistance of members of other groups. Therefore, as reported later, at least one expert responsible for analysis visited NIS from October 2012 until the seminar on the final results in March 2013, and advised C/Ps including members of other groups as follow-up training.

- What is important when looking at statistical data is to look into them from various aspects and to imagine or think why such results have been derived and how they will change in future. Moreover, by manipulating statistical data or comparing them with other data, it can be checked whether proper data are used, and what characteristics or differences are noticed in the current status. Also, the veracity and limit of the original data can be confirmed. Therefore, the experts made efforts to make the C/Ps confirm the validity and veracity of data to the extent possible at the analysis of the results in addition to capturing the economic current situation. As the Economic Census was the first one in the history of Cambodia, the analytical work had constraints that chronological analysis and validation were not possible. But, the importance of such an attitude toward analysis was repeatedly stressed to the C/Ps during the analytical work exchanging information closely with the data processing JICA experts as needed, and getting a lot of their cooperation in checking the veracity of the original data.
- As to the analytical procedures, the experts drafted expected final analytical tables based on Census topics, and also drafted and showed the C/Ps intermediate tables needed for the final ones together with associated calculation formulae. Then, a principal C/P was assigned to each chapter of the report concerned in consultation with the C/Ps. At the work, after holding follow-up training again as stated earlier, at least one expert responsible for analysis visited NIS every month, checked the C/Ps' work progress, ensured the understanding of concepts, and corrected mistakes. Subsequently, the experts and C/Ps checked the data through such work, and integrated analytical comments for which data validation was completed considerably. In reality, there existed a wide difference in capabilities of C/Ps assigned to analysis of the results, and many produced intermediate tables using wrong data. Therefore, the experts had to spend a considerable time to check and correct or tabulate again the tables referring to the micro data base which was provided by the data processing experts. Then, many cases occurred in which the JICA experts had to advise the C/Ps to tabulate necessary tables one by one from the original data in a face-to-face manner. The compilation of the analytical comments did not go smoothly for more than half of the C/Ps: it was not enough to explain analytical points and meanings to some C/Ps and to encourage them to understand analytical points etc. even in a face-to-face way, and it sometimes happened that analytical comments had to be drafted by the experts for C/Ps. However, as there were a few C/Ps capable of SPSS and other analytical software, the experts advised the DDG to instruct them to assist incapable staff across groups so that the analytical work made progress.

3) Effects of technological transfer

- The following reports were compiled and published, and uploaded to the website of the Statistics Bureau of Japan.

	Title	Date
1	Economic Census of Cambodia 2011, Analysis on 17 Industries	February 2013
2	Economic Census of Cambodia 2011, Comparative Analysis by Industry	February 2013
3	Economic Census of Cambodia 2011, Comparative analysis by Scale	February 2013
4	Economic Census of Cambodia 2011, Analysis on Large, Medium & Small and Micro Industry	February 2013
5	Economic Census of Cambodia 2011, Manufacturing Industry	February 2013
6	Economic Census of Cambodia 2011, Food Processing Industry	February 2013
7	Economic Census of Cambodia 2011, Textile Industry	February 2013
8	Economic Census of Cambodia 2011, Wholesale and Retail Industry	February 2013
9	Economic Census of Cambodia 2011, Women in Business	February 2013
10	Economic Census of Cambodia 2011, Street Business	February 2013
11	Economic Census of Cambodia 2011, Application to National Accounts	February 2013

- The seminar on the final results was held at Cambodia-Japan Cultural Center (CJCC) on 19 March 2013 being attended by Senior Minister, Minister of Planning, Chief Representative, JICA Cambodia Office, Representatives/staff of international donor agencies, directors/staff of Provincial Departments of Planning, and DG/staff of NIS. Each analytical report was presented by the NIS staff member representing the analytical group concerned, and questions and answers were handled by Mr. Khin Sovorlak, DDG and staff responsible for the report concerned. Participants raised questions about validity of tabulated figures, coverage of data, definition of industry, kind of business operation, etc. (for example, the term of “Cooperatives” was not very commonly used, and had better be called “Micro establishment” or “Micro finance”, or the definition of number of persons engaged which was used in analysis regarding “Year of starting the business” was not clear) and so on. Also, the following questions were raised: differences from GDP figures already compiled in shares by industry should be explained, and what industries should be regarded as main industries in Cambodia. Furthermore, a comment was made that the Economic Census conducted for the first time in Cambodia should be followed by another by all means to catch the Cambodian economic situation and its chronological change, as well as to induce implications to contribute to the economic management, which promoted understanding of the significance of the Census, and another comment urged that NIS should continue to improve the contents of the Census and the analytical capability of statistics.

11-4. Analysis of the results: application to national accounts (February – March 2013)

1) C/P

- Keo Chettra (Director, National Accounts Department.)

2) Methods of technological transfer

- The JICA expert conducted an overall assessment of the results of the Economic Census, the first large-scale collection of economic data to utilize them for the estimation in the system of national accounts (SNA). The expert confirmed that the Census covered by far a wider range of industries as compared existing surveys, and that it provided balanced data in terms of sectoral and industrial breakdowns, especially covering service industries. Therefore, the expert pointed out the importance of continuous implementation of the Economic Census.
- The expert adjusted the concepts of the Census topics in the framework of SNA, and produced statistical tables according to SNA concepts. In doing so, the expert pointed out the necessity to capture wages and salaries of non-administrative sectors by separating them from expenses such as intermediate inputs, and made the C/P understand this necessity.

3) Effects of technological transfer

- The above achievements were transferred to the C/P so that the Census results could be utilized in Cambodian SNA.
- Based on the above analysis, the expert proposed to modify the Census Form in designing CIES Form so that the results could be more utilized in SNA.

12. Comprehensive report on the organization and administration of the Economic Census

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)

2) Methods of technological transfer

- A report titled "Organization and Administration of the 2011 Economic Census" was compiled and published containing organization for the Economic Census in the Government, overall plan, budgeting, scheduling, Form and other documents, publicity, training, enumeration, data processing, release and dissemination of the results, analysis of the results, and so on regarding the 2011 Economic Census.
- The JICA expert pointed out to the C/Ps that a similar administrative report had been compiled for the 2008 Population Census; made them to recognize the importance of such an administrative report for the next Economic Census; and instructed them to gather and arrange related documents.
- In addition, the experts proposed the overall structure of the administrative report to the C/Ps and instructed them to draft it.
- Lastly, the expert augmented related documents and accomplished the comprehensive administrative report on the 2011 Economic Census.

3) Effects of technological transfer

- NIS could preserve knowhow and technologies relating to the Economic Census, by compiling and publishing the administrative report, which would be indispensable for planning the 2014 Cambodia Inter-censal Economic Survey (CIES), the 2021 next Census and similar surveys.
- Knowhow on the compilation of a comprehensive administrative report regarding a statistical census/survey was transferred to NIS.

Section 2. CIPS 2013

1. EA delineation

1) C/P

- Ms. Hang Lina (DDG)
- Mr. Meng Kimhor (DDG)
- Mr. Sin Sereyvuth (Department of Demographic Statistics, Census and Survey)

2) Methods of technological transfer

- The 2013 CIPS was supported by JICA together with UNFPA, and conducted as of 3 March 2013. One of the JICA's main responsibilities was EA delineation prior to the enumeration, in which the JICA experts supported canvassing of selected EAs, updating of EA maps, confirmation of the number of households, and division of EAs where the number of households had increased.
- As requested by the C/Ps, the JICA experts advised on the revision of the Manual on Mapping Work, on the compilation of the work plan for the mapping work and the schedule for mapping, and on the drafting of the budget implementation plan.
- The experts also advised on the revision of the overall work plan of the entire CIPS.

3) Effects of technological transfer

- The C/Ps' understanding of points to consider on estimation of workload, allocation of working days to work components, bad effects of holidays (Water Festival) on work and so on.
- The mapping work was successfully implemented in November 2012, and the objective was achieved.

4) Challenges etc.

- The C/Ps' draft work plan had a lot of lack of attention resulting in omitted work components and duplicate schedules.

2. Debriefing meeting

1) C/P

- Ms. Hang Lina (DDG)
- Mr. They Kheam (Director, Department of Demographic Statistics, Census and Survey)
- Mr. Kim Net (Social Statistics Department)

2) Methods of technological transfer

- It is very important to hear difficulties and problems encountered in the enumeration of a census/survey and solutions for them from officials in charge and to utilize the report for the next census/survey. In the past, NIS and UNFPA did not hold a debriefing meeting for such a purpose. A debriefing meeting was organized for the first time for the 2011 Economic Census according to the JICA experts' advice. For CIPS 2013, the C/Ps were also advised to organize a debriefing meeting.
- The debriefing meeting was planned to be organized separately for Directors of Provincial Department of Planning, and ROs/AROs, and the experts supported the C/Ps in drafting the form on which the participants should write their reports as well as in setting topics to be reported.
- The experts attended the debriefing meeting sessions and supported the C/Ps in compiling the report on the debriefing meeting.

3) Effects of technological transfer

- The importance of a debriefing meeting was recognized through setting up an organizing committee.
- The debriefing meeting for PDPs was held on 15 August 2013 being attended by about 70 local officials. The one for ROs/AROs was held on 16 August 2013 being attended by about 100 NIS officials.
- CIPS 2013 was reported to have been conducted with no major troubles, but the following problems were reported by some of the participants, which should be solved for the next survey.
 - (i) The room for training supervisors and enumerators was small.
 - (ii) Transportation and daily allowances were not enough.
 - (iii) EA maps provided were not clear or not accurate.

3. Preliminary tabulation

1) C/P

- Mr. Meng Kimhor (DDG)
- Mr. Sok Kosal (DDG)

2) Methods of technological transfer

- CIPS 2013 was supported together with UNFPA, and conducted on 3 March 2013. The preliminary results were released on 15 August.
- The preliminary tabulation and the compilation of the preliminary report was primarily performed under UNFPA experts' advice. JICA experts checked the draft of the report and pointed out tabulation errors in addition to spelling errors in the names of provinces, etc.

3) Effects of technological transfer

- The preliminary results were released and the explanatory seminar on the preliminary results was held with about 180 participants including Senior Minister, Minister of Planning, senior staff of Ministry of Planning, Representatives of UNFPA and JICA, NIS staff of line ministries, staff of statistical divisions of PDPs, and participants from international agencies and donors.
- JICA experts' detection and correction of errors in the draft preliminary report improved the accuracy of the report before official release and reproduction.

4. Final tabulation and analysis of the results

1) C/P

- Mr. Meng Kimhor (DDG)
- Mr. Sok Kosal (DDG)
- NIS staff in charge of compilation of various reports

2) Methods of technological transfer

- The final tabulation was primarily supported by UNFPA experts, while regarding various reports compiled based on the results of the final tabulation, the Final Report was supported by UNFPA and JICA, the National Profile was supported by JICA, 4 volumes of the Analytical report was supported by JICA and 9 volumes of the Analytical Report was supported by UNFPA, the Statistical Atlas was supported by JICA, and the Provincial Report and the Provincial Profile were supported by UNFPA.
- Even for the final tabulation conducted under a UNFPA expert, the following technical advice was given by the JICA experts:
 - Management of the progress of the data cleaning work
 - Final confirmation of the clean data
 - Examination of tabulated tables
 - Preparation of micro data for secondary use
- As to the compilation of the Final Report supported by UNFPA and JICA, the JICA experts examined the draft, and pointed out tabulation errors and erroneous analytical descriptions and instructed the C/Ps to correct them.
- As to the 9 volumes of the Analytical Report handled by UNFPA, the JICA experts examined the draft as they thought fit, and pointed out tabulation errors and erroneous analytical descriptions and instructed the C/Ps to correct them.
- As to the 4 volumes of the Analytical Report handled by JICA, explanatory lectures were given by a JICA expert on No.7 Literacy and Educational Attainment and No.10 Family and Household, providing training to the C/Ps on analysis on the results of CIPS.
- The JICA experts examined drafts of documents which C/Ps would present at the seminar on the analysis on the results, and instructed them to amend them where necessary.

3) Effects of technological transfer

- The JICA experts found inconsistencies among statistical tables produced by a C/P. For example, the number of persons by sex differed between labour related tables and education and literacy related tables. The result of investigation for causes of such errors showed that the C/P had modified the results of tabulation using a special logic incorporated in CSPro without changing the Form-level micro data. This was because the UNFPA experts in charge of Final Report had requested that tables produced should not be changed to the extent possible. However, such tabulation had already caused inconsistencies among statistical tables, and moreover, it might bring about the following problems:
 - (i) statistical tables for the release of the results might be compiled, but some figures might not be able to be reproduced when someone tabulated tables for various analytical purposes using the

household and population micro data in future. (ii) This would provoke deep skepticism about the credibility of official statistics, and would contradict the encouragement of secondary use of statistics in the era of PC. Thus, the JICA experts stressed that NIS should keep the final version Form level clean micro data. Regarding CIPS data, the experts wanted at first to discuss this matter with the C/P when Mr. Gregory Martin, UNFPA short-term expert on data processing came to NIS, but as it turned out that Mr. Martin would not come in time, and Mr. Martin's next assignment was not on tabulation, but on data dissemination, the JICA experts directly advised the C/P to correct the CIPS micro data finally.

- The JICA experts checked the draft of CIPS Final Report prior to reproduction, and detected various major and minor errors. This was because of the C/P's insufficient training of NIS staff in charge, and advice was given to him to pay utmost attention to the release of statistics.
- The final results were released and the explanatory seminar on the final results was held on 26 November 2013 with about 230 participants including Senior Minister, Minister of Planning, Secretaries/Under-secretaries of State of line ministries, Representatives of UNFPA and JICA, staff of NIS and statistical divisions of PDPs, participants from international agencies, donors, and the media.
- The National Profile, 4 volumes of Analytical Report (No.7 Literacy and Educational Attainment, No.8 Economic Activity and Employment, No.9 Housing and Household Amenities, and No.10 Family and Household) were compiled and published.
- The explanatory seminar on the final results were held with about 170 participants including senior staff of Ministry of Planning, Representatives of UNFPA and JICA, staff of NIS and statistical divisions of PDPs, participants from international agencies, donors, and the media.

5. Production of statistical maps

1) C/P

- Mr. Pen Soheat (Department of Demographic Statistics, Census and Survey)

2) Methods of technological transfer

- The experts supported the compilation of statistical maps displayed in the sites of the ceremonies for releasing the preliminary and final results.
- The experts supported the compilation of the Statistical Atlas which was a collection of statistical maps drawn based on the final results of CIPS, where provincial figures obtained from CIPS 2013 were digitally mapped.
- To draw statistical maps relating to provincial figures, it was necessary to prepare statistical data in a format which GIS could process, and micro data were tabulated by province to produce data suitable for mapping by GIS.
- Produced maps were saved in a pdf format so that they could be displayed on PCs with GIS software unequipped with.

3) Effects of technological transfer

- 7 maps and 12 statistical maps were drawn to be displayed at the sites of ceremonies for the preliminary and final results of CIPS respectively.
- By displaying the statistical maps in the sites of ceremonies for the preliminary and final results, the survey results were presented in a user-friendly way.
- The Statistical Atlas was compiled and published.

Section 3. CIES 2014

1. Planning of CIES

1) C/P

- Mr. Hor Darith (DDG)
- Mr. Khin Sovorlak (DDG)
- Mr. Chhay Satia (DDG)
- Mr. So Tonnere (Economic Statistics Department))
- Mr. Mich Kanthul (Director, Economic Statistics Department)
- Mr. Kim Net (Social Statistics Department)
- Mr. Sin Sereyvuth (Department of Demographic Statistics, Census and Survey)

2) Methods of technological transfer

- The Economic Census is stipulated to be conducted every ten years, but during ten years, it is expected that establishments and enterprises are newly opened/closed or change their business categories, and that enterprises' activities and surrounding economic activities change, while it is not very certain that knowhow for conducting an economic census can be maintained at NIS. Therefore, during inter-censal years, a CIES is planned as a sample survey on establishments in order to maintain and improve the knowhow of census/survey taking, to update directories of establishments, and to capture the economic actual situation.
- As CIES was the first one for NIS like the Economic Census, points to consider for the implementation of the survey were listed, and discussed with the C/Ps on a one-to-one basis. Then, CIES Technical Committee (CIES-TC: chaired by Secretary of State, Ministry of Planning and consisting of representatives of line ministries) was held as needed to consider survey methods, survey topics, sampling methods etc.
- The first CIES-TC on August 2012 decided on the following policies:
 - The enumeration would be conducted in March 2014.
 - The survey objects would be all the establishments excluding the following establishments similarly to the Economic Census: a) Establishments classified into "Section A, Agriculture, forestry and fishing"; b) Establishments classified into "Section O, Public administration and defense; compulsory social security"; c) Establishments classified into "Section T, Activities of households as employers; undifferentiated goods-and services-producing activities of households for own use"; and d) Establishments classified into "Section U, Activities of extraterritorial organizations and bodies" as specified in the United Nations International Standard Industrial Classification of Economic Activities, Revision 4 (ISIC).
 - The survey topics would be determined based on the Economic Census.
 - The sample size would be about 1%, but all the establishments with 50 persons engaged or more should be enumerated.
 - New survey methodologies would be sought such as e-mail enumeration and response via the

Internet

- Following the first CIES-TC, the experts considered survey topics with the C/Ps, and advised them on drafting the Form taking accounts of interview errors in the Economic Census.
- The second CIES-TC in March 2013 decided to exclude Street Business establishments which were covered in the Economic Census; to simplify EA delineation work; and to introduce an e-survey which would allow for e-mail enumeration and response via the Internet. It also discussed the draft Form and the sample size in terms of number of establishments (EAs). Later, the e-survey method was abandoned due to lack in human resources capable of system development, and due to high operating costs.
- In order to update the Directory of Establishments of the 2011 Economic Census, and to obtain information on the closure of establishments, it was proposed and approved in the CIES-TC that Pre-printed Village/EA Establishment List which contained establishment number, establishment name, address, number of persons engaged, etc. would be compiled and printed from the Census data and provided to supervisors so that they could match the list with Establishment List filled in by enumerators using name of establishment and address as keys, and transcribe the Census establishment numbers onto Establishment List and Form for those establishments which could be matched. As to the large-scale establishments targeted for complete enumeration, it was proposed and approved that Pre-printed Large-scale Establishment List which contained establishment number, establishment name, address, contact person, number of persons engaged etc. would be compiled and printed from the Census data, and provided to ROs/AROs so that they could record the presence or absence of establishments on Establishment List, and transcribe the Census establishment numbers on to Form for those establishments which still existed (did not move or close).
- Based on the analysis of the results of the Economic Census, topics for analysis on fund procurement of establishments and enterprises and for estimation of national accounts were proposed and approved to be included in the CIES-TC.
- The experts supported the compilation of such survey documents as Form, Enumerator's Manual, Supervisor's Manual and various Lists.

3) Effects of technological transfer

- The C/Ps' understanding of the planning and design of CIES deepened through considerations about various challenges concerning the implementation of CIES 2014.
- Survey documents such as Form, Enumerator's Manual, Supervisor's Manual and various Lists were compiled.

2. Sampling design for CIES

1) C/P

- Mr. Hor Darith (DDG)
- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)

2) Methods of technological transfer

- The first CIES-TC adopted the following sampling design for CIES based on Directory of Establishments (list of 15,224 EAs and list of 1,619 large-scale establishments with 50 persons engaged or more), taking into consideration budgetary constraints and provincial implementation structures:
 - (i) For establishments with less than 50 persons engaged, 540 EAs (30 EAs for major 6 provinces and 20 EAs for other 18 provinces) would be randomly selected, and 16 establishments would be randomly selected in each EA from the establishment list.
 - (ii) All the establishments with 50 persons engaged or more should be enumerated, and every effort should be paid to catch such large established which had opened since the Economic Census.

Later, the following amendments to the above method were proposed and approved in the following way because it was envisaged that rather complicated procedures such as adding other EAs to an EA with less than 16 establishments would be required. The new method was that up to 30 establishments would be selected from an EA, while all the establishments present should be enumerated in case that the selected EA has less than 30 establishments so as to obtain the needed number of sample establishments and to evade the complicated procedures above mentioned at the same time.

- The experts advised the C/Ps to reselect EAs after excluding Street Business establishments from the population, and to recompile the list of selected EAs as the second CIES-TC decided to exclude them from the survey coverage.
- It was proposed and approved that those SEZs and newly developed establishment group areas such as commercial and industrial areas which started after the 2011 Economic Census should be specified as enumeration areas.

3) Effects of technological transfer

- As CIES 2014 was the first authentic sample survey to cover the whole country based on Directory of Establishments obtained from the Economic Census, and as it was an economic survey, the following issues can be pointed out as effects of technological transfer.
 - Introduction of the concept of Directory of Establishments, the recognition of the necessity for its construction and maintenance, and its actual construction, maintenance and use
 - Provision of an actual example of sampling for an economic survey which is quite different from surveys on households and population

- Transfer of capability of sampling design for monthly or quarterly economic surveys on industrial production, commercial sales, construction starts, etc. which would be necessary in future to monitor Cambodian economy
- Recognition of the necessity for the maintenance and use of a list of large-scale establishments
- Transfer of knowhow of random and purposive selection of EAs which have many establishments belonging to specific industrial classes for which investigation/information would be needed for fostering such industries, for example.

3. Capture of large-size establishments with 50 persons engaged or more

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)

2) Methods of technological transfer

- Large-scale establishments with 50 persons engaged and more should be thoroughly enumerated, and in order to capture the target establishments to the extent possible, the C/Ps were advised to capture large-scale establishments which had opened after the 2011 Economic Census, establishments which had grown to become large-scale establishments after the Census, large-scale establishments which had refused to cooperate in the Census, establishments which had been omitted by mistake in the Census, by referring to administrative records such as Commercial Registry and to directories of trade organizations
- It was proposed and approved that even the Head office has less than 50 persons engaged, but if the total number of persons engaged in all the Branch offices exceed 50, then the establishment (head office) should be enumerated
- In anticipation of finding a large-scale establishment with 50 persons engaged and more at the enumeration stage, the C/Ps were instructed to let enumerators report such a case to the RO/ARO in charge of complete enumeration, and to include this instruction in the Enumerator's and Supervisor's Manuals.
- The experts supported the compilation of Pre-printed Large-size Establishment List.

3) Effects of technological transfer

- Large-scale establishments which had refused to cooperate in the 2011 Economic Census were included in CIES 2014.
- Large-scale establishment with 50 persons engaged and more found at the Pretest were included in CIES 2014.
- The experts compiled the reporting form for the case in which large-scale establishments with 50 persons engaged or more were found at the enumeration stage, and described the procedures incurred in Enumerator's Manual.
- Pre-printed Large-size Establishment List was compiled.

4. Pretest

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)
- SCOs

2) Methods of technological transfer

- The Pretest was conducted using EA maps, Pre-printed Village/EA Establishment List, Form, Enumerator's Manual and so on in order to review and revise if needed survey procedures, survey documents, etc. by analyzing and evaluating enumerator's debriefing reports on enumeration, entries in Forms, etc.
- The Pretest was conducted in 15 EAs which had not been selected for CIES 2014 in Phnom Penh. They were purposively selected according to the following criteria: (i) target establishments suitable for new survey topics existed; (ii) the number of establishments was 130 or less; (iii) whether there existed enterprises (Single unit or Head office) having financial statements; (iv) whether there existed Branch offices or not; (iv) EA characteristics; and so on.
- The experts advised on how to plan the Pretest implementation plan, how to compile survey documents, how to design a form by which to collect debriefing reports from enumerators', etc.
- The experts advised on how to select Pretest target EAs, and how to print the Pre-printed Village/EA Establishment List for the Pretest containing such basic information as establishment number, name of establishment, address, and number of persons engaged, using the Economic Census data
- The experts advised the C/Ps to hold a debriefing meeting, attended it, and supported the compilation of the results of the Pretest.

3) Effects of technological transfer

- The Pretest was conducted and a debriefing meeting was organized.
- From debriefing reports and entries in the Forms collected, the following deficiencies were found: (i) some EA maps of the 2011 Economic Census were not accurate; (ii) mistakes in transcribing establishment numbers from Establishment List to Form; and (iii) incomplete entries in Pre-printed Village/EA Establishment List, and so on. As a result, Enumerator's Manual etc. was augmented, and statements printed in the Form to explain survey topics were improved for CIES 2014.
- The significance of a pretest was reconfirmed.
- The results of the Pretest was reported to CIES-TC.

5. EA delineation

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)
- Other SCOs

2) Methods of technological transfer

- In order to simplify the EA delineation work, it was proposed and approved to restrict the work to those selected EAs where the boundary changes of communes or villages had taken place; and where there had existed 130 establishments and more in the 2011 Economic Census and they should be divided for CIES; as well as to those SEZs and newly developed establishment group areas such as commercial and industrial areas which had started after the Economic Census.
- The experts advised the C/Ps to collect information from PDPs on relocation, division and integration of villages/communes and newly developed establishment group areas. However, it turned out that they had not caught detailed information on relocation, division and integration of villages, nor on what villages' or communes' boundaries had changed. Such information could not be obtained from Ministry of Interior, either. Thus, EAs whose boundaries had been changed could not be identified.
- The experts supported the compilation of documents related to EA delineation such as the work plan, the list of target EAs for delineation and the manual.
- The experts advised the C/Ps to hold a debriefing meeting to hear the implementation status, and supported the compilation of the results of the EA delineation.

3) Effects of technological transfer

- Utilizing the experiences acquired in the EA delineation work for the 2011 Economic Census, the EA delineation work for CIES 2014 was accomplished.
- As a result of the EA delineation work, EAs with many establishments had been divided prior to the enumeration of CIES 2014, and the enumeration work was simplified. At the same time, in some areas that had been regarded as newly developed establishment group areas, it turned out that the number of establishments had not increased very much from the 2011 Economic Census counts. Then, special enumeration was not required for such areas.
- The results of the EA delineation work was reported to CIES-TC.

6. Follow-up survey of large-scale establishments with 50 persons engaged or more

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)
- Mr. Kim Net (Social Statistics Department)
- SCOs

2) Methods of technological transfer

- The JICA experts advised the C/Ps to list up those large-scale establishments with 50 persons engaged or more which had not been enumerated due to refusal, etc. and which had reserved responses to accounting topics such as sales due to delay in compiling financial statements; and to conduct a follow-up survey thereof.
- After the follow-up survey, the experts instructed the C/Ps to match the list of target large-scale establishments and data of large-scale establishments already key-entered, to confirm presence or absence information such as “closed” and “not found” which was recorded in Pre-printed Large-size Establishment List, and then to capture the survey status of each large-scale establishment whose response had still not been obtained, that is whether it had closed, was “unknown”, or had refused to be surveyed.
- The experts advised the C/Ps to reconfirm whether Ministry of Commerce, etc. possessed related lists of enterprises concerning the large-scale establishments whose responses had still not been obtained due to “closed”, “not found”, etc., and to confirm their presence or absence by matching them against the lists if available. Also, the C/Ps were advised to contact them again just in case by telephoning the numbers which were recorded in the list of survey target large-scale establishments.
- As a result of reconfirmation of presence or absence by telephone, about 30 large-scale establishments could be contacted (i.e. were present). Then, the experts instructed the C/Ps to conduct a second follow-up survey.

3) Effects of technological transfer

- Out of 200 target large-scale establishments of the first follow-up survey, 119 large-scale establishments provided responses to CIES.
- Out of 31 target large-scale establishments of the second follow-up survey, 25 large-scale establishments provided responses to CIES.

4) Challenges, etc.

- The response rate of large-scale establishments was low clearly indicating some of ROs/AROs' negligence of survey taking of large-scale establishments.

7. Debriefing meeting

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)
- Mr. Kim Net (Social Statistics Department)
- SCOs

2) Methods of technological transfer

- The experts advised the C/Ps to hold a debriefing meeting to hear difficulties and problems encountered in the enumeration of the survey from officials in charge and to utilize the report for the next census/survey.
- It was proposed and approved that the debriefing meeting should be held separately for directors of PDPs and ROs/AROs, and that reports should be also collected from one enumerator and one supervisor selected in each of 24 provinces for CIES 2014.
- The experts supported the drafting of reporting forms separately for directors of PDPs, ROs/AROs and enumerators and supervisors.
- The experts attended the debriefing meeting sessions and supported the compilation of the report of the debriefing meeting.

3) Effects of technological transfer

- The debriefing meeting was held with DG attending, and it can be said that the significance of holding a debriefing meeting was recognized by NIS to hear difficulties and problems encountered in the real enumeration of a survey.

8. Data processing

8-1. Manual editing and coding of Survey Forms etc.

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)
- SCOs

2) Methods of technological transfer

- The JICA experts supported the compilation of the manual and the work plan for manual editing of Establishment Lists, Forms and other survey documents and for coding of ministries and agencies and of industries of establishments.
- As to the industrial classification for CIES 2014, it was decided to use Cambodia Standard Industrial Classification (CSIC) Version 1, and the experts supported the development of a CCIC retrieval system for industrial classification according to CSIC.
- The experts attended the training session on manual editing and coding, and stressed at its beginning the importance of the manual editing and coding work saying that it would affect very much the accuracy of the results of CIES 2014.
- The experts walked in the manual editing and coding work site so as to respond questions while checking the entry status in real Forms. They also advised the C/Ps to check that financial statements including Ownership (Legal status) had been transcribed correctly to Forms when copies of financial statements were attached.

3) Effects of technological transfer

- The manual on manual editing and coding and the work plan were compiled.
- A CSIC retrieval system was developed.
- The manual editing and coding work for CIES was accomplished without delay.

8-2. Data entry

1) C/P

- Mr. So Tonnere (Economic Statistics Department)
- Mr. Saint Lundy (Director, ICT Department)
- Mr. Lay Sophat (ICT Department)
- Mr. Chao Pheav (ICT Department)

2) Methods of technological transfer

- Taking into consideration the fact that many data entry mistakes had occurred for the Economic Census, the experts advised the C/Ps to let different persons key-enter all the Forms and other documents twice; to compare the first entered data and the secondly entered data; and to correct errors referring to the Forms when inconsistencies were found.
- The experts instructed the C/Ps to key-enter unformatted descriptions such as main economic activities (industries) for CIES 2014 so that they could be referred to when coding errors might be found in data cleaning, and that they could be utilized for future use in establishment data bases.
- Taking into consideration the fact that many errors had occurred with respect to digit positions concerning number of persons engaged, and with respect to digit positions and columns concerning accounting topics such as amount of sales for the Economic Census, the experts instructed the C/Ps to key-enter both the total and its components, not to replace the total with the sum of its components, and to key-enter marks to distinguish daily amounts from monthly amounts.
- The JICA experts supported the compilation of the manual and the work plan for data entry taking into consideration the above matters.
- The development of the data entry system was supported.
- The experts attended the training session on data entry, and stressed at its beginning the importance of the data entry work saying that it would affect very much the accuracy of the results of CIES 2014.
- The experts checked the progress of the data entry work, and supported the data entry work by performing a final matching check of the first and secondly entered data sets against the data sets which the C/Ps said to have verified already.

3) Effects of technological transfer

- The manual on data entry and the work plan were compiled.
- All the Forms were key-entered and verified.

4) Challenges, etc.

- Key-entry errors were found even for ID codes (the matching key for the first and secondly entered data sets); and many inconsistencies were detected between the first and secondly entered data sets. Thus, it took a lot of time for the verification. Moreover, the experts found many data entry mistakes during the final matching, and many also in the data cleaning stage as stated later.

8-3. Data cleaning

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)
- Mr. Saint Lundy (Director, ICT Department)
- Mr. Lay Sophat (ICT Department)
- Mr. Chao Pheav (ICT Department)

2) Methods of technological transfer

- The experts supported the compilation of the manual on data cleaning incorporating as many data editing rules as possible taking account of the experiences acquired in the Economic Census, and the compilation of the work plan.
- Taking account of the experiences acquired in the Economic Census and the fact that the data volume was not very voluminous for CIES, the experts advised the C/Ps to correct errors when they were detected by referring to the original Forms, and by confirming the presence or absence of key-entry mistakes.
- The experts supported the development of the data cleaning system.
- The experts checked the progress of the data cleaning work, and supported the data cleaning work by performing a final check of the data which the C/Ps said to have finished cleaning and correcting errors already.

3) Effects of technological transfer

- A considerably detailed data cleaning manual was compiled.
- Generally speaking, the manual on data cleaning has to be revised as needed according to real data. However, this kind revision did not occur many times for CIES data processing.
- The data cleaning system was developed.
- The work plan was compiled.

4) Challenges, etc.

- A considerable amount of errors were detected at the experts' final confirmation of the data cleaning work.

9. Preliminary tabulation

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)
- SCOs

2) Methods of technological transfer

- The JICA experts supported the calculation of multipliers for sampled establishments.
- The experts advised the C/Ps to release only the total number of establishments by province at the preliminary release of the results of CIES, and the tabulation on the number of establishments by province.
- The experts checked the draft presentation documents which NIS staff had compiled for the ceremony for releasing the preliminary results and for the associated explanatory seminar, and advised them to improve the draft documents as needed.

3) Effects of technological transfer

- The ceremony for releasing the preliminary results and the associated explanatory seminar were held with about 250 participants including Senior Minister, Minister of Planning, Representatives of Embassy of Japan and JICA, senior staff of Ministry of Planning, staff of NIS and statistical divisions of PDPs, participants from line ministries, international agencies, donors, and the media.

10. Analysis of the results

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)
- Other SCOs, ROs and AROs

2) Methods of technological transfer

- Training was provided in Japan toward the end of January 2014, and lectures were given on the review of the Economic Census, fields on which to strengthen capabilities for CIES, and points to pay attention to.
- The contents of the National Report and analytical reports of CIES were discussed with the C/Ps to prompt NIS to consider this matter, and to examine the scope of analytical work .
- Participating in the Pretest reporting meeting and the debriefing meeting organized by NIS inviting ROs and AROs, the experts heard the survey status and challenges, and exchanged views and advised on how to promote surveys (attended by Ms. Hang Lina, DG).
- With respect to the above training in Japan, NIS requested the experts to give basically similar lectures to NIS staff related to CIES. Thus, the experts provided NIS staff including ROs and AROs two-day training in conjunction with the seminar on the preliminary results of CIES on analysis of financial statements, data analytical methodology, and approaches toward strengthening cooperation with line ministries.
- Based on the above training, the experts provided support to NIS in the compilation of analytical reports, while assisting the compilation of the National Report of the results of CIES.
- Through the above mentioned work, the experts submitted proposals to NIS concerning selection of sample enterprises, review of enumeration topics for the next census/survey, improvement of enumeration methods, feedback of information to enterprises, and necessity for more cooperation with line ministries.

3) Effects of technological transfer

- Through the exchange of views in the Pretest reporting meeting, the debriefing meeting and the training above mentioned, requests and exchange of views were made toward improvement of official statistics, and NIS staff, especially ROs and AROs reaffirmed the importance of CIES and deepened the understanding of the necessity for continuous data collection. However, NIS requested further technical assistance in some way or another as it still lacked budgets and capabilities.
- Mr. Kim Sovorlak, DDG expressed gratitude for the training above mentioned saying that it deepened staff's understanding and achieved its objectives.
- The preliminary results of CIES was released and explained in the seminar, and uploaded in the website of NIS.

4) Challenges etc.

- The technical transfer work on analysis on CIES had been scheduled to conclude by the end of February 2015 by releasing the final results of CIES. However, NIS requested JICA to extend the project until September 2015 so that National Profile, Statistical Atlas, and Analytical Reports on 7 industries and by scale of enterprise would be compiled, and that NIS staff could become self-standing even a little more.

11. Final tabulation

1) C/P

- Mr. Khin Sovorlak (DDG)
- Mr. So Tonnere (Economic Statistics Department)
- SCOs

2) Methods of technological transfer

- It turned out that large-scale establishments had not been enumerated thoroughly enough inspite of various efforts and that they also had to be estimated. Thus, the experts supported the compilation of multipliers for the estimation of large-scale establishments.
- The experts supported the final tabulation by province, size of establishment in terms of number of persons engaged, by industry, and so on.
- The experts supported the compilation of “National Results of CIES2014”.
- The experts advised the C/Ps on the documents which they would use at the ceremony of releasing the final results and the explanatory seminar of the final results by checking their drafts and instructing the C/Ps to amend them.

3) Effects of technological transfer

- “National Results of CIES2014” was published.
- The ceremony for releasing the final results and the explanatory seminar of the final results were held being attended by 300 participants including Senior Minister, Minister of Planning, representatives of Embassy of Japan and JICA, senior staff of Ministry of Planning, staff of NIS and PDPs, participants from line ministries, international agencies, donors, the media, and so on.

12. Production of statistical maps

1) C/P

- Mr. Pen Soheat (Department of Demographic Statistics, Census and Survey)

2) Methods of technological transfer

- The experts supported the compilation of statistical maps displayed in the sites of the ceremonies for releasing the preliminary and final results.
- To draw statistical maps relating to provincial figures, it was necessary to prepare statistical data in a format which GIS could process, and micro data were tabulated by province to produce data suitable for mapping by GIS.
- Produced maps were saved in a pdf format so that they could be displayed on PCs with GIS software unequipped with.
- In order to produce a statistical atlas for CIES 2014, a series of technologies relating to compilation of statistical maps (selection of mapping themes, generation and transformation of statistical data, drawing of statistical maps) were lectured to the C/Ps.
- The experts submitted to DG and senior NIS staff a proposal on the development of GIS at NIS following the UN Handbook on Geospatial Infrastructure in Support of Census Activities.

3) Effects of technological transfer

- 7 and 12 colored statistical maps of A1 size were drawn to be displayed at the sites of ceremonies for releasing the preliminary and final results of CIPS respectively.
- By displaying the statistical maps in the sites of ceremonies for releasing the preliminary and final results, the survey results were presented in a user-friendly way to the many participants

Section 4. Regional Statistical Capability Improvement Plan (RSCIP)

1. Planning of RSCIP (SAS Sub-project)

1) C/P

- Mr. Hor Darith (DDG; now Under-secretary of State)
- Mr. Cchay Satia (DDG)
- Mr. Kim Net (Social Statistics Department)
- Ms. Hang Phally (Economic Statistics Department)
- Mr. Sin Sereyvuth (Department of Demographic Statistics, Census and Survey)
- Mr. Kuon Sithana (Department of Demographic Statistics, Census and Survey)
- Mr. Lay Sophat (ICT department)
- ROs/AROs: one RO and one ARO for one province; 48 persons in total)
- SASPOs (Small Area Statistics Provincial Officer): three provincial officers; 72 persons in total)

2) Methods of technological transfer

- RSCIP was implemented under the name of the Small Area Statistics Sub-project (SAS Sub-project) and implemented in all the 24 provinces successively group by group of provinces.
 - FY 2011: 6 provinces (Battambang, Kampong Cham, Kandal, Preah Sihanouk, Siem Reap and Takeo)
 - FY 2012: 9 provinces (Banteay Meanchey, Kampong Chhnang, Kampong Thom, Koh Kong, Kratie, Mondul Kiri, Pursat, Kep and Pailin)
 - FY 2013: 5 provinces (Kampong Speu, Phnom Penh, Preah Vihear, Svay Rieng, and Otdar Meanchey)
 - FY 2014: 4 provinces (Kampot, Preyveng, Ratanakiri and Stung Treng)
- Furthermore, the work was implemented in an orderly sequence in two stages as the contents were diversified.
 - First stage: Improvement of the computer room of the provincial office, installment of equipment such as PCs, training on using Excel, the Internet, etc. and on basic techniques for statistical tabulation (SCOs trained ROs/AROs, and ROs/AROs trained PDP staff)
 - Second stage: Training on tabulation of the micro data of the 2008 Population Census and the 2009 Nation-wide Establishment Listing (training on methods of using SCS or GIS software), compilation of summary tables and charts as well as analytical methods following the sample report (SCOs trained ROs/AROs, and ROs/AROs trained PDP staff), tabulation, analysis and compilation of a provincial report by PDP staff themselves, and review of the draft of the provincial report by ROs/AROs and SCOs.
- It was necessary to make C/Ps understand the entire work plan, that is for what, how, in what period, and by what system the Small Area Statistics Sub-project would be implemented. To this end, a

paper titled "SAS Sub-project for Improvement of Statistical Technology in Provincial Departments of Planning" was compiled, whose essence was as follows:

- Background and significance of the Small Area Statistics (part of statistical diffusion activities, etc.)
 - Objectives and final products
 - Period and target provinces (grouping of provinces)
 - Implementation system
 - Two stages and main activities, work schedule, training plan, and training curriculum
 - Contents of an analytical report to be compiled and published
 - Roles and tasks of persons concerned
- The experts prepared computer tools for tabulating micro data, data to be analyzed, and tools for producing summary tables and charts in the first fiscal year, and compiled a sample analytical report so that ROs/AROs could provide training smoothly and SASPOs could perform tabulation and analysis smoothly. In addition, tools were developed to meet the demand for additional tabulation which were raised during actual work of tabulation and analysis in the first fiscal year.
 - According to the above mentioned work plan, the experts conducted 3-stage training seminars and OJT in the second stage to transfer necessary knowhow and technologies.
 - a. Training seminar for the SCOs (3 days)
 - a-1: Overall explanation of Small Area Statistics Sub-project plan (explanation of above stated "SAS Subproject for Improvement of Statistical Technology in Provincial Departments of Planning")
 - a-2: Lecture on methods of calculation of major derived statistics and compilation of analytical tables and charts, as well as practice
 - a-3: Points of writing analytical results
 - a-4: Points of compiling analytical reports
 - a-5: Points of checking inconsistencies
 - b. Training for ROs/AROs (3 days)
 - Trainees were officials responsible for the of provinces of each fiscal year group; lecturers were SCOs who had received the SCO training seminar stated above; and teaching materials were the same as for the SCO seminar.
 - c. Training for SASPOs (3 days)
 - Held at each provincial office; lecturers were ROs/AROs who had been trainees of the RO/ARO training seminar stated above; and teaching materials were the same as for the SCO seminar.
 - d. OJT as needed
 - After the SASPO training, SASPOs were due to compile major statistical tables for small areas (Districts, Communes and Villages) using micro data, to compile analytical tables combining them with officially released results, and to write an analytical report. In such analytical work, various doubts and problems usually rise, and work will not go ahead unless they are solved. Thus, ROs/AROs visited provincial offices several times to evade such situations. As needed, SCOs and

JICA experts also visited provincial offices and conducted OJT.

- As SCOs were the same for subsequent fiscal years, the experts just checked the work plan made by the C/Ps, and did not conduct SCO training, but only assisted lecturers in answering questions raised. The experts also entrusted the C/Ps to revise the training materials.

3) Effects of technological transfer

- Data processing environment at PDPs were improved.
- Teaching materials compiled by the experts in English were translated into Khmer, and used for the RO/ARO training and for the SASPO training as well as for the guideline for the analytical work. Through this translation process, C/Ps' understanding and learning of knowhow and technologies concerned deepened, and transfer thereof was more achieved.
- Through responses to questions raised in the SASPO training and OJT in the tabulation work, SASPOs deepened and acquired knowhow and technologies for handling small area statistics.
- The tabulation and analytical work was the first experience for some of ROs/AROs and staff of PDPs. Through this sub-project, their understanding and acquisition of knowhow and technologies for data processing, statistical analysis and compilation of an analytical report advanced.
- An analytical report was successfully compiled and printed for each province.

Chapter 5. Inputs of Technical Assistance

Section.1 Dispatch of Japanese Experts

The short-term experts in the field of data processing/ scrutiny, census/ survey planning, data analysis, mapping, and small area statistics/ project coordination have dispatched as scheduled. The short-term and shuttle-style dispatch facilitated adjustment of dispatch depending on the progress and needs of NIS effectively.

The total input of Japanese experts from first year to fourth year is 134.66 Man-Month. The details are shown as the follows.

(Unit: Man-Month)

Name	Field	1 st Year	2 nd Year	3 rd Year	4 th Year	Total
Akihiko Ito	Team Leader/ Data Processing/Scrutiny	1.93	3.70	3.70	7.40	16.73
Atsushi Otomo	Data Processing/ Scrutiny/Data Analysis	0.47	1.93	0.00	0.00	2.40
Yasuo Ishida	Census/ Survey Planning/Small Area Statistics	4.93	6.97	0.00	0.00	11.90
Akihito Yamauchi	Data Processing/ Scrutiny/ Data Analysis/ Small Area Statistics	0.00	4.10	4.47	9.30	17.87
Joji Sawada	Census/ Survey Planning/Small Area Statistics	0.00	0.00	4.60	4.70	9.30
Mariko Murata	Data Processing/ Scrutiny	0.00	0.00	2.00	1.44	3.44
Nao Endo	Mapping	0.47	1.90	0.00	0.00	2.37
Jun Konishi	Mapping	0.00	1.90	0.27	2.93	5.10
Tomoko Saito	Mapping	0.00	0.00	0.23	1.40	1.63
Nobuo Hirohata	Data Analysis/ Census/Survey Planning/ Small Area Statistics	1.43	2.30	3.90	3.77	11.40
Eishi Yasunaga	Data Analysis	0.00	0.60	1.90	0.53	3.03
Hisatsugu Furukawa	Data Analysis	0.00	0.40	2.77	2.77	5.94
Koh Sakano	Data Analysis	0.00	0.63	1.93	2.60	5.16
Kazuhiro Fukuyo	Data Analysis	0.00	0.00	0.00	1.43	1.43
Yoichi Nakamura	Data Analysis	0.00	0.00	0.97	0.46	1.43
Yasuko Hayase	Data Analysis	0.00	0.00	0.00	1.97	1.97

Hiromi Mizuta	Project Coordination/ Small Area Statistics	3.50	7.50	5.63	8.66	25.29
Emi Harada	Project Coordination/ Procurement	0.00	1.00	1.47	4.17	6.64
Masayoshi Nakagawa	Training in Japan	0.00	0.00	0.63	1.00	1.63
Total		12.73	32.93	34.47	54.53	134.66

Section.2 Provision of Technical Equipment

In order to fix up basic working facility and infrastructure for the SAS Sub-project activities, JICA renovated SAS-room in 24 PDP (Provincial Department of Planning) offices existing all over the country of Cambodia. On that basis, JICA provided the Technical Equipment, such as computers, software, peripherals, printers, copying-machines, desks & chairs and etc. in the said PDP office year after year. These equipments were officially handed over to NIS after their performance capacity had been firmly ascertained by the performance-test.

The date of official handing over in each annual year is as shown below. As for the items of the equipment, inspection date, location, usage and conditions are as shown in the List of Equipment.

1st Year (Oct 2010 - March 2011) : None

2nd Year (April 2011 - April 2012)

By Government Team : For 6 provinces / US\$46,200

(Date of Handing Over : 8th Aug 2011, and 19th Aug 2011)

By Non-Government Team : For 9 provinces / US\$73,062

(Date of Handing Over : 16th April 2012)

3rd Year (May 2012 - June 2013)

By Non-Government Team : For 5 provinces / US\$38,060

(Date of Handing Over : 6th May 2013)

4th Year (Aug 2013 - March 2015)

By Non-Government Team : For 4 provinces / US\$33,100

(Date of Handing Over : 21st Feb 2014)

Section.3 Expenditure in Cambodia.

The total amount of expenditure in Cambodia from first year to fourth year is approximately 113.5 million Japanese Yen. As for the expenditure of each item and year are as shown in the following table. Each and every expenditure has been used appropriately and efficiently in order to run the project successfully.

(Unit: JPY)

Expense Item	1 st Year (Oct. 2010- Mar. 2011)	2 nd Year (Apr. 2011- Apr. 2012)	3 rd Year (May 2012- Jun. 2013)	4 th Year (Aug. 2013- Mar. 2015)	Total (Oct. 2010- Mar. 2015)
General Local Expense	24,233,000	9,472,000	21,832,000	36,512,000	92,049,000
Meeting Expense	428,000	777,000	0	0	1,205,000
Equipment and Renovation	0	5,880,000	8,817,000	5,496,000	20,193,000
Total	24,661,000	16,129,000	30,649,000	42,008,000	113,447,000

Section.4 Training Course in Japan

As a part of the project, project team has accepted three trainees from NIS in each fiscal year, and twelve trainees in total. Since the contents of the training programs were designed in accordance with the project activities of subsequent year as well as NIS's needs, all training courses received high evaluation from trainees. The contents of training course are very informative not only for the trainees but for the other staff of NIS widely, they are effectively utilized for other training courses and NIS works.

The details of training course in each year are shown as the follows.

1st Year (16 days, Jan. 13- Jan. 28, 2011)

- <Purpose> Capacity building of survey planning, data processing and scrutiny on 2013 Cambodia Inter-Censal Population Survey
- <Topics>
- Survey planning of 2013 Cambodia Inter-Censal Population Survey
 - Data processing of 2013 Cambodia Inter-Censal Population Survey
 - Tabulation of 2013 Cambodia Inter-Censal Population Survey
 - Training in Mie and Nagoya, Aichi
- <Trainees>
- Ms. Som Somalin
 - Mr. Moeung Kongkea
 - Mr. Nou Chanra

2nd Year (18 days, Jan. 10- Jan. 27, 2012)

- <Purpose> Capacity building of data analysis, data processing and scrutiny on 2013 Cambodia Inter-Censal Population Survey
- <Topics>
- Data processing of 2013 Cambodia Inter-Censal Population Survey
 - Data analysis of 2013 Cambodia Inter-Censal Population Survey
 - Sampling Design of 2013 Cambodia Inter-Censal Population Survey
 - Training in Yamaguchi and Kita-kyushu, Fukuoka
- <Trainees>
- Mr. Saint Lundy
 - Mr. Lim Penh
 - Mr. Lay Sophat

3rd Year (18 days, Jan. 15- Feb. 1, 2013)

- <Purpose> Capacity building of survey planning on 2014 Cambodia Inter-Censal Economic Survey
- <Topics>
- Survey planning of 2014 Cambodia Inter-Censal Economic Survey
 - Data processing tool of 2014 Cambodia Inter-Censal Economic Survey
 - Provision of Small Area Statistics
 - Training in Kochi
- <Trainees>
- Mr. Oukchay Panhara

- Mr. Kim Net
- Mr. Chao Pheav

4th Year (18 days, Jan. 14- Jan. 31, 2014)

<Purpose> Capacity building of data analysis on 2014 Cambodia Inter-Censal Economic Survey

<Topics>

- Data processing of 2014 Cambodia Inter-Censal Economic Survey
- Data analysis of 2014 Cambodia Inter-Censal Economic Survey
- Provision of Small Area Statistics
- Training in Miyazaki

<Trainee>

- Mr. Hor Darith
- Mr. Meng Kimhor
- Mr. Chhay Saita

1. The First Joint Coordinating Committee Meeting

The First Joint Coordinating Committee (JCC) Meeting of the Project on Improving Official Statistics in Cambodia Phase III

at Meeting Room, 1st Floor, New Building,
National Institute of Statistics (NIS), Ministry of Planning
on Tuesday, October 12, 2010 at 9:00 – 12:00AM

Tentative Agenda

- 09:00-09:10: Opening Address of H.E. San Sy Than,
Director-General of the NIS, Ministry of Planning
- 09:10-09:20: Opening Remarks of Mr. Yasujiro Suzuki,
Chief Representative of JICA Cambodia Office
- 09:20-10:00: Brief Inception Report of the Project Phase III
of Mr. Fumihiko Nishi, Chief Advisor of the Project
- 10:00-10:10: Question and Answer
- 10:10-10:40: Detailed Inception Report of the Project Phase III
of Mr. Akihiko Ito, Leader of the Project
- 10:40-10:50: Question and Answer
- 10:50-11:20: Progress Report of the Preparation Works of the 2011 Economic Census
of Mr. Khin Sovorlak, Deputy Director-General, the NIS
- 11:20-11:30: Question and Answer
- 11:30-11:50: Discussion
- 11:50-12:00: Closing Address of H.E. San Sy Than,
Director-General of the NIS, Ministry of Planning

Minutes on the First Joint Coordinating Committee Meeting

Date & Time: 9:00 AM on 12 October 2010

Venue: Conference Room at 1st Floor of the new building, National Institute of Statistics, Ministry of Planning

Attendees:

National Institute of Statistics (NIS)

H.E. San Sy Than, Director General, the NIS

H.E. Mr. Seng Soeurn, Deputy Director General, the NIS

Mr. Khin Sokvorlak, Deputy Director General, the NIS

Mr. Mich Kanthul, Director of Economic Statistics Department, the NIS

M. Lim Penh, Director of Statistical Standard and Analysis, the NIS

Mr. Saint Lundy, Director of Information, Communication and Technology Department, the NIS

Mr. Kim Net, Deputy Director of Social Statistics Department, the NIS

Observer from Line Ministries:

Representative from Ministry of Education, Youth and Sport

JICA Side:

Mr. Yasujiro Suzuki, Chief Representative of JICA Cambodia Office

Ms. Satoko Nadamoto, Project Formulation Advisor, JICA Cambodia Office

Mr. Fumihiko Nishi, Chief Advisor of JICA Project, JICA Expert

Dr. (Mr.) Kiyomi Shirakawa, JICA Expert

Mr. Akihiko Ito, Team Leader of JICA Project, JICA Expert

Dr. (Ms.) Nao Endo, JICA Expert

Mr. Yasuo Ishida, JICA Expert

Mr. Eishi Yasunaga, JICA Expert

Mr. Nobuo Hirohata, JICA Expert

Mr. Hiromi Mizuta, JICA Expert

Ms. Emi Harada, JICA Expert

Mr. Youk Seng An, Project Assistant

Agenda

1. Opening Address of H. E. San Sy Than
2. Opening Remarks by Mr. Yasujiro Suzuki, Chief Representative, JICA Cambodia Office
3. Brief Inception report of the Project Phase 3 by Mr. Fumihiko Nishi, Chief Advisor of JICA Project
4. Question and answer
5. Detailed Inception report of the Project Phase 3 by Mr. Akihiko Ito, Team Leader of JICA Project
6. Question and answer
7. Report on the Progress of the Preparation Work of the EC2011 by Mr. Khin Sovorlak, Deputy Director General of the NIS
8. Question and answer
9. Discussion
10. Closing Address of H. E. San Sy Than

1. Opening Session

1.1 H.E Mr. San Sy Than, Director General of the NIS:

At the beginning of the session, HE San Sy Than, Director General, the NIS mentioned that the JCC meeting was the regular meeting for reviewing the progress of the project. He mentioned that JICA Project Phase 1 and 2 completed successfully and came to Phase 3 which would mainly support to the 2011 Economic Census of Cambodia (EC2011), 2013 Cambodia Inter-censal Population Survey (CIPS2013), 2014 Cambodia Inter-censal Economic Survey (CIES2014), and the capacity building of the Provincial Departments of Planning. After this meeting, we will request the NSC to decide the logo of the EC2011 as well.

1.2 Mr. Yasujiro Suzuki, Chief Representative, JICA Cambodia Office:

In the opening remarks by the Chief Representative of JICA Cambodia Office, he would like to express his sincere thanks to the NIS for good cooperation and support to JICA Project Phase 2 for smooth and successful implementation of the 2008 Population Census and the 2009 Nation-wide Establishment Listing. JICA will continue to support the NIS for another 4.5 years through Phase 3 which funded by the Government of Japan and JICA for assisting the NIS to conduct the EC2011, the CIPS2013, the CIES2014, and the capacity building of the Provincial Departments of Planning. He expressed his confidence that the NIS would exercise strong ownership and lead the coordination with all stakeholders to smooth implementation and continue the excellent cooperation between JICA and the NIS.

2. Presentation

2.1 Mr. Fumihiko Nishi

Since a new JICA team has just arrived to work for the JICA Project Phase 3, Mr. Nishi, Chief Advisor introduced new JICA Experts. He reported the main project activities such as Dispatch of Japanese experts, Training in Japan, Training in Indonesia, Training in Cambodia, Technical cooperation to the EC2011, the CIPS2013, and the CIES2014, Holding of seminars, and Provision of

machineries and equipment. Furthermore, he added the additional activities as follows: the 1st counterpart fund of non-grant aid through Phase 1 of USD 885,827.00; the 2nd one through Phase 2 of USD 1,968,212.00; and the 3rd one through Phase 3 of USD 2,243,061.00.

After the presentation by Chief Advisor, Director General of the NIS expressed his gratefully thank to JICA for continuous assistance to the NIS. DG mentioned that JICA Project was very important for the CIPS2013 because the NIS officer could gain more experiences and knowledge not only from UNFPA but also from JICA Project which were dispatching very experienced and skillful experts. It is my great pleasure for Cambodia, especially for the NIS that we will be able to conduct the EC2011 and CIES2014 because we can have a very comprehensive frame than ever.

2.2 Mr. Akihiko Ito

Mr. Akihiko Ito reported in more detail on the inception report. However, since the time is limited, he presented main points only on the policy of the project implementation, method and work flow chart, operational plan, schedule, various training on the CIPS2013 and the CIES2014, experts to be dispatched by subject-matter, and implementation structure of Phase 3.

Regarding the training on the CIPS2013 and the CIES2014, Mr. Khin Sovorlak asked what the content of these trainings are. Are analysis and sampling included in these trainings?

Mr. Nishi answered since it was very technical matter, we should discuss it in the next JCC. At the pilot survey of the EC2011, Mr. Ito provided a sampling training. In addition, Mr. Ito said that it was very important to assign proper counterparts for sampling skill training. In terms of English-speaking staff, DG mentioned that the NIS had limited officers who could speak English well. However, SIDA (Sweden) Project is providing the English training for NIS officers. So DG is expecting that this matter will be improved in the near future.

2.3 Mr. Khin Sovorlak

Mr. Khin Sovorlak presented the preparation work of the EC2011. He reported the preparatory stages toward the EC2011 as follows: pre-test was from 15 to 31 December 2009; pilot survey was from 1 to 31 March 2010; census mapping was from 12 to 31 July 2010. In addition, the Ministry of Planning established the following committees: the National Census Committee (NCC), the Census Technical Committee (CTC), the National Steering Committee for Census Information and Education Campaign (NSC), and Provincial Census Committee (PCC). Besides these committees, the NIS held various kinds of internal meetings to discuss the management and technical matters on the EC2011.

Regarding the preliminary results of the pilot survey of the EC2011, Mr. Nishi confirmed whether we should report to the CTC or not. And he requested DG to nominate three trainees in charge of the CIPS2013 for Training in Japan in January 2011.

DG answered that it was not necessary to report to the CTC. DG informed that the NIS was planning to print a book on the legal basis on the EC2011.

3. Closing Session

At the end of the presentations and discussions, DG wrapped up the meeting as below:

- Good experts have been being dispatched for JICA Project Phase 3. We need to improve official statistics not only at national level but also at provincial level;
- The preparation of the EC2011 is going smoothly although we have to work on a very tight schedule;
- The EC2011 logo will be submitted to the NSC for deciding and getting the approval of Chairman of the NCC;
- We will unify the logo position at using on the official census documents.

2. The second Joint Coordinating Committee Meeting

The Second Joint Coordinating Committee (JCC) Meeting of the Project on Improving Official Statistics in Cambodia Phase III

at Meeting Room, 1st Floor, New Building,
National Institute of Statistics (NIS), Ministry of Planning
on Friday, March 11, 2011 at 9:00 – 12:00AM

Tentative Agenda

- 09:00-09:10: Opening Address of **H.E. San Sy Than**,
Director-General of the NIS, Ministry of Planning
- 09:10-09:20: Opening Remarks of **Mr. Yasujiro Suzuki**,
Chief Representative of JICA Cambodia Office
- 09:20-10:00: Brief Progress Report of the Project Phase III
of **Mr. Fumihiko Nishi**, Chief Advisor of the Project
- 10:00-10:10: Question and Answer
- 10:10-10:40: Detailed Progress Report of the Project Phase III
of **Mr. Akihiko Ito**, Leader of the Project
- 10:40-10:50: Question and Answer
- 10:50-11:20: Progress Report of the 2011 Economic Census
of **Mr. Hor Darith**, Deputy Director-General, the NIS
- 11:20-11:30: Question and Answer
- 11:30-11:50: Discussion
- 11:50-12:00: Closing Address of **H.E. San Sy Than**,
Director-General of the NIS, Ministry of Planning

Minutes on the Second Joint Coordinating Committee Meeting

11 March 2011

Venue: NIS Conference Room at 1st Floor of the new building

Attendees:

National Institute of Statistics

H.E. San Sy Than, Director General, National Institute of Statistics
H.E. Mr. Seng Soeurn, Deputy Director General, National Institute of Statistics
Mr. Khin Sokvorlak, Deputy Director General, National Institute of Statistics
Mr. Mich Kanthul, Director of Economic Statistics Department
M. Lim Penh, Director of Statistical Standard and Analysis
Mr. Saint Lundy, Director of Information, Communication and Technology Department
Mr. Kim Net, Deputy Director of Social Statistics Department

Observer from Line Ministries:

Representative from Ministry of Education, Youth and Sport

JICA Side:

Mr. Yasujiro Suzuki, Chief Representative of JICA Cambodia Office
Ms. Satoko Nadamoto, Project Formulation Advisor, JICA Cambodia Office
Mr. Fumihiko Nishi, Project Chief Advisor, JICA Expert
Mr. Akihiko Ito, Project Team Leader, JICA Expert
Mr. Nobuo Hirohata, JICA Expert
Mr. Eishi Yasunaga, JICA Expert
Mr. Kiyomi Shirakawa, JICA Expert
Mr. Yasuo Ishida, JICA Expert
Ms. Emi Harada, JICA Expert
Ms. Nao Endo, JICA Expert
Mr. Hiromi Mizuta, JICA Expert
Mr. Youk Seng An, Project Assistant

Agenda

11. Opening Address of H. E. San Sy Than, Director-General of the NIS, Ministry of Planning
12. Welcome Remarks by Mr. Yasujiro Suzuki, Chief Representative, JICA Cambodia Office
13. Brief Progress Report of the Project Phase III by Mr. Fumihiko Nishi, Project Chief Advisor
14. Question and answer
15. Detailed Progress report of the Project Phase 3 by Mr. Akihiko Ito, Project Team Leader
16. Question and answer

17. Progress Report of the 2011 Economic Census by Mr. Hor Darith, Deputy Director General of NIS
18. Question and answer
19. Discussion
20. Closing Address of H. E. San Sy Than

1. Opening Session

1.1 H.E Mr. San Sy Than, Director General of NIS:

At the beginning of the session, HE San Sy Than, Director General, NIS has mentioned that JCC meeting is the regular meeting for reviewing the progress of the project implementation. He mentioned that JICA project Phase 3 which mainly supports for the conducting 2011 Economic Census of Cambodia (EC2011), 2013 Cambodia Inter-Population Censal Survey, 2014 Economic Statistics Survey, and the development of provincial department of planning. As for the implementation of EC2011, the field enumeration is going on smooth and as of now there were no serious problems reported, only minor issues which can be solved by RO/ARO, Director of provincial department of planning, supervisors and enumerators.

1.2 Mr. Yasujiro Suzuki, Chief Representative, JICA Cambodia Office:

In the welcome remarks by the Chief Representative of JICA Cambodia Office, he would like to express the sincere thanks to NIS for good cooperation and support to JICA Project until this Phase 3 for the ongoing of field enumeration of 2011 Economic Census of Cambodia and now EC2011 is going smoothly with strong coordination of NIS. He expressed his confidence that NIS will exercise strong ownership and lead the coordination with all stakeholders to smooth implementation, capacity development of its officers and keep continuing the excellent cooperation between JICA and NIS.

2. Presentation

2.1 Mr. Fumihiko Nishi, Project Chief Advisor

After the welcome remarks, Mr. Fumihiko Nishi reported the brief major activities of the project phase 3 such as dispatching JICA Experts for 7 sectors, training in Japan for 3 NIS Officers every year, local training in NIS for economic census operation and ICT staff on programming, cooperation on the technical planning of EC2011, provision of necessary material for EC2011 activities such as data collection from the field and data processing. The machinery and equipment will be equipped to provincial offices in the purposes of development the capacity of local officers with various statistical training for data processing and analysis. Mr. Nishi also presented the additional support to NIS/MoP such as construction of new building for NIS through the 1st counterpart fund of non-grant aid project of USD 885,827.00, financial support for the 2nd counterpart fund through JICA project phase 2 of non-grant aid project of USD 1,968,212.00 for supporting the general population census and 2009 Nation-wide Establishment Listing, and the 3rd counterpart fund through JICA project phase 3 of non-grant aid project of USD 2,243,061.00 for supporting the field operation of 2011 Economic Census of Cambodia.

After the presentation by Project Chief Advisor, Director General, NIS has expressed his gratefully

thank to JICA for continuous assistance to NIS since 2005 up-to now. Especially the on-going economic census which is implementing smoothly now through the technical and financial support by Government of Japan and JICA project.

2.2 Mr. Akihiko Ito, Project Team Leader

After presentation by Chief Advisor Report, Mr. Akihiko Ito presented the progress work of the JICA project phase 3 implementing in the first year from October 2010 to March 2011. He reported that the project team provides the technical assistance related to the EC2011 such as census planning and implementation, scrutiny/data processing, publication, census atlas etc, The project also support in issue the reports related to EC2011 such as Nation-wide Establishment Listing of Cambodia 2009 Statistics Atlas and Preliminary Results of Pilot Survey of 2011 Economic Census of Cambodia. He added that the project also support in implementing various training, seminar, and meeting related to EC2011 such as Joint Coordination Meeting, National Census Committee meeting, Census Technical Committee meeting, National Steering Committee for Census Information and Education Meeting, and training on EC2011 to NIS and local officers.

He also briefed the methods of project implementation including the content of project, operational plan etc., and the various outputs of the projects within the first year.

2.3 Mr. Hor Darith, Deputy Director General, NIS

Coming to next agenda, Mr. Hor Darith reported the progress of 2011 Economic Census of Cambodia which is implementing full month of March 2011.

Mr. Hor Darith briefed the background of EC2011 implementation which has statistics law and sub-decree as the legal basis. In term of implemented activities, he pointed that various committees was set up and held several meetings such National Census Committee (NCC), Provincial Census Committee (PCC), Census Technical Committee (CTC), and National Steering Committee for Census Information and Education (NSC). In addition to the committee activities, the pre-test for testing the census form and related documents were implemented in December 2009, pilot survey conducted in March 2010, and census mapping work of EC2011 conducted in July 2010. These activities had been completed with strong support by JICA Experts. Related to the census operation, he mentioned about the training to the provincial census officers, NIS officers, enumerators and supervisors was going smoothly, all the necessary material for the census operation already produced and handed over to the census officers. Now the data collection from the field is in good progress.

As for next activities, it will be the submission of filled-in forms from provincial planning offices to NIS, data editing and coding, data entry, results analysis, releasing the preliminary results and final results, and the dissemination of the results to all users such as government line ministries, sub-national level government, local and international partners, etc.,

Adding to the reported by Mr. Hor Darith, DG mentioned that according to the EC2011 calendar, the preliminary results will be released in August 2011 and the final results scheduled to release in March 2012.

3. Closing Session

At the end of the presentation and discussion, DG would like to summary briefly that the field enumeration is going on smoothly and senior management level is ready to provide the necessity support if needed. DG, once again, expresses his sincere thanks to Government of Japan and JICA for continuous support to NIS/MoP especially in Phase 3 that mainly assistance in conducting 2011 Economic Census of Cambodia, CIPS2013, Economic Survey 2014, and capacity development of local planning departments through the provision of statistical training, computers and necessity equipment for data processing and analysis of small area statistics at the local offices.

3. The third Joint Coordinating Committee Meeting

**The Third Joint Coordinating Committee (JCC) Meeting
of the Project on Improving Official Statistics in Cambodia Phase III**
at Meeting Room, 1st Floor, New Building,
National Institute of Statistics (NIS), Ministry of Planning
on Friday, March 9, 2012 at 2:00 – 4:00PM

Tentative Agenda

- 09:00-09:10: Opening Address of **H.E. San Sy Than**,
Director-General of the NIS, Ministry of Planning
- 09:10-09:20: Opening Remarks of **Mr. Yasujiro Suzuki**,
Chief Representative of JICA Cambodia Office
Senior Representative of JICA Cambodia Office
- 09:20-09:40: Brief Progress Report of the Project Phase III
- 09:40-09:50: Question and Answer
- 09:50-10:10: Detailed Progress Report of the Project Phase III
of **Mr. Akihiko Ito**, Leader of the Project
- 10:10-10:20: Question and Answer
- 10:20-10:40: Progress Report of the 2011 Economic Census
of **Mr. Hor Darith**, Deputy Director-General, the NIS
- 10:40-10:50: Question and Answer
- 10:50-11:10: Progress Report of the 2013 Inter-censal Population Survey
of **Ms. Hang Lina**, Deputy Director-General, the NIS
- 11:10-11:20: Question and Answer
- 11:20-11:50: Discussion
- 11:50-12:00: Closing Address of **H.E. San Sy Than**,
Director-General of the NIS, Ministry of Planning

Minutes on the Third Joint Coordinating Committee Meeting

Date & Time: 2:00 PM on 9 March 2012

Venue: Conference Room at 1st Floor of the New Building, National Institute of Statistics, Ministry of Planning

Attendees:

National Institute of Statistics (NIS)

H.E. San Sy Than, Director General
H.E. Hang Lina, Deputy Director General
H.E. Hor Darith, Deputy Director General
Mr. Khin Sokvorlak, Deputy Director GeneralS
Mr. Mich Kanthul, Director of the Economic Statistics Department
Mr. Saint Lundy, Director of the ICT Department
Mr. Lay Sophat, Deputy Director of the ICT Department
Mr. Kim Net, Deputy Director of the Social Statistics Department

JICA Side:

Mr. Yasujiro Suzuki, Chief Representative of JICA Cambodia Office
Ms. Satoko Nadamoto, Project Formulation Advisor, JICA Cambodia Office
Mr. Fumihiko Nishi, Chief Advisor of JICA Project, JICA Expert
Ms. Eri Hirota, JICA Expert
Mr. Hiromu Harada, JICA Expert
Mr. Akihiko Ito, Team Leader of JICA Project, JICA Expert
Mr. Eishi Yasunaga, JICA Expert
Mr. Yasuo Ishida, JICA Expert
Mr. Akihito Yamauchi, JICA Expert
Prof. (Dr./Mr.) Nobuo Hirohata, JICA Expert
Mr. Hiromi Mizuta, JICA Expert
Dr. (Ms.) Nao Endo, JICA Expert
Mr. Youk Seng An, Project Assistant

Agenda

1. Opening Address of H. E. San Sy Than, Director General of NIS, Ministry of Planning
2. Opening Remarks by Mr. Yasujiro Suzuki, Chief Representative, JICA Cambodia Office
3. Brief Progress Report of the Project Phase 3 by Mr. Fumihiko Nishi, Chief Advisor of JICA Project, JICA Expert
4. Question and Answer
5. Detailed Progress Report of the Project Phase 3 by Mr. Akihiko Ito, Team Leader of JICA Project, JICA Expert

6. Question and Answer
7. Progress Report of the 2011 Economic Census by H.E. Hor Darith, Deputy Director General of NIS
8. Question and Answer
9. Progress Report of the 2013 Cambodia Inter-censal Population Survey by H.E. Ms. Hang Lina, Deputy Director General of NIS
10. Discussion
11. Closing Address by H. E. San Sy Than, Director General of NIS, Ministry of Planning

1. Opening Session

1.1 H.E. San Sy Than, Director General of NIS:

At the beginning of the session, H. E. San Sy Than, Director General, NIS expressed his honor to participate in the 3rd JCC Meeting and mentioned that the meeting is the regular meeting for reviewing the progress of the project implementation. He mentioned that JICA Project Phase 3 has been commenced in October 2010 and running until March 2015. The project mainly supports 2011 Economic Census of Cambodia (EC2011), 2013 Cambodia Inter-Censal Population Survey (CIPS 2013), 2014 Cambodia Inter-Censal Economic Survey (CIES 2014), and development of provincial department of planning through small area statistics sub-project. H. E. San Sy Than stressed the great success of EC2011, which is essential for Royal Government of Cambodia (RGC), especially economic statistical data obtained from the EC2011 covering all the establishment through nationwide. He ended the session, saying he expects to hear various reports on the current situation and progress of the project from each presenter.

1.2 Mr. Yasujiro Suzuki, Chief Representative, JICA Cambodia Office:

In the opening remarks, the Chief Representative of JICA Cambodia Office expressed his sincere appreciation to NIS, and mentioned that JICA and NIS have been working together under collaborative work since 2005 in improving official statistics in Cambodia and statistic officers of NIS. He said NIS has been implementing General Population Census 2008, Nationwide Establishment Listing 2009 and 2011 Economic Census in a very proper manner in achieving successful results together with JICA Experts since General Population Census 2008 of Cambodia. He informed that the final results of EC2011 will be officially released on 13th March 2012; consequently they will be used as a baseline data for government bodies, local and international NGOs, development partners and other data users in terms of economic statistics. Mr. Yasujiro Suzuki mentioned that the project currently lies midway of its implementation period so that JICA is ready to support CIPS 2013, CIES 2014 and other relevant activities. He expressed his willingness that NIS will keep close cooperation with their great effort together with JICA experts for successful project implementation.

-For more details, refer to his opening remarks-

2. Presentation

2.1 Mr. Fumihiko Nishi, Chief Advisor of JICA Project, JICA Expert:

Mr. Fumihiko Nishi, Chief Advisor of JICA Project reported the brief major activities of the project phase 3, such as dispatching JICA Experts for 7 sectors, providing training in Japan and Indonesia for 3 NIS officers every fiscal year, local training in NIS for data processing of EC2011, analysis, and post enumeration survey. In addition, the project also provided the training to 3 provincial officers for 6 provinces to develop their capacity in term of small area statistics, especially on how to use PC, internet, tabulation of data, analyzing data and compiling the small area statistics report. Mr. Nishi added that the project has been assisting NIS for holding various ceremony and seminar on releasing EC2011 Preliminary Results, releasing EC 2011 Final Results and launching of small area statistics sub-project. In term of small area statistics improvement, he mentioned that the project provided 2 units of PC and peripherals to equip each PDP (provincial department of planning) office for the first 6 provinces with computer room renovation, as well as 3 units of PC in central office of NIS. Mr. Nishi also reported concerning the additional activities supporting NIS/MoP, such as construction of new building of NIS completed in January 2008 under the 1st counterpart fund of non-grant aid project of USD 0.9 million, financial support for the 2nd counterpart fund through JICA project phase 2 of non-grant aid project of USD 2.00 million for supporting the general population census and 2009 Nation-wide Establishment Listing, and the 3rd counterpart fund through JICA project phase 3 of non-grant aid project of USD 2.20 million for supporting the field operation of 2011 Economic Census of Cambodia.

After the report of Mr. Nishi, H. E. San Sy Than, Director General, NIS expressed his appreciation to JICA for their ceaseless assistance being rendered to NIS since 2005 up-to now, especially, the successful implementation of EC2011, whose results are to be released forthcoming 13th March 2012.

-For more details, refer to his Brief Progress Report of the Project Phase 3-

2.2 Mr. Akihiko Ito, Team Leader of JICA Project, JICA Expert:

Mr. Akihiko Ito, Team Leader of JICA Project made a presentation on the progress of JICA project phase 3 concerning the second year from October 2011 to February 2012. He reported that the JICA team supported the implementation of trainings, seminars and meetings related to 2011 Economic Census activities, such as the first training of data analysis and second training of geographic information system (GIS) in October 2011, the second and third training for NIS staff (RO/ARO) in November 2011. As for the Cambodia Inter-Censal Population Survey 2013 (CIPS 2013), various meetings had been held, such as the meeting on CIPS 2013 Technical Committee (CIPS-TC) in December 2011 and CIPS pre-test in February 2012. In addition, project also provided the Second Training of Small Area Statistics (SAS) in November 2011 and the Second Training of Data Analysis in February 2012. Furthermore, the Project Team implemented technical assistance related to 2011 Economic Census in term of production of Census atlas, release and publication of Census results, census/survey planning, public relation, implementation of 2011 Economic Census, data cleaning of census data, and Post Enumeration Survey, Tabulation plan of 2011 Economic Census of Cambodia.

He also briefed the indicators in project implementation based on PDM (Project Design Matrix), which indicates the project purposes, expected outputs and various indicators and target of the project. He also explained concerning the project implementation framework in Cambodia, project team functional diagram, work flow chart and operational plan of the project implementation.

-For more details, refer to his Detailed Progress Report of the Project Phase 3-

2.3 H.E. Hor Darith, Deputy Director General of NIS:

H. E. Hor Darith reported the progress of 2011 Economic Census of Cambodia, which is being implemented from April 2011 to March 2012.

He also reported post census activities, such as the process for receiving and checking of census documents, storage, data processing and data cleaning. After data processing and cleaning, the preliminary results have been compiled and released in August 2011. The final results of the EC2011 is scheduled to be released on 13 March 2012. He mentioned about the Post Enumeration Survey of EC2011 which was carried out in July 2011 and the data processing has been completed. PES analysis and report-writing are being carried out from August 2011 to February 2012. He added that the next activities are the compilation of provincial reports, provincial tables, census atlas, administration and census management report.

-For more details, refer to his Progress Report of the 2011 Economic Census -

2.4 H.E. Hang Lina, Deputy Director General of NIS:

H.E. Hang Lina reported the progress of 2013 Cambodia Inter-Censal Population Survey, which covers the official assignment of Cambodia Inter-Censal Population Survey Technical Committee Members (CIPS-TC members), the starting work on village frame update, sample design, prepared work plan and budget, held the resources mobilization workshop and join meeting among NIS, UNFPA and JICA on the fund contribution. She also briefly reported about the agendas of the CIPS-TC meetings, in which she discussed; they are the budget clarification (701,817.00US\$), number of selected villages (955; 2865 HHs), drafting questionnaire and manual, drafting logo, finalizing village frame, map collection, drafting outline for mapping work of CIPS 2013, preparation of the request for additional budget for mapping work, and updating of questionnaire. The meetings also reviewed the village frame, sampling design, sampling village, revised questionnaire, training and first & second pre-test. She added that NIS also conducted the consultative workshop with stakeholder in order to finalize the questionnaire and manual for field work scheduled to be carried out in next March.

-For more details, refer to her Progress Report of the 2013 Cambodia Inter-censal Population Survey -

3. Discussion

3.1 Mr. Nishii, Chief Advisor of JICA Project asked H.E. Hang Lina, Deputy Director General of NIS:

- Mr. Nishi asked as to how long UNFPA consultant will stay in NIS in 2012 for CIPS2013.

“Two weeks only”, Ms. Hang Lina answered.

- Mr. Nishi asked if Ms. Hang Lina already completed a draft of new definition of Urban / Rural, and

requested her to send the draft to him if completed.

Ms. Hang Lina accommodated his request.

3.2 H.E. San Sy Than, Director General asked Mr. Nishi:

- H.E. San Sy Than asked for an idea of Mr. Nishi concerning the EC2011 micro data provision.

Mr. Nishi gave his views, which are to provide two kinds of micro data:

1) Version 1 for the National Report No. 1 & 2.

He mentioned that the file is based on real responses filled-in the EC2011 Forms.

The NIS can provide it after March 13.

2) Version 2 for after the National Report No. 1 & 2

He mentioned that the file is the one which revised doubtful data manually from the view points of research and analysis.

The NIS will be able to provide the file possibly after this coming April.

4. Closing Session

At the end of the presentations and discussions, H. E. San Sy Than, Director General, NIS wrapped up the meeting as follows:

H. E. San Sy Than expressed his willingness to summarize the results obtained from the meeting and again emphasized the important role of JICA Project, which has been supporting NIS since phase I in 2005 in terms of capacity development of the statistical officers in central and provincial level through various training and practical work, such as statistical training, population census 2008, Establishment Listing 2009, Economic Census 2011, provision of PC and peripherals to Provincial Department of Planning Offices (PDPs), especially for the improvement of small area statistics at provincial level that could be a great contribution to decentralization currently being promoted by the Cambodian Government. And JICA Project Phase 3 still can contribute to the CIPS 2013 by means of technical and financial assistance. With JICA supports, NIS will have a huge amount of statistical data available in the future. Once again, H. E. San Sy Than, Director General, NIS expressed his sincere appreciation to the Government of Japan and JICA for their ceaseless support extended toward NIS for the past decade.

4. The fourth Joint Coordinating Committee Meeting

**The Fourth Joint Coordinating Committee (JCC) Meeting
of the Project on Improving Official Statistics in Cambodia Phase III**

at Meeting Room, 1st Floor, New Building,
National Institute of Statistics (NIS), Ministry of Planning
on Friday, December 14, 2012 at 03:00 – 06:00PM

Tentative Agenda

MC: **H.E. Mr. San Sy Than**, Director General, the National Institute of Statistics (NIS), Ministry of Planning (MOP)

- 3:00-3:05: Opening Address of **H.E. Mr. San Sy Than**, Director General of the NIS
- 3:05-3:10: Remarks of **Mr. Kuniaki Amatsu**, Head of Mid-term Evaluation Team, JICA
- 3:10-3:30: Remarks and Explanation of How to Evaluate by **Mr. Ryosuke Yoshida**, Member of Mid-term Evaluation Team, JICA
- 3:30-3:50: Report of the Outputs of JICA Project by **Ms. Rie Fusamae**, Member of Mid-term Evaluation Team, JICA
- 3:50-4:10: Report of the Results of Evaluation by **Ms. Rie Fusamae**, Member of Mid-term Evaluation Team, JICA
- 4:10-4:40: Conclusions and Suggestions by **Mid-term Evaluation Team**, JICA
- 4:40-5:00: Exchange opinions with **Mid-term Evaluation Team**, JICA
- 5:00-5:30: Break
- 5:30-5:40: Ceremony of Signing the Minutes
- 5:40-5:45: Closing Remarks of **H.E. Mr. San Sy Than**, Director General of the NIS

Minutes of the Fourth Meeting of Joint Coordinating Committee

Project on Improving Official Statistics in Cambodia, Phase 3

Date & Time: 3:00 PM on 14 December 2012

Venue: Conference Room at 1st Floor of the New Building, National Institute of Statistics (NIS), Ministry of Planning

Attendees:

National Institute of Statistics

H.E. Mr. San Sy Than, Director General
H.E. Mr. Hor Darith, Deputy Director General
H.E. Mr. Meng Kimhor, Deputy Director General
Mr. Khin Sokvorlak, Deputy Director General
Mr. They Kheam, Director of Demographic Statistics, Census, and Survey Department
M. Lim Penh, Director of Statistical Standard and Analysis Department
Mr. Saint Lundy, Director of Information, Communication and Technology Department
Mr. Sin Sereivuth, Deputy Director of Demographic Statistics, Census, and Survey Department
Mr. So Tonnere, Deputy Director of Economic Statistics Department
Mr. Lay Sophat, Deputy Director of Information, Communication and Technology Dpt.
Mr. Kim Net, Deputy Director of Social Statistics Department

Observer from Line Ministries:

Mr. Chhoeung Rachana, Staff of EMIS/DoP

JICA Side:

Mr. Kuniaki Amatsu, Head of Mid-term Review Team
Mr. Yoshiyuki Kobayshi, Mid-term Review Team member
Mr. Ryosuke Yoshida, Mid-term Review Team member
Ms. Rie Fusamae, Mid-term Review Consultant
Ms. Satoko Nadamoto, Project Formulation Advisor, JICA Cambodia Office
Mr. Fumihiko Nishi, Project Chief Advisor
Mr. Akihiko Ito, Project Team Leader
Prof. /Dr. /Mr. Nobuo Hirohata, JICA Expert
Mr. Akihito Yamauchi, JICA Expert
Mr. Joji Sawada, JICA Expert
Mr. Hiromi Mizuta, JICA Expert
Mr. Phok Phira, Program Officer, JICA Cambodia Office
Mr. Youk Seng An, Project Assistant
Mr. Reth Youn, Secretary Assistant

Agenda

12. Opening Address of **H. E. Mr. San Sy Than**, Director-General of NIS, Ministry of Planning
13. Remarks of **Mr. Kuniaki Amatsu**, Head of Mid-term Evaluation Team, JICA
14. Remarks and Explanation of How to Evaluate by **Mr. Ryosuke Yoshida**, Member of Mid-term Evaluation Team, JICA
15. Report of the Outputs of JICA Project by **Ms. Rie Fusamae**, Member of Mid-term Evaluation Team, JICA
16. Report of the Results of Evaluation by **Ms. Rie Fusamae**, Member of Mid-term Evaluation Team, JICA
17. Conclusions and Suggestions by **Mid-term Evaluation Team**, JICA
18. Exchange opinions with **Mid-term Evaluation Team**, JICA
19. Break
20. Ceremony of Signing the Minutes–
21. Closing Remarks of **H.E. Mr. San Sy Than**, Director General of NIS

1. Opening Session

1.1 H.E. Mr. San Sy Than, Director General of NIS:

At the beginning of the session, H.E. Mr. San Sy Than, Director General, NIS expressed his great pleasure to warmly welcome the mission team of mid-term review for the Project on Improving Official Statistics in Cambodia, Phase 3 under the financial and technical assistance from Government of Japan and Japan International Cooperation Agency (JICA). The JCC meeting is a regular meeting for reviewing the progress of the project and this 4th JCC meeting was very special meeting which was attended by the JICA mid-term review team. The JICA mid-term review team stayed in NIS more than one week, interviewed NIS counterparts and other concerned stakeholders, and prepared the Minutes of Mid-term Review.

1.2 Mr. Kuniaki Amatsu, Head of JICA Mid-term Review Team:

Mr. Kuniaki Amatsu, Head of the JICA mid-term review team, has expressed his sincere thanks for good cooperation and support from NIS counterparts and hard work of the review team that made the mid-term review successful. Through the reviewing activities, we found a very good progress and positive signal of achieving the project's objectives. However, there are still some challenges which need to overcome. Subsequently, Mr. Yoshida and Ms. Fusamae will make the presentations on the methodology of evaluation and evaluation results.

2. Presentation

2.1 Ryosuke Yoshida, Member of JICA Mid-term Evaluation Team

Mr. Ryosuke Yoshida briefly reported how to evaluate the project as follows:

- Step of reviewing: The team reviewed the related documents which were collected through questionnaires and interviewed Japanese experts, Cambodian C/Ps, and relevant stakeholders according to the JICA Project Evaluation Guidelines (June 2010). The review was conducted

as the following processes: review the inputs and activities; verify the outputs; review the project purposes and the overall goals; compare the outputs and schedule with the Project Design Matrix and the Plan of Operation; and verify the project implementation processes. The team also discussed and set the objectively verifiable indicators as specific numerical number targets and/or qualitative ones on the PDM. The team will also provide its recommendations on the measures to be taken for the remaining project period. The mid-term review applies general description of the Five Evaluation Criteria, relevance, effectiveness, efficiency, impact, and sustainability. The team conducted the review and the major evaluation questions are as follows:

- ① Are the project objectives consistent with the needs of the beneficiaries, the development policies of the recipient country, and Japanese assistance policies?
 - ② Is the project purpose expected to be achieved?
 - ③ Is the project implemented efficiently?
 - ④ Does the project have positive/negative impacts?
 - ⑤ Is the policy, organizational, and technical environment for sustainable project effects in place?
- Data collection methods and analysis: Both quantitative and qualitative data were collected and analyzed. Data collection methods used for review were: document review, key informant interview, group interview, and direct observation.
 - Constraints of the methods: Due to time constraints, information collection from Provincial Departments of Planning (PDPs) was limited to a minimal.

2.2 Ms. Rie Fusamae, Member of the Mid-term Evaluation Team, JICA

Ms Rie Fusamae presented briefly about the evaluation results as follows:

- Achievement of project outputs:
 - ① Output 1: NIS and provincial planning departments will be able to conduct planning and implementation of statistical surveys
 - ② Output 2: NIS will be able to conduct data processing
 - ③ Output 3: NIS will be able to conduct analysis
 - ④ Output 4: NIS will be able to conduct dissemination
 - ⑤ Output 5: NIS will be able to provide small area statistics
 - ⑥ Output 6: PDPs will be able to tabulate and scrutinize data (SAS sub-project)
 - ⑦ Output 7: NIS and PDPs will be able to keep institutional memory
 - ⑧ Output 8: NIS and PDPs will be able to conduct coordination
- Achievement of project purpose level: The performance of the project described in the above section means that the project is on the right track that NIS and PDPs will be able to implement the EC, the CIPS, the CIES, and other statistical activities. It is strongly expected that NIS will build its capacity furthermore by repeating similar exercises. More specifically, the CIPS, the CIES, and other statistical activities will be conducted in a more NIS-led manner. Output 8 of keeping the institutional memories is expected to sustain NIS's efforts of taking the lead of the process. At the provincial level, PDPs had had sufficient experience to implement the field

operations of censuses/surveys and even in the first ever economic census in the country, they performed expected responsibilities without serious problems. However, their capacity development in SAS, which they had never engaged in, is advancing in a slow pace requiring more support than initially anticipated from ROs and AROs.

- Achievement level of overall goal: Overall Goal is Statistical results provided by NIS and PDPs will be utilized for planning and implementation of policies, plans and strategies of line ministries and provincial governments. Statistical data provided by NIS has been used by many ministries. NIS data has been used to monitor the following major policies: National Strategic Development Plan (NSDP), MDGs monitoring, The ASEAN Framework. NIS carries out a census approximately every three year and also conducts a variety of surveys. The results of those surveys have been used mainly by government bodies. NIS stated that the results have been used in the national decentralization processes.

A positive signal is observed in this mid-term review mission. DG of NIS repeatedly emphasized on the significance of synergy between planning and statistic activities. The same message was confirmed in the meeting with Director General of Planning of the MoP. In this sense, the project has potential of achieving the overall goal.

1. Relevance: The project is highly relevant to development needs of Cambodia, development policy of the RGC as well as the cooperation policy of the Japanese Government. The RGC stresses in its National Strategic Development Plan (NSDP) the importance of statistics in implementing priority policies. The EC 2011 is regarded as important means to effectively implement the RGC's private sector development policy and as well as to attract domestic and foreign investment. Population surveys including the CIPS 2013 are also given priority in order to implement the National Population Policy. The objectives of the project are also consistent with those of the Statistics Master Plan (SMP) 2008-2015 and The Project is also in line with Japan's assistance policy towards Cambodia, which gives priority to administrative capacity development including improvement of capacity in statistics.
2. Effectiveness: The effectiveness of the project appears promising given the good prospects for the achievement of the project purpose in light of the progress made and the largely smooth implementation process. Technical advice and support from JICA experts, NIS staff has enhanced their capacity required at each stage of: census/survey planning and implementation; data processing; data analysis and preparation of analytical report; and dissemination of the results. Some of them have also been trained under the project to help PDP develop their skills to carry out some small area statistics and have been providing support for them.
PDPs are capable to implement various censuses/surveys given their past experience including the EC2011. However, as far as their capacity in SAS is concerned, the amount of support provided by ROs/AROs and the slow development of skills of PDP staff suggest that there will be much to be done in the second half of the project
3. Efficiency: The team identified no major issues that may hamper the efficient

implementation of the project. Inputs from both sides and the project activities implemented have been largely appropriate and timely in light of the implementation progress and the achievement made so far. Inputs from the Japanese side have been kept to a minimum such expert dispatching is in accordance with the work plan, procurement of equipment for PDP, counterpart training in Cambodia and Japan, personnel allocation, and the fund contribution by RGC to EC2011 is 20% of the cost. The team identified a few issues undermining the efficient implementation of the project to some extent: require more time than in the original work plan for data cleaning and preparation of analytical reports on the EC and the work of ROs/AROs involved in support for PDPs regarding SAS has also turned out to be more than expected, requiring many follow-up visits after training and technical assistance in their preparation of provincial SAS reports.

4. **Impact:** The project is on the right track towards the achievement of the Overall Goal in the future. The team also recognized several impacts of the project. The prospects for the achievement of the Overall Goal are very good in terms of the use of NIS's statistical information by line ministries. It has been used to monitor the NSDP, the MDGs and the ASEAN framework. The mid-term evaluation team also identified the cases that statistics provided by NIS were used outside Cambodia. Some research institutes such as Institute of Developing Economies, Japan and Institute of Economic Research, Hitotsubashi University, Japan used NIS's statistics in their research papers. The impact of the EC2011 can be very extensive. The results can be used for improvement of the quality of national accounts, which can contribute to the development of effective industrial policy. The comprehensive establishment directory and a sampling frame have been prepared from the EC and will be used for future economic surveys. In addition, the first attempt to provide SAS by district, commune and villages could have a significant impact on decentralization. There is another positive impact that should be noted. Following the technical exchange program between NIS and Sri Lanka Department of Census and Statistics, NIS received a request from them for sharing of the manuals and reference materials used in the implementation of the EC 2011. Sri Lanka is preparing for the first economic census planned for 2014
 5. **Sustainability:** Assessing sustainability is undertaken from (i) policy, (ii) organizational, (iii) financial and (iv) technical perspectives. In general, the project has made good efforts to ensure sustainability of the project's outputs and outcomes.
- **Conclusion:** The project has been implemented without significant delay and shown good performances despite some unexpected situations and slow progresses in carrying out some activities. NIS successfully completed the EC2011 which is the main factors for such achievement are attributable to NIS's accumulating experiences, good planning of each statistical survey, excellent coordination among concerned parties, and a great deal of support from JICA experts. As for the evaluation criteria, the project objectives remain to be highly relevant to the development needs of Cambodia and the RGC's development policy and also to

the assistance policy of the Japanese Government. The project is on the right track towards the achievement of the Project Purpose and therefore the effectiveness of the project can be considered high at this stage. Although the team identified a few issues in the implementation process of the project, the inputs executed and the project activities undertaken are largely appropriate facilitating the efficient implementation of the project. Especially, the statistical information was used widely to monitor the major indicators of government development policy. However, by tackling some institutional issues, the sustainable effects will be ensured.

- Recommendations:

- ① Ensuring strong ownership in the project management;
- ② Proactive action for allocating the budget for statistical activities;
- ③ Facilitation of coordination at the provincial level;
- ④ A support mechanism for PDPs;
- ⑤ Low salary of civil servants shall be noted. Incentive is important for officers engaging the censuses and surveys. However, this issue cannot be solved in a short-term. It is expected that the Cambodian government will raise the government personnel salary reform in the medium and long-term plan.

- Lessons learnt: Under the Statistics Law of Cambodia, three censuses, that is, a Population Census, an Economic Census, and an Agriculture Census are to be conducted once in ten years respectively. For the smooth implementation of each census, adequate interval is required between censuses. Since NIS conducted the Population Census in 2008 and the Economic Census in 2011, the Agriculture Census should have been conducted in 2014 in order to avoid overlapping between Economic Census works and Agriculture Census works. Unfortunately, however, since NIS decided to implement the Agriculture Census in 2013 and assigned some Economic Census C/Ps also to the Agriculture Census, they couldn't finish writing the reports of the Economic Census on schedule. Although the team understands that this is an exceptional case at NIS, it teaches a lesson that schedule adjustments between two censuses are very important for the smooth implementation of census activities.

2.3 Exchanging opinions with Mid-term Review Team

- **Mr. Kuniaki Amatsu:**

Through the presentation by the member of the review team, some actions are proposed to be taken by NIS for the smooth implementation of the project and the proposed actions will be reported again in the last JCC meeting of the final evaluation study. As for the sustainability for implementing the censuses and surveys, the budgetary issue is mainly concerned. That is, the Cambodian government does not have sufficient financial capacity to conduct the censuses and surveys by itself even though the Cambodian government has increased its budget contribution from one census to another census.

- **H.E. San Sy Than:**

This project is very important for monitoring and evaluating the National Strategic Development Plan (NSDP). NIS personnel gained lots of knowledge on data analysis that contributes greatly to

monitoring and evaluating various development policies of the Cambodian government. He appreciates very much for supporting not only the central office but also the provincial offices which are deeply related to the Cambodian government policies such the de-concentration and decentralization policy. This project also contributes to the computation of National Account that assists in shortening the gap between Cambodia and other ASEAN countries in term of statistics information.

3. Signing Minute and Closing Session

At the end of the session, H.E. Mr. San Sy Than, Director General of NIS, emphasized the important role of JICA Project which has been supporting NIS since 2005. In Phase I, it mainly supported the capacity building of statistical officers at central and provincial level through statistical training. In Phase II, it mainly supported the 2008 Population Census and the 2009 Establishment Listing. In Phase III, it has mainly been supporting the 2011 Economic Census. In addition, the small area statistics subproject, which provides PCs with peripherals and training for all of 24 Provincial Departments of Planning, could be a great contribution to the decentralization currently being promoted by the Cambodian Government.

Before closing the 4th Join Coordination Committee Meeting, Head of JICA Mid-term Review Team and Director General National Institute of Statistics signed on the Minute of Meetings of Mid-term Review for the Project on Improving Official Statistics in Cambodia Phase III. Then both sides expressed their commitment for assisting in achieving the successful completion of JICA Project.

5. The Fifth Joint Coordinating Committee Meeting

The Fifth Joint Coordinating Committee (JCC) Meeting of the Project on Improving Official Statistics in Cambodia Phase III

at Meeting Room, 1st Floor, Japan Building,
National Institute of Statistics (NIS), Ministry of Planning
on Friday, March 14, 2014 at 09:00 – 12:00AM

Tentative Agenda

- 09:00-09:10: Opening Address of **H.E. Ms. Hang Lina**,
Director-General of the NIS, Ministry of Planning
- 09:10-09:20: Opening Remarks of **Mr. Hiroshi Takeuchi**,
Senior Representative of JICA Cambodia Office
- 09:20-09:40: Brief Progress Report of the Project Phase III (2013FY)
of **Mr. Fumihiko Nishi**, Chief Advisor of the Project
- 09:40-09:50: Question and Answer
- 09:50-10:10: Detailed Progress Report of the Project Phase III (2013FY)
of **Mr. Akihiko Ito**, Leader of Non-Government Team of the Project
- 10:10-10:20: Question and Answer
- 10:20-10:40: Progress Report of the 2014 Inter-censal Economic Survey
of **Mr. Khin Sovorlak**, Deputy Director-General, the NIS
- 10:40-10:50: Question and Answer
- 10:50-11:10: Progress Report of the 2013 Inter-censal Population Survey
of **Mr. Meng Kimhor**, Deputy Director-General, the NIS
- 11:10-11:20: Question and Answer
- 11:20-11:40: Progress Report of Small Area Statistics in 2013FY
of **Mr. Kim Net**, Deputy Director, Department of Social Statistics, the NIS
- 11:40-11:50: Question and Answer
- 11:50-12:00: Closing Address of **H.E. Ms. Hang Lina**,
Director-General of the NIS, Ministry of Planning

Minutes on the Fifth Joint Coordinating Committee Meeting

The Project on Improving Official Statistics in Cambodia Phase-III

Date & Time: 09:00 to 12:00 noon, 14th March 2014

Venue: NIS Conference Room, 1st Floor of the new building, National Institute of Statistics, Ministry of Planning

Attendees:

National Institute of Statistics

H.E. Ms. Hang Lina, Director General, National Institute of Statistics
Mr. Meng Kimhor, Deputy Director General, National Institute of Statistics
Mr. Khin Sokvorlak, Deputy Director General, National Institute of Statistics
Mr. Mich Kanthul, Director of Economic Statistics Department
Mr. Kim Net, Deputy Director of Social Statistics Department
Mr. So Tonere, Deputy Director of Economic Statistics Department
Mr. Saint Lundy, Director of Information, Communication and Technology Department
Mr. Sin Sereivuth, Deputy Director of Demographic Statistics, and Census Department
Mr. So Tonnere, Deputy Director of Economic Statistics Department
Mr. Lay Sophat, Deputy Director of Information, Communication and Technology Dpt.

Observer from Line Ministries:

Mr. Pong Pitin, Deputy of Director of Department, MoEYS
Mr. MOUNG Visoth, Deputy Director of Department, CDC
Mr. Khim Fadane, Deputy Director of Department, MoP

JICA Side:

Mr. Hiroshi Takeuchi, Senior Representative of JICA Cambodia Office
Mr. Junsuke Suzuki, Project Formulation Advisor, JICA Cambodia Office
Mr. Fumihiko Nishi, Project Chief Advisor, JICA Expert
Dr. / Mr. Kiyomi Shirakawa, JICA Expert
Mr. Kyosuke Tomita, JICA Expert
Mr. Akihiko Ito, Project Team Leader, JICA Expert
Dr. / Ms. Yasuko Hayase, JICA Expert
Mr. Akihito Yamauchi, JICA Expert
Ms. Jun Konishi, JICA Expert
Mr. Hiromi Mizuta, JICA Expert
Ms. Tomoko Saito, JICA Expert
Mr. Phok Phira, Program Officer, JICA Cambodia Office
Mr. Youk Seng An, Project Assistant
Mr. Reth Youn, Secretary Assistant

Agenda

1. Opening Address by **H.E. Ms. Hang Lina**, Director-General of NIS, Ministry of Planning
2. Opening Remarks by **Mr. Hiroshi Takeuchi**, Senior Representative of JICA Cambodia Office
3. Brief Progress Report of the Project Phase III (2013FY) by **Mr. Fumihiko Nishi**, Chief Advisor of the Project
4. Question and Answer
5. Detailed Progress Report of the Project Phase III (2013FY) by **Mr. Akihiko Ito**, Leader of Non-Government Team of the Project
6. Question and Answer
7. Progress Report of the 2014 Inter-censal Economic Survey by **Mr. Khin Sovorlak**, Deputy Director-General, NIS
8. Question and Answer
9. Progress Report of the 2013 Inter-censal Population Survey by **Mr. Meng Kimhor**, Deputy Director-General, NIS
10. Question and Answer
11. Progress Report of Small Area Statistics in 2013FY by **Mr. Kim Net**, Deputy Director, Department of Social Statistics, NIS
12. Question and Answer
13. Closing Address by **H.E. Ms. Hang Lina**, Director-General, NIS, Ministry of Planning

1. Opening Session

1.1. H.E. Ms. Hang Lina, Director General of NIS:

At the beginning of the session, H.E. Ms. Hang Lina, Director General, NIS expressed her great pleasure to attend the 5th Joint Coordination Committee (JCC) Meeting and her appreciation to Senior Representative of JICA Cambodia Office and all participants in the meeting. She mentioned that the Project on Improving Official Statistics in Cambodia, Phase 3 has been financially and technically supported with the assistance of Government of Japan and Japan International Cooperation Agency (JICA). Last JCC meeting was held on 14 December 2012 when Mid-term Review Mission Team was here. JICA Project Phase 3 mainly supports 2011 Economic Census (EC2011), Cambodia Inter-censal Population Survey 2013 (CIPS2013), Cambodia Inter-censal Economic Survey 2014 (CIES2014), and Small Area Statistics (SAS). EC2011 was successfully conducted and released the results in March 2012. While CIPS2013 final results was released on 25 November 2013, in addition, debrief meeting on local activities of CIPS2013 was held in August 2013 in order to collect every comment from officers concerned. Director General also mentioned CIES2014 activities, such as pre-test which was done on October 2013 selecting the samples in Phnom Penh, Mapping work which was done on November 2013, and field enumeration of CIES2014 which is currently in progress and to be completed by 31 March 2014. The final results of CIES2014 are scheduled to be released in March 2015. In phase 3, JICA project provides full support for SAS, such as computer room renovation, provision of desktop computer, peripherals, printer, copier, as well as basic computer and data analysis training, to all 24 Provincial Departments of

Planning (PDPs). SAS is essential for capacity building of the provincial officers and statistical system as a whole. As the results, SAS training and analysis report writing have been completed in 9 PDPs in 2011, 6 PDPs in 2012, 5 PDPs in 2013, and the last 4 PDPs will be completed in 2014. As for the budget contribution for JICA project activities, Royal Government of Cambodia (RGC) contributes 10-15% of the total budget in addition to Japanese Counterpart Fund and JICA Project Fund.

With regard to CIES2014, Director General repeated that the field enumeration is to be completed on 31 March 2014 and the final results are scheduled to be released in March 2015 which is the last stage of the Project phase 3. However, it is quite difficult to prepare analysis reports of CIES2014 during the period of on-going project due to the fact that the project is to be terminated in March 2015. Therefore, NIS has submitted an official request to JICA for extension of the project in order to enable NIS to complete the data analysis report of CIES2014.

According to Statistical Law, NIS is obliged to conduct census every 10 years, however, it is difficult for RGC to bear all the costs for census which will cost about 15\$ millions. In this regard, we are planning to request Japanese Government for YEN Loan for population census 2018. Therefore, we requested Ministry of Planning (MoP) to submit an official request letter to Ministry of Economy and Finance (MEF) for the said YEN Loan.

1.2. Mr. Hiroshi Takeuchi, Senior Representative of JICA Cambodia Office

Mr. Hiroshi Takeuchi expressed his honor and pleasure to attend the 5th JCC Meeting in NIS/MoP. He remarked that CIES2014 field work was launched on 1 March 2014 together with a field demonstration with the presence of Minister of Planning, Chief Representative of JICA Cambodia Office, and Secretary of the Embassy of Japan. JICA has been providing a lot of supports for NIS since 2005 until March 2015 for General Population Census 2008, EC2011 and CIPS2013, which were conducted properly and completed successfully. Lastly, he emphasized that the project was contributing a lot for the improvement of official statistics in Cambodia.

2. Presentation

2.1. Mr. Fumihiko NISHI, JICA Project Chief Advisor

Mr. Fumihiko NISHI, JICA Project Chief Advisor, reported briefly on project activities for the period starting from April 2013 to March 2014. He recalled that the affirmed term of the Project Phase III was from 9 October 2010 up to 31 March 2015. In FY2013 (April 2013 to March 2014), 18 JICA Experts for 10 sectors were dispatched to NIS and 3 NIS officers were sent to Japan for the training mainly on data processing. As for the current activities, JICA Project in collaboration with NIS supported CIES2014 pretest, mapping work, training and field enumeration with 24 ROs, 72 AROs, 24 DPDPs, 24 Provincial Officers, 134 Supervisors, 553 enumerators, and 63 reserved staffs. The project keeps on providing full support for Small Area Statistics (SAS) activities on 5 provinces with PC room renovation, provision of PC and peripherals to PDP offices, training on basic computer to 3 SASPOs per province by 1 RO and 2 AROs and SAS data analysis supported by 1 RO and 1 ARO for each province.

The project also provides the technical cooperation on CIES2014, such as planning, form design, drafting manuals, census mapping, enumeration, and manual editing & coding, as well as data processing. CIES2014 field work was launched and demonstrated on March 1, 2014 with the presence of Minister of Planning, Chief Representative of JICA Cambodia Office, and other people concerned.

As for the CIPS2013 activities, the project provided technical cooperation for organizing debrief-meeting on local activities of CIPS2013 with 24 ROs, 96 AROs, and 24 Directors of Provincial Department of Planning, as well as on how to compile National Reports of both the preliminary results and the final results and also four analytical reports. The project also supported in organizing both the seminar of CIPS2013 preliminary results on 15 August 2013 and that of CIPS2013 final results on 25 November 2013. In addition, the project provided 500 copies of CIPS2013 National Report of preliminary results and 1,300 copies of that of final results. Statistical Atlas and other analytical reports are coming soon.

Mr. Nishi also reported about Japan Fund-Contribution for a provision of the Building in NIS with the 1st counterpart fund of the Non-Project Grant Aid with a sum of USD 0.9 million, the 2nd counterpart fund of the Non-Project Grant Aid with a sum of USD 2.0 million for 2008 Population Census and 2009 Nation-wide Establishment Listing under the project phase II, and the 3rd counterpart fund of the Non-Project Grant Aid with a sum of USD 2.2 million for EC2011 and CIES2014

2.2. Mr. Akihiko Ito, JICA Project Team Leader

Mr. Akihiko Ito, Project Team Leader, reported about the detailed progress report of the Project Phase III, concerning the second year starting from July 2013 to December 2013. He reported that the JICA team supported the implementation of trainings, seminars and meetings such as CIPS2013 preliminary results in August 2013 and final results in November 25, 2013, third, fourth, and fifth CIES2014 Technical Committee Meeting, and Mapping Work Training. JICA Team also implemented the technical assistance in term of production of data analysis report, census atlas, release and publication of census results, data cleaning, census/survey planning, and sampling work. JICA team supported the preparation for issuance of the report on SAS in 9 provinces, CIPS2013 Manual on Mapping Work, Supervisor and Enumerator's Manual, CIPS2013 preliminary and final report.

In terms of methods for project implementation, the project focuses on highly prioritized purpose that is statistical results provided by NIS and PPDs, which are to be utilized for planning and implementation of policies, plans, and strategies of line ministries and provincial governments. While the project purpose is to make NIS and PPDs attain and enhance their skill and ability to implement the Economic Census, the Inter-censal Population Survey, the Economic Statistics Survey, and other statistical activities. Mr. Ito also reported about the project outputs and indicators, project implementation framework in Cambodia, and project team functional diagram. As for the workflow chart of CIPS2013, he reported that JICA Expert Team produced a draft plan for the implementation of CIPS2013, which covers the period from July to December 2013, and held consultation on the

draft plan with JICA Governmental Team and revised the contents according to the opinions raised during the consultation. JICA Team also held a briefing of the English report for the Cambodian counterparts and, after consulting with the counterparts, sought the counterpart's approval. A briefing was also held for a local JICA office and donors such as the United Nations and SIDA, among other parties concerned. JICA Expert Team provided assistance for the smooth implementation of the work based on the complete set of table formats for data processing, data processing plan, and the specific work implementation manual. JICA Expert Team also provided assistance for the analysis and publication of the data processing results obtained from the survey questionnaires. It helped to compile analytical reports, and provided assistance for statistics map creation plan that described the objective of creating the map, method of map creation, and creation schedule, among other items, as well as provision of assistance for the actual creation of the statistics map, and JICA Expert Team compiled a report on the status of progress of the CIPS and other project work.

Regarding the CIES2014, JICA Expert Team provided instruction on the design of the survey questionnaires and household list, scope of the survey target, definition of business establishment, survey method including confirmation of the EAs, survey sheet entry method, survey related administrative matters, survey screening method, and procedures for submission of survey questionnaires and other materials. JICA Expert Team also provided financial assistance, such as survey related documents including survey questionnaires and manuals, as well as enumeration kits, such as carrying bag and stationaries for interview.

2.3. Mr. Khin Sovorlak, Deputy Director General, NIS

Mr. Khin Sovorlak, Deputy Director General in NIS, reported the progress of CIES2014 works. He firstly introduced CIES2014, which is to be conducted between two censuses 2011 and 2021, and after 3 years 2011 Economic Census implemented by NIS with technical cooperation from Government of Japan and JICA. The purpose of CIES2014 is to obtain basic economic information such as current situation of establishments and enterprises that will be used to update development indicators for utilization in monitoring Millennium Development Goals (MDGs), NSDP, the Rectangular Strategy, and other domestic and international policies, especially, to develop Cambodia and improve Cambodian life with prosperity and happiness as well as to provide information to the public concerning the changes in economic aspects within the past three years after 2011 EC. The preparation of CIES2014 has been conducted through various stages such as establishing technical committee, revising forms, developing the manuals and survey procedures, as well as sampling work. Coming to the activities, the CIES2014 pretest was done in 15 Village/EAs selected from Phnom Penh by 19 NIS counterparts involved. Then, mapping work conducted in 14 provinces selected 30 villages/EAs where boundaries changed, having new developed areas, and areas with more than 130 establishments with 30 cartographers.

For implementation of CIES2014 field enumeration, the assignment of staff was made; 7 SCOs, 24 ROs, 72 AROs, 48 DPDPs, 553 enumerators, and 134 supervisors. The survey materials were also provided to each province, such as forms, survey documents, leaflets, and enumerator's kits. The training for ROs/AROs was conducted for 5 days from 3-7 February 2014 and the training for

enumerators and supervisors was conducted for 5 days from 17-21 February 2014. The survey field operation started from village/EAs map confirmation, establishment listing, selecting 30 establishments for interview for EAs with more than 30 establishments, and then, enumeration started from 1st March 2014. As for large scale establishments with more than 50 engaged persons, it will be enumerated by AROs from 6-31 March 2014.

As of now, all provinces have submitted the filled-in form to NIS already and Mr. Khin Sovorlak also reported briefly about the number of establishment by province to the meeting as below:

Provinces	Target estab. EC 2011	Estab. Listed CIES 2014	Estab. enumerated CIES 2014	Large-size estab. EC2011	New Large-size estab. CIES 2014	Large-size estab. enumerated
01 Banteay Meanchey	1537		899	42	10	44
02 Battambang	1070	1002	559	62	8	30
03 Kampong Cham	786	765	470	82	3	34
04 Kampong Chhnang	468	598	384	22	12	30
05 Kampong Speu	298			36	20	16
06 Kampong Thom	520	474	329	21	0	9
07 Kampot	1012	1014	478	36	1	14
08 Kandal	906	787	579	142	6	30
09 Koh Kong	728			5		
10 Kratie	1237	944	505	8	3	11
11 Mondul Kiri	329	387	309	1	0	close
12 Phnom Penh	1591	1925	781	980		114
13 Preah Vihear	447	573	336	3	0	3
14 Prey Veng	521	525	352	28	2	14
15 Pursat	533	651	413	11	2	13
16 Ratanak Kiri	777	739	354	6	4	10
17 Siem Reap	366	390	316	119	3	60
18 Preah Sihanouk	2215	1621	756	54	10	20
19 Stung Treng	487	513	353	7		
20 Svay Rieng	322			48		20
21 Takeo	760	857	480	41	9	37
22 Otdar Meanchey	390	446	296	4	1	5
23 Kep	1467	1700	575	1	2	2
24 Pailin	629	407	407	8	1	8

2.4. Mr. Meng Kimhor, Deputy Director General, NIS

Mr. Meng Kimhor, Deputy Director General in NIS, reported the progress of CIPS2013 works briefly. He recalled CIPS2013 that was conducted five years after the 2008 Population Census funded by UNFPA, JICA and RGC. The objective of CIPS2013 is to update data for characteristics of the population in terms of population size and distribution, sex, age and marital status, fertility and mortality, migration status, disabled population, literacy and educational level, employment and unemployment, and housing and household amenities. CIPS2013 will provide fresh data that enables the calculation of reliable estimates and projections of population size and growth, fertility and mortality levels, volume of migration, and housing and household amenities. CIPS2013 preparation works are composed of Technical Committee meeting with donors such as UNFPA and JICA, updating village frame and selecting sample EAs, preparation of work plan, budget allocation, and design of questionnaire. There were 2 pretests conducted by NIS officers in 3 urban and 5 rural EAs. For field enumeration, 955 enumerators and 318 supervisors were selected and trained by 100 NIS officers at each PDP office. CIPS2013 survey field operation was conducted from 26 February to 2 March 2013 as follows: to update an EA map; to make a household list by using Form A; to select 30 households from one EA for interview by supervisor; and to enumerate these 30 selected households by using Form B.

After the field operation, the training on manual editing and coding were conducted at NIS. Data entry training was also done and CSPro was used as tabulation application to produce national and provincial tables. The CIPS2013 preliminary results were released on 15 August 2013, and the final results were released on 25 November 2013. The following five analytical reports have already been published: Report No. 1 “Estimates of Fertility and Mortality”; Report No. 2 “Spatial Distribution and Growth of Population”; Report No.3 “Sex and Age Structure”; Report No. 5 “Disability”; and Report No. 7 “Literacy and Educational Attainment”.

2.5. Mr. Kim Net, Deputy Director, Department of Social Statistics, NIS

Mr. Kim Net, Deputy Director, Department of Social Statistics in NIS, reported the progress of Small Area Statistics (SAS) subproject in 2013FY. He described the purpose of SAS. That is to bring up statistical staff of the PDPs so that each PDP could tabulate small area statistics such as commune or village level tables. In 2013FY, SAS subproject was conducted in the following five provinces: Preah Vihear; Otdar Meanchey; Phnom Penh; Kampong Speu; and Svay Rieng. Main activities in 2013FY were as follows:

- To renovate computer rooms in 5 PDPs and equip and install computers and necessary peripherals, such as 2 sets of desktop computers with UPS and licensed software (window, office, acrobat, antivirus), 2 sets of desk and chairs, 1 color printer, 1 photocopier, 1 external hard drive (500GB), 2 Flash drive (4 GB), 1 LCDs, and 2 internet USB modem, 1 whiteboard, and 1 LCD screen.
- To conduct training for Regional Officers (RO) and Assistance Regional Officers (ARO) by SCOs... (Note: Training for 6 SCOs by JICA Experts had ever been conducted in May 2011 as “The first & the last time training”. The SCOs who have received the said “The first & the last

- time training” will implement following RO & ARO training in each fiscal year, on how to use Sample Calculation System (SCS), how to produce statistical map, basic excel, and internet usages, without receiving SCO training anymore in each fiscal year.)
- In the first stage: 5 ROs and 15 AROs were trained by SCOs from 6 to 9 August 2013 at NIS. After the training, one RO and three AROs were dispatched and assigned to their jurisdictional province to provide training for SASPOs. The training curriculum focuses on tabulation using SCS, statistical map producing, usage of Internet, and basic excel calculation. As for second stage, 5 ROs and 10 AROs were trained by SCOs from 8 to 11 October 2013 at NIS. The training curriculum focuses on SAS report analysis and compilation. One RO and two AROs were dispatched and assigned to their jurisdictional province to provide training for SASPOs. As a result, 15 SASPOs were trained by RO and AROs from 19 to 22 August 2013 on SCS, Tabulation, Basic Excel, Statistical Map, and Usage of Internet in the first stage, and training on SAS Report Analysis and Compilation from 21 to 24 October 2013 in the second stage.
 - After training, SASPOs executed the work for writing report for the duration of 3 months using the micro data of General Population Census 2008 and National Wide Establishment Listing 2009. As the results, 3 among 5 provinces submitted their reports to RO/AROs for checking. SCOs have finalized the said 3 reports, while the other 2 reports are, so far, not yet submitted.
 - SAS reports are scheduled to be published and disseminated upon having been finalized by SCOs. 20 copies of each report will be printed and disseminated to PDPs and line department of the respective provinces in May 2014.

3. Discussion:

At the opening of discussion, Mr. Ito, Project Team Leader, asked about setting-up of a new department, so called Sub-national Statistics. Director General announced that it has been officially established, however, she is currently mobilizing the staff to work in this new department, because, so far, only Chief and Vice-Chief are there in a new department.

With regard to the distributed CIPS2013 Report 7 on Education, Mr. Pong Pitin, the representative from MoEYS, asked if population attending school age 6-14 in Phnom Penh is similar to other provinces as well as Kandal province, which is higher than others. He is concerned with these different figures; especially the figure should not be much different among Ministry of Planning, Ministry of Education, and NGOs. In response to the question made by Mr. Pong Pitin, Dr. Hayase, JICA Expert answered that the decrease of enrollment is due to a big shift away from some areas to another, such as from Kandal province to Phnom Penh in 2011. Mr. Ito, Project Team Leader added that in EC2011, we found similarity in education due to boundary changes and differences are not only in Cambodia but also found in Japan between administrative and survey/census data. Mr. Nishi, Project Chief Advisor, also commented that some newly added areas in Phnom Penh are still very rural, for example, the areas near Ly Yong Phat bridge.

Director General added that the differences could be generated due to survey method (De Facto). Reference Date of CIPS2013 is as of 3 March 2013, Definition in CIPS2013 asks the questions

to Households, and the error sampling standards are agreed among NIS and international consults from JICA and UNFPA.

4. Closing:

At the end of discussion, Director General of NIS summarized the meeting saying that the JICA-support enabled NIS to conduct EC2011, CIPS2013, CIES2014, and SAS activities in the 24 provinces. In addition, various publications in census and survey results are supported by JICA Project. With regard to further JICA-Technical Cooperation, DG expressed her opinion that she understands the reality that it's hard to expect JICA-support without financial provision of NIS any more than 10 years. So, NIS/MoP is planning to submit official request letter to Ministry of Economy and Finance in order to apply for Japanese Yen loan for Population Census 2018 and EC2021. NIS is also trying to lobby other donors such as KOICA for their support.

6. The Sixth Joint Coordinating Committee Meeting

The Sixth Joint Coordinating Committee (JCC) Meeting of the Project on Improving Official Statistics in Cambodia Phase III

at the Meeting Room, 1st Floor, Japan Building,
National Institute of Statistics (NIS), Ministry of Planning
on Friday, September 12, 2014 at 02:00 – 05:00PM

Tentative Agenda

MC: **H.E. Ms. Hang Lina**, Director General,
the National Institute of Statistics (NIS), Ministry of Planning (MOP)

- 2:00-2:05: Opening Address of **H.E. Ms. Hang Lina**, Director General of the NIS
- 2:05-2:10: Remarks of **Mr. Ryuichi Tomizawa**, Head of the Terminal Evaluation Team, JICA HQ
- 2:10-2:30: Remarks and Explanation of How to Evaluate by **Mr. Sho Takatsuki**, Member of the Terminal Evaluation Team, JICA HQ
- 2:30-2:50: Report of the Outputs of JICA Project by **Dr. Kumiko Shuto (Ms.)**, Member of the Terminal Evaluation Team, JICA HQ
- 2:50-3:10: Report of the Results of Evaluation by **Dr. Kumiko Shuto (Ms.)**, Member of the Terminal Evaluation Team, JICA HQ
- 3:10-3:40: Conclusions and Suggestions by **the Terminal Evaluation Team**, JICA HQ
- 3:40-4:00: Exchange opinions with **the Terminal Evaluation Team**, JICA HQ
- 4:00-4:30: Break
- 4:30-4:40: Ceremony of Signing the Minutes
- 4:40-4:45: Closing Remarks of **H.E. Ms. Hang Lina**, Director General of the NIS

Minutes on The Sixth Joint Coordinating Committee Meeting

Date & Time: 12 September 2014, 14:00 to 17:00

Venue: NIS Conference Room, 1st Floor of the new building, National Institute of Statistics, Ministry of Planning

Attendees:

National Institute of Statistics

H.E. Ms. Hang Lina, Director General, National Institute of Statistics, MoP
Mr. Heang Kanol, Deputy Director General, National Institute of Statistics, MoP
Mr. Meng Kimhor, Deputy Director General, National Institute of Statistics, MoP
Mr. Khin Sokvorlak, Deputy Director General, National Institute of Statistics, MoP
Mr. Chhay Satia, Deputy Director General, National Institute of Statistics, MoP
Mr. Ouk Chay Panhara, Deputy Director General, National Institute of Statistics, MoP
Mr. Chhuon Sothy, Director of Statistics Policy and Cooperation Department, MoP
Mr. Kim Net, Deputy Director of Social Statistics Department, MoP
Mr. Saint Lundy, Director of Information, Communication and Technology Department, MoP

Observer from Line Ministries:

Mr. Muong Naroath, Officer, MoEYS
Mr. Va Sophal, Deputy Director General of General Directorate of Planning, MoP

JICA Side:

Mr. Ryuichi Tomizawa, Head of the Terminal Evaluation Team, JICA HQ
Mr. Sho Takatsuki, Member of Terminal Evaluation Team, JICA HQ
Ms. Takako Kanamuro, Member of Terminal Evaluation Team, JICA HQ
Dr. Kumiko Shuto, Member of Terminal Evaluation Team, JICA HQ
Mr. Hiroshi Takeuchi, Senior Representative of JICA Cambodia Office
Mr. Eiichiro Hayashi, Project Formulation Advisor, JICA Cambodia Office
Mr. Fumihiko Nishi, Project Chief Advisor, JICA Expert
Mr. Akihiko Ito, Project Team Leader, JICA Expert
Dr. Nobuo Hirohata, JICA Expert
Mr. Jooji Sawada, JICA Expert
Mr. Akihito Yamauchi, JICA Expert
Mr. Hiromi Mizuta, JICA Expert
Mr. Hisatsugo Furukawa, JICA Expert
Mr. Koh Sakano, JICA Expert
Mr. Phok Phira, Program Officer, JICA Cambodia Office
Mr. Youk Seng An, Project Assistant
Mr. Reth Youn, Secretary Assistant

Agenda

1. Opening Address by **H.E. Ms. Hang Lina**, Director-General of the NIS, Ministry of Planning
2. Opening Remarks by **Mr. Ryuichi Tomizawa**, Head of Terminal Evaluation Team, JICA HQ
3. Remarks and Explanation on How to Evaluate by **Dr. Kumiko Shuto**, Member of the Terminal Evaluation Team, JICA HQ
4. Report of the Outputs of JICA Project by **Dr. Kumiko Shuto**, Member of Terminal Evaluation Team, JICA HQ
5. Report of the Results of Evaluation by **Mr. Sho Takatsuki**, Member of Terminal Evaluation Team, JICA HQ
6. Conclusions, Recommendations and Lessons Learned by **Mr. Sho Takatsuki**, Member of Terminal Evaluation Team, JICA HQ
7. Discussion
8. Closing Remarks by **H.E. Ms. Hang Lina**, Director General of NIS, and Signing the Minutes

1. Opening Session

1.1 H.E. Ms. Hang Lina, Director General of NIS:

H.E. Ms. Hang Lina, Director General, NIS, expressed her appreciation to all participants in the meeting; especially to every member of JICA Mission who has been working hard to accomplish terminal evaluation for JICA Project Phase 3. She emphasized that today was the final day of the terminal evaluation work, consequently the findings of the terminal evaluation would be presented in the meeting by the mission and the final conclusion derived from the said findings would be specified in the Signing-Minute of the Joint Evaluation Report (JER). She continued her remarks that she already saw substantive results of the evaluation from the JER and agreed with it in general. She, as DG of NIS, affirmed to try her very best to solve existing issues. At the time of closing, she invited Mr. Tomizawa, head of the JICA Evaluation Team of JICA HQ for his welcome remarks.

1.2 Mr. Ryuichi Tomizawa, Head of the Terminal Evaluation Team, JICA HQ

Mr. Ryuichi Tomizawa, Head of the Terminal Evaluation Team, JICA HQ, delivered his remarks and his appreciation for all the efforts and cooperation made by NIS and the project. He continued his remarks saying “We have an honor to have this opportunity to make a presentation in detail concerning the terminal evaluation results as well as our evaluation methods” he said. He affirmed that in general, the overall purposes of the project had been achieved with high level except some small challenges on NIS capacity in analysis and PDP capacity on Small Areas Statistics (SAS). He said as looking back his past “At the time of my first visit at NIS that was in May 2003, I participated in the preparation mission to formulate this project and we interviewed with H.E. San Sy Than, H.E. Hang Lina, and other NIS Officers to find out statistics capacity of NIS, such as computer skills, and so on. After 9 years since then, I am now really impressed with your facilitation and great achievements, because you successfully conducted General Population Census 2008 (PC2008), Economic Census 2011 (EC2011), Cambodia Inter-censal Population Survey 2013 (CIPS2013), and Cambodia Inter-censal Economic Survey 2014 (CIES2014). As all of you recognized, official

statistics is very important for preparation of development plan for both central and sub-national level and to keep on monitoring the progress of the development of the country. In this sense, I think NIS has enough capacity to provide official statistics to the central government. On the other hand, donors, NGOs, private sectors, and academic institutions are the user of the statistics, and their demands of official statistics data is currently increasing. Therefore, I hope that NIS will continue its efforts to disseminate the data to these users through website and/or CD-Rom in users' friendly manner. Through 9 years experiences under JICA Technical Cooperation, the relationship between NIS and JICA has become precious property for both sides in the field of capacity development in official statistics. I hope that we can utilize and apply these experiences to any cooperation program in other countries by means of technical exchange or in the future statistical cooperation. In kick-off meeting, I already explained the importance of the ownership and the partnership, which are well known as an important principle under JICA Technical Cooperation. I am anticipating the strong leadership of H.E. Mrs. Hang Lina and ownership of NIS in continuous capacity development in the field of official statistics and also hoping that the partnership among NIS, JICA, and Statistical Bureau of Japan could last for a long time”.

2. Presentation

2.1 Dr. Kumiko Shuto, Member of Terminal Evaluation Team, JICA HQ

Dr. Kumiko Shuto, Member of Terminal Evaluation Team, JICA HQ expressed her appreciation for the cooperation made by NIS and the project toward the terminal evaluation mission and her wishes that the findings could be useful for improving official statistics. Prior to the presentation of the findings, she introduced the measures as to how the team carried out the evaluation specifying the contents of the Project Design Matrix (PDM); that are Overall Goal, Project Purpose, Outputs and Activities. She firstly reported the results of the 8 items of Achievements of Outputs based on the findings of the evaluation, as follows

- Output 1 [Planning and implementation of statistical surveys] /NIS' and PDPs' capacity to plan and implement EC 2011, CIPS 2013 and CIES 2014. This output has been achieved. NIS and PDPs are now able to conduct both population and economic censuses/surveys building on their experience of successfully completing EC 2011, CIPS 2013 and CIES 2014. In particular, considering the fact that EC 2011 was the first census of this kind ever undertaken in Cambodia, smooth planning and implementation of this census as well as other inter-censal surveys should be regarded as a significant achievement
- Output 2 [Data processing] /NIS' capacity to process data for EC 2011, CIPS 2013 and CIES 2014. This output has been achieved. NIS processed data and produced statistical tables for EC 2011, CIPS 2013 and CIES 2014. In the process, NIS staff has learned how to use statistical software including SCS and CSPro. They are now able to operate these programs without much help from the Experts. Data cleaning for the economic census and survey, however, took much longer time than anticipated due to the heterogeneous characteristics of establishments, the inapplicability of computer error imputation, the C/P's unfamiliarity with economic data.

- Output 3 [Analysis] /NIS' capacity to analyze EC 2011, CIPS 2013 and CIES 2014. This output has been achieved only to some degree and further assistance is necessary. NIS' analytical capacity has been improved by going through the process of analyzing data and writing reports for EC 2011 and CIPS 2013. NIS is now able to analyze data and produce reports on its own for population censuses and surveys. On the other hand, analyzing data and producing reports for economic censuses and surveys still need much help from the Experts since EC 2011 was the first economic census ever conducted in Cambodia and NIS still needs practice and assistance to conduct analytical work on economic data..
- Output 4 [Dissemination] /NIS' and PDPs' capacity to disseminate results of EC 2011, CIPS 2013 and CIES 2014. This output has been achieved with some minor issues regarding the use of the Websites. NIS has established procedures to disseminate statistical results through means such as ceremonies and seminars. It also successfully published a large number of reports on EC 2011 and CIPS 2013. Posting publications on the Websites, however, needs to be conducted more actively since only one report on EC 2011 is currently posted on NIS' Websites.
- Output 5 [Small Area Statistics (SAS)] /NIS' capacity to conduct SAS. This output has been achieved. Regional Officers (ROs) and Assistant Regional Officers (AROs) of NIS were trained and successfully learned SAS. They are now able to teach SAS to PDPs.
- Output 6 [Trainings of provincial planning departments (PDPs)] /NIS' capacity to conduct SAS. This output has been achieved to some degree. Although necessary equipment/machines and all the planned training programs were given to PDPs throughout the country, PDPs' capacity to work on SAS is still limited since they had very little training prior to the Project's SAS training. NIS's newly-established Sub-national Statistics Department has an important role to play in strengthening PDPs' capacity from next year, building on the Project's experience on SAS.
- Output 7 [Institutional Memory] /NIS' and PDPs' capacity to keep institutional memory (knowledge management). This output has been achieved with some minor issues regarding document management. Important operating procedures were recorded and a variety of manuals and instructions were produced particularly during EC 2011. Technical/knowledge transfer among staff members are now easier than before. However, softcopies of the important documents are not so well managed since file sharing systems and procedures are not fully established among the staff. There is also NIS' overreliance on development partners for managing softcopies
- Output 8 [Coordination] /NIS' and PDPs' capacity to conduct coordination. This output has been achieved. Various coordination mechanisms both at the central and provincial levels are functioning well without major issues.

2.2 Mr. Sho Takatsuki, Member of Terminal Evaluation Team, JICA HQ

Mr. Sho Takatsuki, member of Terminal Evaluation Team, JICA HQ briefly reported and summarized the results of 5 evaluation criteria as follows.

- **Relevance** is very high as the project is well aligned with Cambodian development policies, Statistical law, and Statistics Master Plan as well as Japan's aid policies to Cambodia emphasizing on good governance. The project is well responding to the needs of the target groups in terms of capacity development of NIS and PDPs with the appropriate approaches as well as consistency and continuity of Phase 1, 2, and 3.
- **Effectiveness** is relatively high since the project can be expected to be achieved because of the major achievement such as successful implementation of the first EC2011. However, the further improvement is needed on NIS analytical capacity on economic data and PDPs' capacity for SAS implementation
- **Efficiency** is relatively high since inputs from both Cambodian and Japan were provided sufficiently as planned. Efficient and effective dispatch of short term experts specialized in the specific areas and the collaboration with UNFPA for CIPS2013 have been well implemented. However, data cleaning of EC2011 and CIES2014 took much longer time than anticipated, and the Agricultural Census took away much of counterparts' time.
- **Impact** is relatively high. The attainment of the Overall Goal is realistic since NIS and PDPs have acquired skills and knowledge to conduct official statistics. The greatest remaining challenge is resource mobilization to carry out official statistical censuses/surveys planned in the Statistical Master Plan. Strengthening of NIS' capacity to analyze economic data and PDPs' capacity in SAS will also influence the level of attainment of the Overall Goal. Some positive impacts are being observed already: the statistical results disseminated by the Project are widely referred to and utilized for policy making and various research activities in and outside Cambodia
- **Sustainability** is fair to relatively high. However, the sustainability is divided into 3 categories as follows;
 - (a) Policy and institutional sustainability: It is high since the Government of Cambodia has been committed to the implementation of the Statistical Master Plan and Statistics Law. This policy commitment is well reflected to NIS' institutional arrangements and the new department, Sub-national Statistics Department, specializing in supporting PDPs has been established. Although it was pointed during the Mid-term Review that NIS' project ownership was not so sufficient, this situation has been improved to a large extent when NIS took an initiative to plan and carry out CIES 2014. Therefore, it is fair to say that policy and institutional sustainability is regarded high
 - (b) Financial sustainability: It needs to be improved so that all the statistical activities listed in the Statistical Master Plan will be appropriately undertaken. So far, at this moment, financial sustainability is of the biggest concern. NIS had been making efforts to increase the share of cost-bearing over the years both for population economic censuses/surveys. As a result, in population census, NIS shared 10% of the total cost and 13% in CIPS2013. As for EC2011, NIS shared 20% of the total cost and 23% for CIES2014. In terms of financial sustainability at the provincial level, operation and maintenance costs for computers, photocopiers and other equipment for SAS and other statistical work need to be secured immediately because PDPs

are still financially relying on the Project for the costs such as repairing, updating software, and purchasing tonner for photocopiers, etc. at the moment.

(c) Technical sustainability: The technical capacity of NIS and PDPs has been undoubtedly improved and operation manuals and necessary tools for data gathering and processing were also developed. The caveat is that sharing information and managing latest documents should be done more as an institution rather than on a personal basis. Overall, with raised capacity, NIS and PDPs will be able to continue their statistical work on their own. The remaining challenges are the capacity of NIS in analyzing economic data and technical capacity of PDPs in SAS implementation. It will be further enhanced if NIS' analytical capacity of economic data and PDPs' skills to conduct SAS are improved.

Conclusion

Mr. Sho Takatsuki concluded the results of the evaluation as follows;

Since Phase 1 of the Project, JICA's continuous support to NIS has been contributing to the improved capacity of NIS staff and line ministries. In this 3rd phase, the Project is actively engaged in developing capacity of not only NIS but also PDPs. It is surmised that the Project will achieve its Project Purpose to a relatively high degree by the end of the planned project period. The level of achievement of the Project Purpose will be higher if more efforts to produce Output 3 (NIS' analytical capacity) and 6 (PDPs' capacity on SAS) are made.

Recommendations

Mr. Sho Takatsuki provided recommendations to both the Project and NIS. He firstly made a recommendation to the Project and secondly to NIS as follows.

Recommendation to the Project

(a) Improving NIS' analytical capacity on economic data: It has been revealed that although NIS' capacity to plan and implement official statistical activities has been improved satisfactorily, its analytical capacity, especially the capacity to conduct economic analysis, is still insufficient. It is recommended that NIS officers work closely with the Experts to produce analytical reports on CIES 2014 for the purpose of improving their analytical capacity in the remaining project period. An option of extending the project period to achieve that goal needs to be sought and discussed with JICA.

(b) Disseminating statistical information widely on the Websites: Posting statistical reports on NIS' Websites is rather limited. Posting the statistical reports produced by the Project on the Websites will facilitate wider and more efficient dissemination of the statistical information. It is recommended that the Project and NIS' relevant departments work together to post as many reports, including the SAS reports written in Khmer, as possible on NIS' Websites during the remaining project period. Where uploading of publications are difficult, alternative means of providing data such as offering data on a CD-ROM and actively introducing Data User Service Center of NIS to potential users need to be promoted so that their easy access to statistical results

is facilitated. The work procedure to post statistical information on the Websites should also be established by clarifying the roles and responsibilities of concerned departments within NIS.

Recommendation to NIS

(a) Securing adequate financial resources for future statistical activities: In coming years, there are official statistical activities such as CIES2017 and the 2018 Population Census scheduled and planned in the Statistical Master Plan and relevant government decrees. NIS should formulate a budget plan to secure adequate financial resources to conduct these activities. NIS should avidly advocate the importance of official statistics in policy-making and monitoring to concerned ministries such as Ministry of Planning and Ministry of Economy and Finance as well as to development partners.

(b) Strengthening support to PDPs by the Ministry of Planning/ NIS: Although the Project embarked upon capacity building of PDPs through SAS training, NIS' effort to strengthen PDPs is still in its infancy. The Sub-national Statistics Department should formulate its action plan to technically support PDPs, building on the Project's SAS experiences. The Ministry of Planning/ NIS should also assist PDPs in securing funds for operation and maintenance of machines and equipment provided by the Project.

(c) Information management for sustaining transferred skills and knowledge: Although various operation manuals were produced and important activities/data was recorded in a written form during the project period, sharing information tends to be done on a personal basis. There is also NIS' reliance on development partners for managing softcopies of some important documents. NIS, as an institution, should therefore effectively manage documents, particularly electronic copies of manuals and instructions, and share them widely within NIS by improving the current data sharing system and procedure. Sharing information and subsequent transfer of technical skills and knowledge to those, for example, who are new to statistical activities should be efficiently undertaken by using documents produced by the Project.

- (d) Scheduling of major censuses: The Agricultural Census was implemented in 2013 which was a year earlier than scheduled. This schedule change influenced negatively on smooth implementation of other statistical activities. It is recommended that a census be implemented at an appropriate interval in order to avoid such a challenging situation. For example, the next Agricultural Census, therefore, should be conducted three years after the next Economic Census

Lessons Learned:

Mr. Sho Takatsuki summarized the lessons learned as follows.

(a) The challenges on Economic censuses and surveys: It has become apparent that, unlike population censuses/surveys, data cleaning for economic censuses/surveys requires a substantial amount of time due to reasons such as heterogeneous characteristics of establishments and industries, staff's unfamiliarity of dealing with economic data, and inapplicability of computer error imputation. The Project faced this problem when conducting EC 2011 and CIES 2014 and

some planned activities were delayed as a consequence. Moreover, due to time constraints caused by this problem, not enough time was secured for building C/P's capacity in data analysis.

Therefore, when a project includes a component of economic surveys/censuses which the implementing institutions have little experience of, a sufficient amount of time should be allocated for data cleaning. It is also advisable that the project offer a sufficient amount of training on accounting and business activities so that C/P's basic knowledge on economics will increase.

When formulating a new project which assists economic surveys and censuses, it is recommended that a preparatory study to assess basic knowledge on accounting and business activities of C/P and other census/survey implementers be conducted beforehand.

(b) Importance of the coordination with other major censuses: The sudden implementation of the Agricultural Census in 2013 gave negative impact on the project activities in that it prevented the C/P from spending sufficient amount of time for the project activities, particularly, the analysis of EC 2011 data. It has become clear that scheduling and coordination with other major statistical censuses the C/P institutions are responsible for is an important factor for smooth implementation of planned statistical activities under the Project.

(c) Importance of the continuous and long term support to official statistics activities: When providing technical assistance to long-term government activities such as censuses which tend to have an interval of ten years or so between activities, continuous guidance through on-the-job (OJT) training, rather than one-off technical support, is necessary for the skills and knowledge to take root. This Project is a continuous support from Phase 1 and 2, which aimed at developing skills and techniques of the C/P through assisting key statistical activities. Therefore, the design of the Project is considered to be appropriate for this type of assistance

(d) Securing funds for census implementation: For the government of developing countries, financing large-scale statistical activities such as population censuses and economic censuses on their own is often very difficult. Coordinating with development partners and collaborating with various types of international assistance is critical. In this respect, this Project appropriately collaborated with UNFPA and utilized Japan's Counterpart Fund for mobilizing resources for survey implementation.

Although the share of the cost borne by the Government of Cambodia has increased in recent years, the shared amount is still not enough to cover all the necessary cost. It is reaffirmed that when providing assistance in the field of official statistics, measures to secure sufficient funds for statistical activities after the project period need to be investigated carefully and proactively.

3. Discussion:

- **Mr. Hiroshi Takeuchi**, Senior Representative of JICA Cambodia Office, made his comment on statistical data that NIS should make further efforts in order to produce more statistical data since many development-partners, such as World Bank, UNFPA, etc., attended the last releasing ceremony are very much interested in data of EC2011.
- **Mr. Eiichiro Hayashi**, Project Formulation Advisor, JICA Cambodia Office made his comment on website-data that it's quite efficient and effective to utilize website as a measure of

dissemination because many data are being used by donors, private sectors and researchers who are familiar with website on the internet.

- **H.E. Hang Lina**, Director General of NIS, responded to the comment made by Mr. Takeuchi. She said that it's the duty of NIS to produce statistical data as stipulated in the Statistical Law. However, NIS still needs support from JICA. She emphasized that she was really hoping MEF would increase the budget related to the statistical work since MEF had firmly recognized the importance of statistical data of EC2011.
- **Mr. Meng Kimhor**, Deputy Director General of NIS, made his comment on recommendation concerning the Sub-national Statistics Department that it should formulate the action plan for technical-supports for PDPs. In this viewpoint, he said he would try his very best to prepare action plan, but the technical capacity of the said Department was still limited to give technical support to PDPs.
- **Mr. Tomizawa**, Head of Evaluation Mission Team of JICA HQ, made his comment on NIS capacity, saying that it has obviously developed and achieved at certain level so that considerable technical support from JICA could be the technical exchange program with other countries.
- **Mr. Oukchhay Panhara**, Deputy Director General of NIS, made his comment on dissemination of statistical data, saying that he already has a team to disseminate the data on website so that he is encouraging each department to provide the data/articles that they are willing to disseminate through website. He emphasized that he could post such data/articles on the website by the said team so that regardless of internal or external, all users could refer to such articles upon having accessed to our website. He again emphasized that, at least, one staff from each department should be assigned to the team for a smooth operation.

4. Closing:

H.E. Ms. Hang Lina, Director General, expressed her great appreciation to the Government of Japan and JICA for a long term support extended to NIS with her wishes for a further support as an extension of the project. She affirmed that NIS would make every effort to secure fund for next coming censuses and surveys and announced that she fully agreed with the evaluation findings. Owing to the great support made by the Government of Japan and JICA, NIS could successfully conduct General Population Census 2008, first ever EC2011, CIPS2013, CIES2014 and SAS subproject. She again expressed her gratitude to all the participants in the meeting, especially to the Evaluation Mission Team and JICA Experts, and then invited all the participants to a signing ceremony for endorsement of the Minute of the Joint Evaluation Report, which is to be signed by Director General of NIS, H.E. Ms. Hang Lina and Head of Terminal Evaluation Team, Mr. Ryuichi Tomizawa. Finally, the Minutes was officially signed by both parties.

7. The Seventh Joint Coordinating Committee Meeting

The Seventh Joint Coordinating Committee (JCC) Meeting of the Project on Improving Official Statistics in Cambodia Phase III

at Meeting Room, 1st Floor, Japan Building,
National Institute of Statistics (NIS), Ministry of Planning
on Tuesday, February 17, 2015 at 09:00 – 12:00AM

Tentative Agenda

- 09:00-09:10: Opening Address of **H.E. Ms. Hang Lina**,
Director-General of the NIS, Ministry of Planning
- 09:10-09:20: Opening Remarks of **Mr. Takeharu Kojima**,
Senior Representative of JICA Cambodia Office
- 09:20-09:35: Brief Progress Report of the Project Phase III (2014FY)
of **Mr. Fumihiko Nishi**, Chief Advisor of the Project
- 09:35-09:40: Question and Answer
- 09:40-09:55: Detailed Progress Report of the Project Phase III (2014FY)
of **Mr. Akihiko Ito**, Leader of Non-Government Team of the Project
- 09:55-10:00: Question and Answer
- 10:00-10:15: Progress Report of the 2014 Inter-censal Economic Survey
of **Mr. Khin Sovorlak**, Deputy Director-General, the NIS
- 10:15-10:20: Question and Answer
- 10:20-10:35: Progress Report of Small Area Statistics in 2014FY
of **Mr. Kim Net**, Deputy Director, Department of Social Statistics, the NIS
- 10:35-10:40: Question and Answer
- 10:40-11:10: Explanation of the Record of Discussions for the Project Extension
of **Mr. Eiichiro Hayashi**, Project Formulation Officer, JICA Cambodia Office
- 11:10-11:50: Question and Answer
- 11:50-12:00: Closing Address of **H.E. Ms. Hang Lina**,
Director-General of the NIS, Ministry of Planning

MINUTES
on
The Seventh Joint Coordinating Committee (JCC) Meeting

Date & Time: Tuesday, 17th February 2015 at 09:00 – 12:00AM

Venue: NIS Conference Room, 1st Floor Japan Building, National Institute of Statistics, Ministry of Planning

Attendees:

National Institute of Statistics

H.E. Ms. Hang Lina, Director General, National Institute of Statistics
Mr. Chhay Satia, Deputy Director General, National Institute of Statistics
Mr. Khin Sokvorlak, Deputy Director General, National Institute of Statistics
Mr. Saint Lundy, Director of Economic Statistics Department
M. Pich Pouty, Director of Sub-National Statistics Department
Mr. Saint Lundy, Director of Information, Communication and Technology Department
Mr. Chhuon Sothy, Director of Statistical Policy and Cooperation Department
Mr. Kim Net, Deputy Director of Social Statistics Department
Ms. Hang Phally, Deputy Director of Demographic Statistics, and Census Department

Observers from Line Ministries:

Mr. Ho Dalina, Deputy of Director of Department, MoP
Mr. Te Kimhok, Aid Coordinator, CDC
Ms. Seak Eng, Aid Coordinator, CDC
Mr. Toch Sophano, Officer, MoEYS

JICA Side:

Mr. Takeharu Kojima, Senior Representative of JICA Cambodia Office
Mr. Eiichiro Hayashi, Project Formulation Officer, JICA Cambodia Office
Mr. Fumihiko Nishi, Project Chief Advisor, JICA Expert
Mr. Akihiko Ito, Project Team Leader, JICA Expert
Mr. Akihito Yamauchi, JICA Expert
Mr. Joji Sawada, JICA Expert
Mr. Hisatsugu Furukawa, JICA Expert
Ms. Jun Konishi, JICA Expert
Mr. Hiromi Mizuta, JICA Expert
Ms. Tomoko Saito, JICA Expert
Mr. Phok Phira, Program Officer, JICA Cambodia Office
Mr. Youk Seng An, Project Assistant
Mr. Reth Youn, Secretary Assistant

Agenda

1. Opening Address of **H.E. Ms. Hang Lina**, Director-General of NIS, Ministry of Planning
2. Opening Remarks of **Mr. Takeharu Kojima**, Senior Representative of JICA Cambodia Office
3. Brief Progress Report of the Project Phase III (2014FY) of **Mr. Fumihiko Nishi**, Chief Advisor of the Project
4. Question and Answer
5. Detailed Progress Report of the Project Phase III (2014FY) of **Mr. Akihiko Ito**, Leader of Non-Government Team of the Project
6. Question and Answer
7. Progress Report of the 2014 Inter-censal Economic Survey of **Mr. Khin Sovorlak**, Deputy Director-General, NIS
8. Question and Answer
9. Progress Report of Small Area Statistics in 2014FY of **Mr. Kim Net**, Deputy Director, Department of Social Statistics, NIS
10. Question and Answer
11. Explanation of the Record of Discussions for the Project Extension of **Mr. Eiichiro Hayashi**, Project Formulation Officer, JICA Cambodia Office
12. Question and Answer
13. Closing Address of **H.E. Ms. Hang Lina**, Director-General of the NIS, Ministry of Planning

1. Opening Session

1.1. H.E. Ms. Hang Lina, Director General of NIS (Opening Address):

H.E. Ms. Hang Lina, Director General, NIS, expressed her appreciation and great pleasure to all the participants in the Seventh Joint Coordination Committee (JCC) Meeting under JICA Project. She reviewed the previous 6th JCC Meeting held on 12 December 2014 on the occasion of terminal evaluation of the project. She emphasized she was very happy as the project had achieved significant results under the terminal evaluation and discussion on the project extension. She continued her remarks as follows;

JICA Project supported NIS in conducting General Population Census of Cambodia 2008 (GPCC2008), Economic Census 2011 (EC2011), Cambodia Inter-censal Population Survey 2013 (CIPS2013), Cambodia Inter-censal Economic Survey 2014 (CIES2014), and Small Area Statistics (SAS).

EC2011 Final Results was released in March 2012 presided over by H.E. Keat Chhun, Deputy Prime Minister at Peace Palace. The dissemination of provincial profile was conducted in Kandal province in 27 May 2013. The final results of CIPS2013 was released on 25 November 2014 presided over by H.E. Chhay Than, Senior Minister of Planning. On 8 September 2014, CIES2014 Preliminary Results was released at Cambodia Japan Cooperation Center and we are to release CIES2014 Final Results on upcoming 25 February 2015.

JICA Project also provided full support for SAS Subproject in 24 provinces by means of providing computer room renovation, necessary equipment such as computers and peripherals, as well as

training on tabulation, producing statistical maps, data analysis and writing analytical report. The detailed reports are to be presented soon by JICA Experts and NIS counterparts.

JICA Project is due to be terminated in March 2015, however it is a great pleasure for NIS that 6 months extension has been granted by JICA to support on data analysis and prioritized reports of CIES2014.

1.2. Mr. Takeharu Kojima, Senior Representative of JICA Cambodia Office (Opening Remarks):

Mr. Takeharu Kojima expressed his pleasure saying it was his honor to deliver his opening remarks on the occasion of JCC meeting. He continued his remarks as follows;

JICA has been supporting NIS since August 2005 through technical cooperation project, so called, Project on Improving Official Statistics in Cambodia phase 1, phase 2, and phase 3. Through these technical cooperation, NIS could successfully conduct General Population Census of Cambodia 2008 (GPCC2008), Nation-wide Establishment Listing 2009 (EL2009), Economic Census 2011 (EC2011), Cambodia Inter-censal Population Survey 2013 (CIPS2013), and Cambodia Inter-censal Economic Survey 2014 (CIES2014).

The Final Results of CIES2014 will be released on 25 February 2015 presided over by HE Chhay Than, Senior Minister of Planning. He again expressed his pleasure upon recognizing that JICA has contributed to the successful results under the leadership of Ministry of Planning and National Institute of Statistics.

Although on-going project is coming to an end soon, it is not the end of the cooperation, since the cooperation will be extended 6 months as Record of Discussion is due to be concluded soon.

At the end of his opening remarks, he expressed his appreciation on behalf of JICA to all the participants for their ceaseless valuable efforts extended to the project and emphasized that today's meeting would provide an opportunity sharing a common understanding on the progress of the project activities, discussion of achievement and challenges.

2. Presentation

2.1. Mr. Fumihiko Nishi, JICA Project Chief Advisor (Brief Progress Report of the Project Phase-III):

Mr. Fumihiko Nishi reported on the progress of the Project Phase III (2014FY) for the period from April 2014 to March 2015. He reaffirmed that the cooperation period of the on-going Project Phase III is from 9th October 2010 up to 31 March 2015 and hopefully extended up to 30 September 2015. In FY2014, 18 JICA Experts for ten sectors were dispatched to NIS and 3 NIS officers were dispatched to Central Statistical Bureau of Nepal from 11 to 17 May 2014 for the purpose of technical exchange, mainly on population census, economic census, and small area statistics. In addition, the project in cooperation with NIS supported CIES2014 activities by means of providing the training for 18 editors for editing and coding held in May 2014, training for 20 data entry operators for data entry held in June 2014, training for 10 programmers for computer programming held in May 2014, and on the job training (OJT) for 1 programmer for computer programming held in August and September 2014. The project also held workshop in September 2014 with 169

participants on economic data analysis. As for SAS subproject, training for 3 SASPOs in each province for 4 PDPs were held by 1 RO and 2 AROs in May 2014 on how to use PC and internet. Subsequent training for 3 SASPOs in 4 PDPs were held by 1 RO and 1 ARO for 3 days in July 2014 on how to analyze data and how to compile a report.

As for CIES2014, the ceremony and seminar on the preliminary results of the CIES2014 were held on 8 September 2014 in Phnom Penh with about 250 participants. The debrief meeting was held on 5 June 2014 in Phnom Penh with 168 participants to grasp the reality of the situation at the time of the implementation of CIES2014. As for final results, the ceremony and seminar on the final results of the CIES2014 is scheduled to be held on 25 February 2015 in Phnom Penh with about 250 participants.

As for CIPS2013, the seminar on the analytical reports of the CIPS2013 was held on 6 June 2014 in Phnom Penh with about 180 participants.

With regard to the publication, the project supported publishing 350 copies of CIES2014 Preliminary results in English and Khmer version and is planning to support printing 500 copies of CIES2014 Final Results in English and Khmer version. As for CIPS2013, the project supported publishing 100 copies of analytical report 7, 8, 9, and 10 in English version, and 200 copies of CIPS2013 Statistical Atlas in English version, and 300 copies of CIPS2013 National Profile I & II in English version. As for SAS Subproject, the project supported publishing 20 copies of the Provincial Reports on population, households, and establishments for 4 provinces in Khmer version.

In addition, the project is supporting to publish 300 copies of EC2011 National Report No. 1 and No. 3 in English version comparing with CIES2014, as well as 300 copies of EL2009 National Report No. 4 comparing with CIES2014.

As for technical equipment, the project provided machinery, equipment and other materials for 4 Provincial Departments of Planning in May 2014 under SAS subproject such as two PCs and peripherals with training equipment such as a projector, a white-board, a photo copier and other necessary items upon having completed renovation of the computer room in each province.

Mr. Nishi reported on additional activities such as the construction of Japan Building of NIS/ Ministry of Planning. The construction was completed in January 2008 under the 1st counterpart fund of Non-Project Grand Aid of US\$0.9 million.

As for fund-contribution to the 2008 Population Census and the 2009 Nation-wide Establishment Listing, both the Census and the Listing were completed under the project phase-II with the 2nd counterpart fund of the Non-Project Grant Aid of USD 2.0 million.

As for fund-contribution to the EC2011, CIPS2013 and CIES2014, all of them were completed with the 3rd counterpart fund of the Non-Project Grand Aid of US\$2.2 million under the project phase-III. Final result of the CIES2014 is to be released on 25 February 2015.

2.2. Mr. Akihiko Ito, JICA Project Team Leader (Detailed Progress Report of the Project Phase-III):

Mr. Akihiko Ito, Project Team Leader, reported on the detailed progress of the Project Phase III as follows;

The project currently focuses on preparation of the final report, which is due to be produced in early

March 2015 with the contents below:

- (1) Background, purposes and targets of the project
- (2) The structure and the schedule of the project
 - 2-1. Project implementation framework
 - 2-2. Targets, outputs and indicators
 - 2-3. Schedule of the project; EC2011, CIPS2013, CIES2014 and SAS.
- (3) Outputs and indicators of the project
- (4) Outputs of technical assistance

Background and Purposes/Targets (1):

Improvement of official statistics in Cambodia was requested in order to support/monitor policies to bring about “sustainable growth and stable society” in Cambodia, consequently following technical cooperation had been realized.

1. Phase-I (from August 2005 to March 2007) focused on “Cambodian government statistical skills improvement project”.
2. Phase-II (from April 2007 to September 2010) focused on supporting implementation of the Population Census 2008.
3. Phase-III (from October 2010 to March 2015) focused on supporting EC-2011, CIPS-2013, CIES-2014 and SAS.

Background and Purposes/Targets (2):

Highly prioritized purpose is to enable the statistical results provided by NIS and PDPs to be utilized for planning and implementation of policies, plans, and strategies of line ministries and provincial governments.

While the project purpose is to enable NIS and PDPs to implement Economic Census, Inter-censal Population Survey, Economic Statistics Survey, and other statistical activities involving planning, implementation, data processing, analysis, dissemination, small area statistics, development maintenance skills/knowhow, etc.

Outputs and Indicators:

Output is to improve and enrich the capabilities of NIS for planning and implementation of censuses and surveys, data processing, analysis, dissemination, small area statistics (PDPs’ capabilities), development/maintenance of skills/knowhow, etc. On the other hand, indicators for the outputs are as follows.

- (1) Levels of understanding of planning and implementation, data processing, analysis, dissemination, small area statistics, development/maintenance of skills/knowhow, etc.
- (2) Numbers of village/EA maps, micro data, statistical tables, analytical reports, profiles/thematic maps, procedural documents, training, WSs and seminars, and coordination meetings.
- (3) Methods for maintaining and managing detailed procedural documents for statistical censuses and surveys in NIS and PPDs.

Mr. Ito continuously reported on the project implementation framework, project functional diagram and schedule of the project, as well as the outputs of the technical assistance as follows:

- Village/EA maps (GPCC, EC etc.):

- (1) Basis for the next census
- (2) Sampling frames on household and economic surveys
- Directory (List) of large-scale establishments:
 - (1) for regular economic surveys to grasp economic trends
 - (2) Need to be maintained using PDPs' reports and other administrative channels (records)
- Procedural documents:
 - (1) Organization and Administration of 2008 GPCC (UNFPA)
 - (2) Organization and Administration of 2011 EC (NIS/JICA)
- Planning of censuses and surveys:
 - (1) Budgeting: No. of Forms; No. of EAs/Villages (enumerators)
 - (2) Stratification and sampling of villages/EAs
 - (3) Topics to collect: Form (Questionnaire)
 - (4) Enumerator/supervisor's manuals
 - (5) Data processing plan (manual editing/coding, data entry, data cleaning, tables to be produced)
 - (6) Parallel planning both for enumeration and data processing
- Implementation:
 - (1) Recruitment of enumerators/supervisors
 - (2) Training
 - (3) Census/survey campaign
 - (4) Logistics (Forms, posters, documents, etc.)
- Data processing (1):
 - (5) Very different features between data cleaning of household/ population data and establishment/enterprise data:
 - (6) Households are more or less homogeneous, while establishments are heterogeneous
 ->imputation not feasible -->CSPro not applicable
- Data processing (2): Province by province data processing both for manual editing/coding and data entry work:
 - (1) Only one or two provinces of census/survey Forms are carried out from the storage.
 - (2) Initial mistakes are restricted to only one or two provinces.
 - (3) The whole data set for one province is available at a very early period of time for testing computer programs for tabulation and for checking the validity of the data in content.
- Statistical maps:
- Statistical maps were presented in a user friendly manner.
 - (1) A proposal will be submitted to DG and senior staff of NIS on the development of GIS at NIS based on the UN Handbook on Geospatial Infrastructure in Support of Census Activities.
- Analysis of the results of censuses and surveys:
 - (1) Lectures and one-to-one trainings on how to analyze the results in depth were provided to C/Ps as much as possible.

- (2) Provincial reports were compiled for each of 24 provinces by ROs/AROs imitating a plot-type report written by a JICA expert.

SAS Sub-project:

Mr. Ito reported that the data processing environment at PDPs was improved because of following achievements:

1. Teaching materials compiled by the experts in English were translated into Khmer. Through this translation process, C/Ps' understanding and learning of knowhow and technologies concerned deepened, and transfer thereof was more achieved.
2. Through responses to questions raised in the SASPO training and OJT in the tabulation work, SASPOs deepened and acquired knowhow and technologies for handling small area statistics.
3. The tabulation and analytical work was the first experience for some of ROs/AROs and staff of PDPs. Through this sub-project, their understanding and acquisition of knowhow and technologies for data processing, statistical analysis and compilation of analytical reports advanced. As the results
4. An analytical report was successfully compiled and published for each province.

2.3. Mr. Khin Sovorlak, Deputy Director General, NIS (Progress Report of the 2014 Inter-censal Economic Survey):

Mr. Khin Sovorlak reported on CIES2014 Progress Work. He firstly introduced the background of CIES2014 saying that it was due to be conducted between two censuses such as 2011 and 2021 Economic Census, and CIES2014 was executed just after 3 years of 2011 Economic Census which was implemented by NIS with technical cooperation of the Government of Japan and JICA. The purposes of CIES2014 are as follows.

- (1) To provide basic statistical data on establishments and enterprises for national and local policy planning three years after the 2011 Economic Census; follow rectangular strategy
- (2) To collect information on establishments and enterprises; To develop Cambodia and improve Cambodian life with prosperity and happiness
- (3) To keep and improve the knowledge and skill required to conduct economic censuses and surveys
- (4) To keep and improve the knowledge and skill required to update and maintain the directory of establishments and enterprises as the sampling frame of various sample surveys on businesses.

The preparation of CIES2014 was made through various stages such as establishing 6 times of Technical Committee Meetings, revising forms, developing manuals and survey procedures and sampling work. As for CIES2014-Pretest, it was carried out in 15 Village/EAs selected in Phnom Penh involving 19 NIS counterparts. As for mapping work, it was conducted in 30 villages/EAs in 14 provinces where boundaries have changed after EC2011, newly developed areas, and areas with more than 130 establishments or more in EC2011.

As for implementation of CIES2014 field enumeration, 7 SCOs, 24 ROs, 72 AROs, 48 DPDPs, 553

enumerators, and 134 supervisors were assigned. In total, more than 800 persons were involved in CIES2014 activities including data processing. The survey materials were provided to each province such as forms, survey documents, leaflets, and enumerator's kits. The training for ROs/AROs (5 days from 3-7 February 2014) and the training for enumerators & supervisors (5 days from 17-21 February 2014.) were conducted accordingly. The survey operation started from village/EAs map confirmation, establishment listing, selecting 30 establishments for interview for EAs with more than 30 establishments, subsequently enumeration started from 1st March 2014. As for large size establishments with more than 50 engaged persons, RO/AROs enumerated them from 6-31 March 2014. As for survey-materials, such as forms, carrying-bags, T-shirts, caps, and enumerator's kits were delivered to each province prior to the training and enumeration.

After the enumeration, further follow-up survey was carried out in October 2014 in 10 provinces as well as in December 2014 in Phnom Penh in order to confirm the closed and not founded establishments.

As for data processing, the training for editing and coding was held in May for 18 editors, and data editing work was carried out for 2 weeks. Data entry training was held in June 2014 for 20 data entry operators, and the data entry work was carried out for 3 weeks. Consequently, data cleaning was finalized in December 2014.

As for releasing 2014 CIES Results, preliminary results was officially released on 8th September 2014 with approximately 250 participants, and debriefing meeting was held on 5th June 2014 with about 170 participants, DPDPs, ROs and AROs. Final results of CIES is scheduled to be officially released on 25 February 2015.

Review of the analytical works during the 1st Economic Census and Implications for the next was made in NIS in September 2014.

Finally, Mr. Khin Sovorlak presented further more activities required for NIS as following:

- (1) Analysis on major industries
- (2) Analysis on Large, Medium and Small establishments.
- (3) Women's Business in Cambodia
- (4) Comparative analysis by Scale
- (5) National Table (National Profile and Statistical Map)
- (6) Disseminations 2014 CIES results at sub-national level

2.4. Mr. Kim Net, Deputy Director, Department of Social Statistics, the NIS (Progress Report of Small Area Statistics in 2014FY):

Mr. Kim Net reported on the progress of Small Area Statistics (SAS) in FY2014. SAS Subproject has been implemented to improve all the Provincial Departments of Planning (PDP) for staff's capacity building in small area analysis. Prior to the staff's capacity building, the project renovated computer rooms in PDPs in order to improve suitable work environment. SAS has been carried out for a period of four years in total since April 2011. SAS has been successfully implemented in the following provinces from FY2011 to FY2013: ①Takeo, ②Kampong Cham, ③Kandal, ④Preah Sihanouk, ⑤Battambang, ⑥Siem Reap, ⑦Banteay Meanchey, ⑧Kampong Chhang, ⑨Pursat,

⑩Pailin, ⑪Kampong Thom, ⑫Kratie, ⑬Mondul Kiri, ⑭Koh Kong, ⑮Kep, ⑯Phnom Penh, ⑰Kampong Speu, ⑱Svay Rieng, ⑲Otdar Meanchey, and ⑳Preah Vihear.

The last 4 provinces in FY2014 are ㉑Prey Veng, ㉒Kampot, ㉓Stung Treng and ㉔Ratanak Kiri.

The purpose of SAS is to strengthen capacity-building of statistical staff in PDPs and National Institute of Statistics by means of learning sophisticated technologies and methodologies for statistical activities under the project, and its objectives are as follows.

- (1) To strengthen ICT of the PDPs
- (2) To improve technology for tabulating basic statistics on small area such as communes, villages from micro data (individual data) possessed by the PDP.
- (3) To develop methodologies for producing small area statistics, analytical summary tables, statistical graphs and maps, and analytical reports of the provincial situation in its jurisdiction on the basis of the statistics produced and possessed by the PDP
- (4) To build up methodologies for dissemination of statistics in the PDP
- (5) To improve the above mentioned technologies and methodologies in NIS.

SAS Sub-project has 2 main activities and they are required to be divided into two stages in order to be carried out systematically, simply and in an orderly manner as follows:

First stage:

- (1) Renovating a computer room of the PDP office
- (2) Installing PCs and peripherals in the PDP
- (3) Holding three kinds of training such as Training for Senior Commanding Officers (SCO), Training for Regional Officers (RO) and Assistant Regional Officers (ARO), and Training for SAS Provincial Officers (SASPO)
- (4) Practicing Excel, Simple Calculation System (SCS, a system for tabulation) which was developed by the National Statistics Center of Japan, GIS (Geographic Information System) software; and internet in the PDP.

Second stage:

- (1) Holding three kinds of training in the same way as the first stage and conducting On-the-Job Training (OJT)
- (2) Tabulating statistical tables by small area such as District, Commune and Village level.
- (3) Compiling SAS report entitled “Population, Households, and Establishments” of the province by producing analytical tables, statistical graphs and maps, and analyzing in the PDP
- (4) Publishing the provincial report.

Computer room renovation in FY2014:

As for SAS activities in FY2014, PC-rooms in four provinces were renovated with a work of fixing partition, door locks, window glasses & frames and fluorescent lights; and polishing & painting wall and floor, as well as installation of one unit of air conditioner.

The renovation was completed until April 2014.

Installation of PC and training equipment in FY2014:

The following equipment and machineries have been installed in each province by the end of April

2014:

- (1) Two units of computer with licensed program and its peripherals,
- (2) Two sets of computer desk and chair,
- (3) One unit of color printer,
- (4) One unit of photocopier machine,
- (5) One unit of external hard disk,
- (6) Two units of USB memories,
- (7) Two units of internet modem connection, and
- (8) One unit of LCD projector,
- (9) One unit of white screen
- (10) One unit of white board

SAS training seminars in FY2014:

The following training seminars have been conducted at three levels in FY2014:

- (1) Training for SCOs at the NIS, MOP
- (2) Training for ROs and AROs at the NIS, MOP
- (3) Training for SASPOs at each PDP

Training for SCO:

Six SCOs selected from NIS were trained by JICA experts on

- (1) How to use SCS,
- (2) How to create statistical map,
- (3) How to make statistical graphs,
- (4) How to tabulate small area statistical tables, and
- (5) How to write SAS analytical report of province, and Internet Connection and Use.

Training for Regional Officers (RO) and Assistant Regional Officers (ARO):

The training was divided into two stages, first and second stage:

First stage:

- (1) 4 ROs and 8 AROs were trained by SCOs from 6 to 9 May 2014 at NIS.
- (2) 4 ROs and 8 AROs were dispatched to their jurisdictional provinces to provide training for SASPOs.
- (3) The training curriculum focuses on how to use SCS, GIS software, Internet, e-mail and basic excel calculation.

Second stage:

- (1) 4 ROs and 4 AROs were trained by SCOs from 10 to 12 June 2014 at the NIS.
- (2) The training curriculum focuses on tabulation of small area statistics, SAS report analysis and compilation.
- (3) One RO and one ARO were assigned to implement training for SASPO in their jurisdictional province.

Training for Small Area Statistics Provincial Planning Officers (SASPOs):

- (1) Three SASPOs were assigned in each province by Director of Provincial Department of Planning.

- (2) Two of three SASPOs are core staff and the rest is an assistant, and they were selected from Statistics Office in PDP.
- (3) The SASPO training was also divided into two stages:

First stage:

- (1) 12 SASPOs were trained by RO and AROs from 20 to 23 May 2014 on SCS,
- (2) The training focused on Tabulation, Basic Excel, Statistical Map, and Use Internet.

Second stage:

- (1) The same 12 core staff and Assists of SAS in total received training on SAS from 24 to 26 June 2014
- (2) The training focused on SAS Report Analysis and Compilation

SAS Report Compilation:

- (1) Upon completion of first and second stage trainings, SASPOs started to compile SAS Report for their jurisdictional province by referring to the template of SAS report of Banteay Meanchey province which was sampled by JICA Experts.
- (2) The title of SAS report is “Population, Household, and Establishment of xxx Province.”
- (3) 3 months were offered for SASPOs from July 2014 to September 2014 for compiling a SAS Report with more than 100 pages.
- (4) Micro data on 2008 Population Census, and 2009 Establishment Listing of respective province were given to the PDP to produce SAS Report.
- (5) All 4 SAS provincial reports of Prey Veng, Kamport, Stung Treng, and Ratanak Kiri in FY2014 were completed by December 2014 as schedule after being checked by RO and ARO, and SCO.

SAS Report Publication and Dissemination:

- (1) The SAS Reports have been printed as simple printing by the end of December 2014.
- (2) 100 copies of SAS Reports of four provinces have been printed, and 20 of the said report have been provided to those PDPs.
- (3) PDP in each province will further disseminate to the line Departments in respective province.

Conclusion:

Mr. Kim Net concluded as follows:

- (1) SAS implementation in the FY2014 was successfully completed as scheduled in four provinces. SCOs, ROs and AROs of NIS Officers made their very best efforts in lecturing, monitoring, supervision and checking on SAS in both first and second stage. In addition, SASPOs and Directors of PDPs made strong commitment in compiling and directing the SAS team work
- (2) PDPs have good quality of equipment and peripherals for producing and disseminating statistics under suitable good environment which were provided by JICA.
- (3) Gradual improvement of Capacity building of statistics officers in NIS and PDPs can be recognized through SAS implementation which has been assisted by JICA.
- (4) PDP in each province has begun to grow their ownership in producing not only SAS reports but also other statistical reports in future.

(5) Small area statistics is available for users in every province.

Finally, Mr. Kim Net introduced a suggestion made by the Director of PDP in Tbong Khmum. The Director has suggested to JICA through SCOs to implement SAS in Tbong Khmum province too as per the other provinces. Since Tbong Khmum has been newly established, it is indispensable for newly established PDP to apply great effort for capacity building in statistics as part of human resource.

2.5. Mr. Hayashi, JICA Cambodia Office (Explanation of the Record of Discussions for the Project Extension):

Mr. Hayashi made his comment on the Record of Discussions for the project extension that the JICA head office fundamentally agreed to extend the project for 6 months from April to September 2015. However, the contents of the project extension are still under examination at head office. In this connection, JICA is planning to send an official letter to MoP concerning the contents in order to finalize them upon having mutual consensus.

3. Discussion (Q & A):

- (1) Mr. Hayashi asked Mr. Khin Sovorlak concerning RO and if it was from local government or not. Mr. Khin Sovorlak answered that RO was Regional Officer assigned from NIS to take supervision on survey work in collaboration with Director of Provincial Department of Planning.
- (2) Mr. Hayashi asked Mr. Ito as to how large-scale establishment should be determined. Mr. Ito answered that large-scale establishment is determined by the size of number of engaged person from 100 and over while medium establishment is 50-99 engaged persons.
- (3) Mr. Hayashi asked Mr. Kim Net about availability of SAS Reports from 2011 to 2013. Mr. Kim Net answered that he had SAS reports for all 24 provinces and would manage sending such reports to JICA Cambodia Office soon.

H.E. Mrs. Hang Lina stressed the importance of SAS activities and its fruitful achievement in producing statistics at provincial level. Since JICA Project is to make a great finish in March 2015, NIS established a new department, namely “Sub-national Statistics Department” in order to continuously conduct SAS activities.

Mr. Kim Net additionally commented that the Sub-national Statistics Department would prepare related plans for further improvement of PDP and SAS activities. Mr. Pich Pouthy, Director of Sub-national Statistics Department, expressed his sincere appreciation to JICA for their great supports rendered to NIS, especially for SAS activities as SAS was one of the major activities in his department. He emphasized his expectation for further-more support to the new Sub-national Statistics Department.

Mr. Phok Phira from JICA Cambodia Office requested official documents specifying the roles and function of the Sub-national Statistics Department. Mr. Pich Pouthy responded saying he would send the related sub-decree and other official documents to Mr. Phok Phira soon.

4. Closing:

H.E. Ms. Hang Lina, Director General of NIS (Closing Address):

H.E. Ms. Hang Lina summarized the meeting saying that NIS was able to execute and successfully completed all major activities, such as EC2011, CIPS2013, CIES2014 and SAS activities in 24 provinces owing to a great support under JICA Technical Cooperation. In addition, various publications pertaining to census and survey results have been produced with a support made by JICA, such as analysis reports of CIPS2013, CIPS2013 Statistical Atlas, CIPS2013 National Profile Part I & II, EC2011 National Report, EC2011 analysis reports, and other EC2011 related publications. Through JICA Project, NIS had drastically improved its statistical capacity to the advanced level by means of having various trainings and conducting censuses and surveys. Especially, NIS counterparts have learnt a lot of valuable skills and knowledge on data analysis and reports writing. In addition, JICA also provided the supports in term of technical exchange with other countries sharing the experiences on conducting censuses and surveys.

Ms. Hang Lina valued anew the Japanese grant, such as JICA Building in NIS/MoP. She emphasized that it was a great assistance given by the Government of Japan, which would be a long lasted memory of NIS. She expressed her willingness to keep in touch with JICA and JICA Experts although JICA Project is going to the end in forthcoming March 2015. On the occasion of closing her address, she expressed her sincere appreciation again to the Government of Japan, JICA, and JICA Experts for their ceaseless supports providing both technical and financial assistance to NIS for the past a decade for strengthening Statistical System in Cambodia.

List of Reports

1. EC2011

1) Report

Title	Year
Preliminary Results of the 2011 Economic Census of Cambodia	8/2011
Preliminary Results of the 2011 Economic Census of Cambodia (No.2)	9/2011
Economic Census of Cambodia 2011, National Report on Final Census Results	3/2012
Economic Census of Cambodia 2011, District and Commune Report on Final Census Results	3/2012
Census Atlas	11/2012
National Profile of Statistical Tables	2/2013
Village Profile of Statistical Tables	2/2013
Provincial Profile of Statistical Tables	2/2013
Provincial report	2/2013
Economic Census of Cambodia 2011, Analysis on 17 Industries	2/2013
Economic Census of Cambodia 2011, Comparative Analysis by Industry	2/2013
Economic Census of Cambodia 2011, Comparative analysis by Scale	2/2013
Economic Census of Cambodia 2011, Analysis on Large, Medium & Small and Micro Industry	2/2013
Economic Census of Cambodia 2011, Manufacturing Industry	2/2013
Economic Census of Cambodia 2011, Food Processing Industry	2/2013
Economic Census of Cambodia 2011, Textile Industry	2/2013
Economic Census of Cambodia 2011, Wholesale and Retail Industry	2/2013
Economic Census of Cambodia 2011, Women in Business	2/2013
Economic Census of Cambodia 2011, Street Business	2/2013
Economic Census of Cambodia 2011, Application to National Accounts	2/2013
Economic Census of Cambodia 2011, Provincial Profile (Kandal) in Khmer	5/2013
Economic Census of Cambodia 2011, Provincial Report (Kandal) in Khmer	5/2013
Economic Census of Cambodia 2011, Village Profile (Kandal) in Khmer	5/2013

2) Manual

Title	Year
Supervisor's Manual	3/2011
Enumerator's Manual	3/2011
Duties of Census Officials Engaged in the Local Organization	3/2011
Supplementary Explanations and Questions & Answers	3/2011
Editing Rules for Data Entry and Computer Editing	4/2011
Manual on ISIC Dictionary System	2/2011
Manual on Data Entry System	4/2011
Editing and Coding Manual	5/2011
Duties of SCO and DPDP (Post Enumeration Survey)	7/2011
Enumerator's Manual (Post Enumeration Survey)	7/2011
Supervisor's Manual (Post Enumeration Survey)	7/2011
Report on Local Activities in the 2011 Economic Census	8/2011
Post Enumeration Survey, Tabulation plan, 2011 Economic Census of Cambodia	10/2011
Handbook of the Implementation on Data Analysis	7/2012
Post Enumeration Survey	2/2013
Use of Directory of Establishments	2/2013
Organization and Administration of the Census	3/2013
Handbook of Financial ratios on Data Analysis	10/2011
Data Analysis on EC 2011	10/2011

2. CIPS

1) Report

Title	Year
Cambodia Inter-Censal Population Survey 2013, Provisional Report	8/2013
Cambodia Inter-Censal Population Survey 2013, Final Report	11/2013
Cambodia Inter-Censal Population Survey 2013, No.7, Literacy and Educational Attainment	2/2014
Cambodia Inter-Censal Population Survey 2013, No.8, Economic Activity and Employment	5/2014
Cambodia Inter-Censal Population Survey 2013, No.9, Housing and Household Amenities	3/2014
Cambodia Inter-Censal Population Survey 2013, No.10, Family and Household	5/2014
Cambodia Inter-Censal Population Survey 2013, National Profile	5/2014
Cambodia Inter-Censal Population Survey 2013, Statistical Atlas	3/2014

2) Manual

Title	Year
Manual on Mapping Work	6/2012
Cambodia Inter-Censal Population Survey 2013, Report on local activities	8/2013
Report on Local Activities of CIPS 2013	8/2013

3. CIES

1) Report

Title	Year
Preliminary Results of Cambodia Inter-Censal Economic Survey 2014	9/2014
Cambodia Inter-Censal Economic Survey 2014, National Report on Final Results	2/2015

2) Manual

Title	Year
Sampling Design	7/2013
Implementation Plan of Pretest for the CIES2014	8/2013
Implementation Plan of Mapping Work for the CIES2014	9/2013
Cambodia Inter-Censal Economic Survey 2014, Manual on Mapping Work	10/2013
Cambodia Inter-Censal Economic Survey 2014, Supervisor's Manual	3/2014
Cambodia Inter-Censal Economic Survey 2014, Enumerator's Manual	3/2014
Cambodia Inter-Censal Economic Survey 2014, Duties of RO/ARO, and DPDP	3/2014
Supplementary Explanations and Questions & Answers	3/2014
Computer Edit Rules	3/2014
Cambodia Inter-Censal Economic Survey 2014, Manual on data entry	5/2014
Cambodia Inter-Censal Economic Survey 2014, Manual on editing and coding	5/2014
Cambodia Inter-Censal Economic Survey 2014, Manual on CSIC dictionary system	5/2014

4. SAS

1) Report

Title	Year
Small area statistics report (6 provinces)	12/2012
Small area statistics report (9 provinces)	8/2013
Small area statistics report (5 provinces)	8/2014
Small area statistics report (4 provinces)	12/2014

2) Manual

Title	Year
Basic Document for Producing Small Area Statistics in Provinces	8/2011
SAS Subproject for Improvement of Statistical Technology in Provincial Developments of Planning	3/2012

List of Equipment for 6 PDPs (2nd Year Procurement purchased by the Government Team)

No	Name of Item	Maker/Model	User (Location)	Quantity	Unit Price (US\$)	Total Price (US\$)	Date of Inspection	Usage /Conditions
1	Desktop PC	Dell Optiplex 380n MT	2 units of each item are being used in each Statistics Office of Provincial Department of Planning in the province, such as Kandal, Takeo, Preah Sihanouk, Kampong Cham, Siem Reap and Battambang (12 units in total).	12	572	6,864	18 & 19 Aug 2011	Good condition and being used on a daily basis
2	Microsoft License	Window-7		12	161	1,932	18 & 19 Aug 2011	Good condition and being used on a daily basis
3	Microsoft License	Office Pro 2010		12	349	4,188	18 & 19 Aug 2011	Good condition and being used on a daily basis
4	Internet Security	Internet Security		12	15	180	18 & 19 Aug 2011	Good condition and being used on a daily basis
5	Printer	HP Color Laserjet CP2025dn Printer	1 unit is being used in each Statistics Office of Provincial Department of Planning in the province, such as Kandal, Takeo, Preah Sihanouk, Kampong Cham, Siem Reap and Battambang (6 units in total). Rest of 6 units are being used in NIS central office.	12	866	10,392	18 & 19 Aug 2011	Good condition and being used on a daily basis
6	External Hard Disk	500GB	1 unit is being used in each Statistics Office of Provincial Department of Planning in the province, such as Kandal, Takeo, Preah Sihanouk, Kampong Cham, Siem Reap and Battambang (6 units in total).	6	72	432	18 & 19 Aug 2011	Good condition and being used on a daily basis
7	Flash Drive	Transcend Jet Flash, 4GB	2 units are being used in each Statistics Office of Provincial Department of Planning in the province, such as Kandal, Takeo, Preah Sihanouk, Kampong Cham, Siem Reap and Battambang (12 units in total).	12	8	96	18 & 19 Aug 2011	Good condition and being used on a daily basis
8	Copier	Toshiba copy machine	1 unit of each item is being used in each Statistics Office of Provincial Department of Planning in the province, such as Kandal, Takeo, Preah Sihanouk, Kampong Cham, Siem Reap and Battambang (6 units in total).	6	970	5,820	18 & 19 Aug 2011	Good condition and being used on a daily basis
9	Projector	LCD Projector		6	927	5,562	18 & 19 Aug 2011	Good condition and being used on a daily basis
10	Screen	2.13m x 2.13m Movable		6	135	810	5 Aug 2011	Good condition and being used on a daily basis
11	Pointer	2.4Ghz Wireless Pointer		6	47	282	18 & 19 Aug 2011	Good condition and being used on a daily basis
12	UPS	Power Tru 650VA UPS	2 units of each item are being used in each Statistics Office of Provincial Department of Planning in the province, such as Kandal, Takeo, Preah Sihanouk, Kampong Cham, Siem Reap and Battambang (12 units in total).	12	32	384	18 & 19 Aug 2011	Good condition and being used on a daily basis
13	Acrobat	Acrobat Professional 10 Win IEA00 License with DVD Set		12	449	5,388	18 & 19 Aug 2011	Good condition and being used on a daily basis
14	Acrobat	Acrobat Professional DVD Set		12	44	528	18 & 19 Aug 2011	Good condition and being used on a daily basis
15	Scanner	HP scan Jet Photo scanner	1 unit is being used at SAS central office in NIS	1	174	174	18 & 19 Aug 2011	Good condition and being used on a daily basis
16	USB Modem	Metfone USB Internet Modem	2 units of each item are being used in each Statistics Office of Provincial Department of Planning in the province, such as Kandal, Takeo, Preah Sihanouk, Kampong Cham, Siem Reap and Battambang (12 units in total).	12	35	420	18 & 19 Aug 2011	Good condition and being used on a daily basis
17	Table	DE 48+G		12	149	1,788	5 Aug 2011	Good condition and being used on a daily basis
18	Chair	SG138		12	45	540	5 Aug 2011	Good condition and being used on a daily basis
19	Whiteboard	1.2m x 2m, Movable	1 unit is being used in each Statistics Office of Provincial Department of Planning in the province, such as Kandal, Takeo, Preah Sihanouk, Kampong Cham, Siem Reap and Battambang (6 units in total).	6	70	420	5 Aug 2011	Good condition and being used on a daily basis
						46,200		

List of Equipment for 9 PDPs (2nd Year Procurement purchased by the Non Governmental Team)

No	Name of Item	Maker/Model	User (Location)	Quantity	Unit Price (US\$)	Total Price (US\$)	Date of Inspection	Usage /Conditions
1	Desktop PC	Dell Optiplex 790 MT	2 units of each item are being used in each Statistics Office of Provincial Department of Planning in the province, such as Kampong Chhnang, Pursat, Pailin, Banteay Meanchey, Kampong Thom, Kratie, Mondulkiri, Kep & Koh Kong (18 units in total).	18	616	11,088	24 & 26 March 2012	Good condition and being used on a daily basis
2	Microsoft License	Window-7		18	154	2,772	24 & 26 March 2012	Good condition and being used on a daily basis
3	Microsoft License	Office Pro 2010		18	344	6,192	24 & 26 March 2012	Good condition and being used on a daily basis
4	Internet Security	Internet Security		18	11	198	24 & 26 March 2012	Good condition and being used on a daily basis
5	Printer	HP Color Laserjet CP2025dn Printer	1 unit of each item is being used in each Statistics Officer of Provincial Department of Planning in the province, such as Kampong Chhnang, Pursat, Pailin, Banteay Meanchey, Kampong Thom, Kratie, Mondulkiri, Kep & Koh Kong (9 units in total).	9	935	8,415	24 & 26 March 2012	Good condition and being used on a daily basis
6	External Hard Disk	500GB		9	100	900	24 & 26 March 2012	Good condition and being used on a daily basis
7	Flash Drive	Transcend Jet Flash, 4GB	2 units of each item are being used in each Statistics Office of Provincial Department of Planning in the province, such as Kampong Chhnang, Pursat, Pailin, Banteay Meanchey, Kampong Thom, Kratie, Mondulkiri, Kep & Koh Kong (18 units in total).	18	11	198	24 & 26 March 2012	Good condition and being used on a daily basis
8	Copier	Toshiba copy machine	1 unit of each item is being used in each Statistics Office of Provincial Department of Planning in the province, such as Kampong Chhnang, Pursat, Pailin, Banteay Meanchey, Kampong Thom, Kratie, Mondulkiri, Kep & Koh Kong (9 units in total).	9	1,610	14,490	24 & 26 March 2012	Good condition and being used on a daily basis
9	Projector	LCD Projector		9	920	8,280	24 & 26 March 2012	Good condition and being used on a daily basis
10	Screen	2.13m x 2.13m Movable		9	145	1,305	24 & 26 March 2012	Good condition and being used on a daily basis
11	Pointer	2.4Ghz Wireless Pointer		9	47	423	24 & 26 March 2012	Good condition and being used on a daily basis
12	UPS	Power Tru 650VA UPS	2 units of each item are being used in each Statistics Office of Provincial Department of Planning in the province, such as Kampong Chhnang, Pursat, Pailin, Banteay Meanchey, Kampong Thom, Kratie, Mondulkiri, Kep & Koh Kong (18 units in total).	18	35	630	24 & 26 March 2012	Good condition and being used on a daily basis
13	Acrobat	Acrobat Professional 10 Win IEA00 License with DVD Set		18	492	8,856	24 & 26 March 2012	Good condition and being used on a daily basis
14	USB Modem	Metfone USB Internet Modem		18	35	630	24 & 26 March 2012	Good condition and being used on a daily basis
15	Table	OD-IC, Size: 700 x 1200 x 750mm		18	135	2,430	24 & 26 March 2012	Good condition and being used on a daily basis
16	Chair	K338 Size: 590 x 920mm	1 unit of each item is being used in each Statistics Office of Provincial Department of Planning in the province, such as Kampong Chhnang, Pursat, Pailin, Banteay Meanchey, Kampong Thom, Kratie, Mondulkiri, Kep & Koh Kong (9 units in total).	18	45	810	24 & 26 March 2012	Good condition and being used on a daily basis
17	Whiteboard	1.2m x 2m, Movable		9	65	585	24 & 26 March 2012	Good condition and being used on a daily basis
18	Tonner	Set for Printer (CP2025dn)		9	450	4,050	24 & 26 March 2012	Good condition and being used on a daily basis
19	Tonner	Set for Copier (Toshiba T1810D)	9	90	810	24 & 26 March 2012	Good condition and being used on a daily basis	
						73,062		

List of Equipment for 5 PDPs (3rd-Year purchased by the Non Governmental Team)

No	Name of Item	Maker/Model	User (Lacation)	Quantity	Unit Price (US\$)	Total Price (US\$)	Date of Inspection	Usage /Conditions
1	Desktop PC	Dell Optiplex 790MT Core i3-2120/3.30GMz/2GB	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	10	612.00	6,120	5 March 2013	Good condition and being used on a daily basis
2	Microsoft License	Window 7 Professional SPI 64bits English	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	10	154.00	1,540	5 March 2013	Good condition and being used on a daily basis
3	Microsoft License	Microsoft Office 2010 Professional English Attached Key PKC Micro Case	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	10	370.00	3,700	5 March 2013	Good condition and being used on a daily basis
4	Anti-virus License	Internet Security kapersky with CD, pre-installed	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	10	13.00	130	5 March 2013	Good condition and being used on a daily basis
5	Acrobat	Acrobat Professional 10 with IEA00 with win IEA00 DVD Set	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	10	495.00	4,950	5 March 2013	Good condition and being used on a daily basis
6	Photo Copier	Fuji Xerox S1810 monochrome, Speed: 18ppm A4, Resolution: 600 x 600i	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	5	1,605.00	8,025	5 March 2013	Good condition and being used on a daily basis
7	White Screen	Size: 2.13m x 2.13m, Movable	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	5	155.00	775	5 March 2013	Good condition and being used on a daily basis
8	Flash drive	USB Memory Adata Flash drive, Capacity:4GB	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	10	12.00	120	5 March 2013	Good condition and being used on a daily basis
9	External Hard Disk	Capacity: 500GB Interface, Interfaces: USB2.0, Transfer rates up to 480Mb/s	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	5	100.00	500	5 March 2013	Good condition and being used on a daily basis
10	Laser Printer	HP Pro 400 M451dn	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	5	915.00	4,575	5 March 2013	Good condition and being used on a daily basis
11	UPS	Input voltage: 220-240V, Power tree 650VA,	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	10	35.00	350	5 March 2013	Good condition and being used on a daily basis
12	LCD Projector	Input voltage: 220-240V, Store Power: Max 15 min, 2 outputs port	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	5	915.00	4,575	5 March 2013	Good condition and being used on a daily basis
13	Pointer	Imation wireless laser WLP1000	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	5	40.00	200	5 March 2013	Good condition and being used on a daily basis
14	USB Modem	3G USB Modem HSUPA/UMTS 2100Hz	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	10	30.00	300	5 March 2013	Good condition and being used on a daily basis
15	Office desk	OD-D1A 700x1200x750mm	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	10	135.00	1,350	5 March 2013	Good condition and being used on a daily basis
16	Chair	K338 590x920mm Movable	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	10	50.00	500	5 March 2013	Good condition and being used on a daily basis
17	White Board	1.2 x 2 m, Movable	PDPs: Phnom Penh, Preah Vihear, Kampong Speu, Svay Rieng, Otdar Meanchey	5	70.00	350	5 March 2013	Good condition and being used on a daily basis
						38,060		

List of Equipment for 4 PDPs (4th Year purchased by the Non Governmental Team)

No	Name of Item	Maker/Model	User (Lacation)	Quantity	Unit Price (US\$)	Total Price (US\$)	Date of Inspection	Usage /Conditions
1	Desktop PC	Dell Optiplex 7010MT	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	8	648.00	5,184	23 Jan 2014	Good condition and being used on a daily basisi
2	Microsoft License	Window 7 Professional (64bits) English, DVD	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	8	170.00	1,360	23 Jan 2014	Good condition and being used on a daily basisi
3	Microsoft License	Microsoft Office 2013 Professional DVD	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	8	365.00	2,920	23 Jan 2014	Good condition and being used on a daily basisi
4	Anti-virus License	Internet Security Tranmacro	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	8	13.00	104	23 Jan 2014	Good condition and being used on a daily basisi
5	Acrobat	Acrobat Professional 11 with IEA00 DVD	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	8	498.00	3,984	23 Jan 2014	Good condition and being used on a daily basisi
6	Copier	Fuji Xerox S1810, monochrome, Speed: 18ppm A4, Resolution: 600 x 6001	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	4	1,650.00	6,600	23 Jan 2014	Good condition and being used on a daily basisi
7	Toner set for copier	Fuji Xerox S1810, monochrome	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	4	74.00	296	23 Jan 2014	Good condition and being used on a daily basisi
8	LCD Screen	2.13 x 2.13m Movable	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	4	155.00	620	23 Jan 2014	Good condition and being used on a daily basisi
9	Flash drive	Capacity: 4GB, Interface USB 2.0	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	8	10.00	80	23 Jan 2014	Good condition and being used on a daily basisi
10	External Hard Disk	Capacity: 500GB Interfaces: USB 2.0	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	4	100.00	400	23 Jan 2014	Good condition and being used on a daily basisi
11	Printer	HP Laser-jet Pro 400 451dn, Speed: 21 ppm color, black & white,	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	4	1,205.00	4,820	23 Jan 2014	Good condition and being used on a daily basisi
12	UPS	Trupower TP300P Input & output voltage: 220-240VAC Capacity:650VA	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	8	37.00	296	23 Jan 2014	Good condition and being used on a daily basisi
13	LCD Projector	EPSON EBS10, Brightness: 2600ANSL	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	4	930.00	3,720	23 Jan 2014	Good condition and being used on a daily basisi
14	Pointer	Logitech r400 2.4 GHz wireless	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	4	45.00	180	23 Jan 2014	Good condition and being used on a daily basisi
15	USB Modem	3G USB Modem	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	8	27.00	216	23 Jan 2014	Good condition and being used on a daily basisi
16	Office desk	ODD-1A 700x1200x750mm, Synthetic Wood with metal	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	8	185.00	1,480	23 Jan 2014	Good condition and being used on a daily basisi
17	Chair	K338 590x920mm Movable	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	8	70.00	560	23 Jan 2014	Good condition and being used on a daily basisi
18	White Board	1.2 x 2 m, Movable	PDPs: Prey Veng, Ratanak Kiri, Stung Treng Kampot	4	70.00	280	23 Jan 2014	Good condition and being used on a daily basisi
						33,100		

Plan of operation

Working items	FY2009										FY2010										FY2011										FY2012											
	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9
101	■																																									
102											■																															
201																					□																					
202																					△																					
203																					△ ◎ ◎ ◎																					
204																					■																					
205																					■																					
206																					■																					
207																					■																					
208																					■																					
209																					■																					
210																					■																					
211																					■																					
212																					■																					
213																					■																					
214																															△											
215																					□																					
216																					□ △																					
217																					△ ◎																					
218																					■																					
219																					■										■											
220																					■																					
221																					■																					
222																					◎										◎											
223																					■																					
224																					■										■											
225																					■																					
226																					△										△											
227																															□											
228																															△											
229																															△											
230																															■											
231																															■											
232																															■											
233																															■											
234																															■											
	■																				□																					
																					■										■											

Note: ■ Phase 2
□ Period for work in Japan
■ Period for work in Cambodia
△ Explanation of reports etc.
◎ Meetings and seminars

Working Items	FY2011												FY2012												FY2013												FY2014					
	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6			
301	[White bar]												[White bar]												[White bar]												[White bar]					
302	[White bar]												[White bar]												[White bar]												[White bar]					
303	[White bar]												[White bar]												[White bar]												[White bar]					
304	[Blue bar]												[White bar]												[White bar]												[White bar]					
305	[Blue bar]												[Blue bar]												[White bar]												[White bar]					
306	[White bar]												[White bar]												[White bar]												[White bar]					
307	[White bar]												[White bar]												[White bar]												[White bar]					
308	[White bar]												[White bar]												[White bar]												[White bar]					
309	[White bar]												[White bar]												[White bar]												[White bar]					
310	[White bar]												[White bar]												[White bar]												[White bar]					
311	[White bar]												[Blue bar]												[White bar]												[White bar]					
312	[White bar]												[Blue bar]												[White bar]												[White bar]					
313	[White bar]												[Blue bar]												[White bar]												[White bar]					
314	[White bar]												[Blue bar]												[White bar]												[White bar]					
315	[White bar]												[Blue bar]												[White bar]												[White bar]					
316	[White bar]												[Blue bar]												[White bar]												[White bar]					
317	[White bar]												[Blue bar]												[White bar]												[White bar]					
318	[White bar]												[Blue bar]												[White bar]												[White bar]					
319	[White bar]												[Blue bar]												[White bar]												[White bar]					
320	[White bar]												[Blue bar]												[White bar]												[White bar]					
321	[White bar]												[Blue bar]												[White bar]												[White bar]					
322	[White bar]												[Blue bar]												[White bar]												[White bar]					
323	[White bar]												[White bar]												[White bar]												[White bar]					
324	[White bar]												[White bar]												[White bar]												[White bar]					
325	[White bar]												[White bar]												[White bar]												[White bar]					
326	[White bar]												[White bar]												[White bar]												[White bar]					
327	[White bar]												[White bar]												[Blue bar]												[White bar]					
328	[White bar]												[White bar]												[Blue bar]												[White bar]					
329	[White bar]												[White bar]												[Blue bar]												[White bar]					
330	[White bar]												[White bar]												[Blue bar]												[White bar]					
331	[White bar]												[White bar]												[Blue bar]												[White bar]					
332	[White bar]												[White bar]												[White bar]												[White bar]					
333	[White bar]												[White bar]												[White bar]												[White bar]					
334	[White bar]												[White bar]												[White bar]												[White bar]					
Regional statistical capability improvement plan	[Blue bar]												[Blue bar]												[Blue bar]												[Blue bar]					

Note: [White box] Period for work in Japan
[Blue box] Period for work in Cambodia
△ Explanation of reports etc.
◎ Meetings and seminars

