

A REPORT  
ON  
*TRAINING ON THE 2016 ECONOMIC CENSUS OF  
INDONESIA*

ORGANISED  
BY  
BADAN PUSAT STATISTIK (BPS) INDONESIA

FROM OCTOBER 10-14 2016  
UNDER THE PROJECT ON CAPACITY DEVELOPMENT FOR ECONOMIC CENSUS 2018 OF  
NEPAL

WITH THE ASSISTANCE OF Japan International Cooperation Agency (JICA)-Nepal  
Coordinated and Cooperated by JICA-Indonesia

**SUBMITTED BY**

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## Acknowledgement

First of all, on behalf of the Central Bureau of Statistics-Nepal, particularly the team of delegates, we would like to express our sincere appreciation to JICA in Nepal for having good arrangement of making technical exchange with the Badan Pusat Statistik (BPS) of Indonesia and training on the 2016 Economic Census of Indonesia in relation to the capacity development program for the Economic Census 2018 of Nepal. It was a good opportunity to visit, learn about the Economic Census 2016-round planning, preparation, methods, statistical infrastructure and implementation, enumeration mapping and its fieldwork, data quality assurance, data processing and data dissemination.

Also we are grateful to BPS for wonderful arrangement of training and sharing the experiences about the ongoing Economic Census 2016 in Indonesia. We are equally grateful to JICA-Indonesia for cooperating and coordinating the event in Jakarta. We are indebted to Central Bureau of Statistics Nepal for giving the opportunity for the capacity development in implementing the Economic Census for the first time in Nepal. On behalf of CBS team, we would appreciate Mr. Fumihiko Nishi for his hard and dedicated efforts in facilitating this training for capacity development.

#### List of the delegates from Nepal

1. Mahesh Chand Pradhan, Director, Economic Census Section, CBS
2. Anil Sharma, Director, Economic Census Section, CBS
3. Rajesh Dhital, Director, Census of Manufacturing Establishment Section, CBS
4. Gopal Gurung, Senior Administrative Officer, JICA-Nepal
5. Fumihiko Nishi, Chief Advisor, JICA-CBS Capacity Development for Implementation of Economic Census of Nepal

## Background

Central Bureau of Statistics of Nepal is an authentic government agency to undertake the statistical activities with the aim to fulfill the data requirements of the government as well as concerned stakeholders. Although it has lot experiences of conducting population census, agriculture census, census of manufacturing establishments, and social and economic surveys, it has never experienced conducting Economic Census as well as establishing Statistical Business Register in Nepal. Since Economic Census provides essential statistical information on economic units containing economic statistics such as the number of enterprises, business, persons engaged, which are basic statistics in drafting economic policies and plans. The overall development goal of the government is to attain poverty reduction and has come up with its periodic plan which envisions graduating Nepal from Least Developed Country (LDC) category to a developing country status by 2022. Also Nepal has envisioned achieving the sustainable development goals (SDGs) by 2030. In such context, CBS has considered to implement Economic Census to fulfill the broad economic data needs in achieving the prevailing challenges towards upgrading the country to Developing Country.

As Economic Census will be conducted for the first time, CBS requested JICA for technical assistance in implementing this statistical endeavor. Now, CBS and JICA have undersigned the project on the capacity development for implementation of Economic Census 2018 of Nepal. As per the schema of this project, JICA arranged training on the 2016 Economic Census of Indonesia from October 9-15 for the capacity building in undertaking the Economic Census in Nepal. In this context, five delegates (three CBS delegates, one from JICA- Nepal, and JICA Chief Advisor) had made this visit to BPS-Indonesia. In this study report, the contents of the trainings and lesson learned from the visit will be explained briefly. The training materials are attached in the annex.

## General Schedule of Training

### 1. 2016 October 10

Session I: OPENING PROGRAM

Session II: Outline and New Challenges of Economic Census 2016

### 2. 2016 October 11

Session I: Presentation on Form (Questionnaire) of Economic Census 2016

Session II: Presentation on Methodologies of Economic Census 2016

Session III: Presentation on Census Mapping of Economic Census 2016

Session IV: Presentation on Data Processing and monitoring of Economic Census 2016

### 3. 2016 October 12

Session I: Visit BPS DI Yogyakarta

Census planning, methods and operation at field level

Session II: Presentation on Census Mapping of Economic Census by BPS Yogyakarta

### 4. 2016 October 13

Session I: Presentation on Data Processing and Monitoring of Economic Census 2016 by BPS Yogyakarta

Session II: Presentation on Execution of Economic Census-2016 in Yogyakarta: Lesson learned

Session III: Visit to Data Processing Lab/ Field Visit to observe the kinds of Economic Units in Yogyakarta BPS DI Yogyakarta Census planning, methods and operation at field level

### 5. 2016 October 14

Session I: Presentation on Tabulation and Analysis of the result of Economic Census 2016

Session II: Presentation on Dissemination of the result of Economic Census 2016

Session III: Closing (wrap up)

Session IV: Courtesy Call to JICA Indonesia Office

### 6. 2016 October 15

RETURN TO KATHMANDU

## ***Country Introduction***

Indonesia is a very unique destination located in South east region. The country is famous throughout the world for its islands and beautiful landscapes. Indonesia is the world's fourth most populous nation. Indonesians are separated by seas and clustered on islands. Indonesia is a vast equatorial archipelago of 17,000 islands extending 5,150 kilometers (3,200 miles) east to west, between the Indian and Pacific Oceans in Southeast Asia. The largest islands are Sumatra, Java, Kalimantan (Indonesian Borneo), Sulawesi, and the Indonesian part of New Guinea (known as Papua or Irian Jaya).

Day 1:

Session 1: Opening Session

Badan Pusat Statistik (BPS) had organized an opening session for starting the training specially organized for Nepalese delegates. The program was started with opening remarks of Dr. Kecuk Suhariyanto, Chief Statistician of BPS Indonesia. First of all he welcomed Nepalese delegates and introduced his team who were participated in the opening event. He started his saying that among all statistical activities, economic census is the most difficult activities to undertake. He said that BPS Indonesia started to undertake Economic Census since 1986 and the latest census taken in 2016 was the 4th economic census in the country. So it has gained a lot of experiences regarding economic census. He mentioned the acceptance of request letter made by Suman Raj Aryal, Director General of CBS Nepal. He also mentioned that the knowledge, techniques and sharing experiences would be useful to CBS Nepal to start Economic Census. He highlighted that the training program would be conducted from October 10 to 14 which also include the field visit to BPS DI Yogyakarta. He also mentioned that Nepalese delegates have visited BPS in the right time as it has just completed the listing of Economic Census of Indonesia. It will make the delegates to learn more on fresh activities of the Economic Census. Finally he wished the fruitful outcome of the training and he expected the knowledge and techniques learned from BPS experience would make convenient to plan and implement the Economic Census in Nepal.

During the opening session, JICA Chief Advisor Nishi also elaborated the objective of the training organized in BPS Indonesia. He mentioned that as CBS is planning to implement the Economic Census in 2018 with the technical assistance of Japan International Cooperation Agency (JICA) under the Capacity Development for the implementation of Economic Census in Nepal.

Mahesh Chand Pradhan, Director of Economic Census Section, on behalf of delegate team and CBS appreciated BPS Indonesia for accepting the request of CBS Nepal to organize the

training on the 2016 Economic Census of Indonesia. Mr. Pradhan elaborated the motive of conducting the Economic Census in Nepal as first endeavor in the country. In this context he explained that Nepal has envisioned in its periodic plan to graduate the country from least developed country to developed country by 2015. Also CBS will have a major role in the context that country has entered in achieving the Sustainable Development Goals by 2030. In such perspectives, he emphasized the Economic Census of Nepal will be most important statistical undertakings to supply the basic economic indicators. The knowledge and sharing of experiences from the Economic Census 2016 of Indonesia will be the important ingredients to plan and implement the EC in Nepal. He mentioned that such technical exchange programs will enhance the friendship between two statistical organizations for a long period. Such programs are necessary events to be organized in the near future for strengthening the global official statistical systems. In the opening program, Mr. Anil Sharma also introduced himself and expected the training will be more fruitful to start EC in Nepal. Mr. Rajesh Dhital also introduced himself and the knowledge from the training will also be helpful in planning and implementing the census of manufacturing establishments agglomerating it with Economic Census in Nepal. At last, Gopal Gurung, Senior administrative officer of Nepal introduced himself and JICA has made its technical support to Nepal Economic census for statistical development of Nepal. In the program, Dr. Kecuk expected that CBS employees would gain knowledge from BPS experience in planning, conducting, analyzing, and disseminating data from Economic Census of Indonesia.

## Session II: Outline and New Challenges of Economic Census 2016

After completion of the short opening event, the main training event was started with the session on Outline and new challenges of Economic Census 2016. The presentation was made by Sasmito Wibowo, Deputy Chief Statistician for Distribution and Service Statistics, BPS Chief Operational Officer, SE 2016. He presented about the Economic Census 2016 of Indonesia focusing briefly on snapshot of EC 2016 and initial results, expected census utilization, confidentiality, statistical units, budget frame, methodology (data collection approach), Data processing, quality control, and socialization aspects. During his presentation he elaborated that EC of Indonesia is conducted in two phases namely listing and census of business activity. In 2016, listing operation was completed in all over the country while the census and survey of business activity would be conducted in 2017. The main purpose of conducting the economic census was to establish foundation for measuring business activities in Indonesia. To achieve this aim, census operation was designed with listing and the census or survey of business activity to be conducted in 2016 and 2017 respectively.

The objectives of conducting listing of census conducted in 2016 were as follow:

- Provide basic information of all economic sectors
  - Provide sampling frame for economic surveys
  - Developing databases and updating statistical business register (SBR)
- Understanding competitiveness of business activities
  - Mapping business competitiveness by Regions
  - Business prospect and investment planning
- To know the business characteristics
  - Business sizes
  - Special characteristics, franchise, e-commerce, online business, multilevel marketing etc.
- Provide complete pictures of levels and economic structures in Indonesia
  - Mapping economic potency by business activities and industries
  - Bench marking economic indicators

During his presentation, he informed that number of non-agriculture establishments has tremendously increased from 9.3 million in 1986 to 26.7 million in 2016 (preliminary figure). BPS- Indonesia is still on the way of data processing of EC 2016. Hence details result has not been published by ISIC categories or other characteristics. He elaborated that economic census 2016 results will be used for business competitiveness namely develop better business strategy; create business alliances and supervision of business competitiveness in the areas. He further mentioned that the EC data will also be used in creating the business profiles of all business units. Similarly, he stated that the EC data will be more helpful in measuring the workers' productivity, business capabilities by type of industries as well as by areas.

In this session, statistical law was also discussed in the context that the article number 16 of 1997 Statistical law of Indonesia has mentioned the individual confidentiality. So BPS will not publish the results in the number of business units is less than 3.

He also informed that the peak data collection period was /will be May 2016 and 2017 respectively. He also mentioned the coverage of the Economic Census which covers micro, small, medium, large businesses, & conglomerates (e.g. multinational companies). He also discussed on different statistical units used in EC 2016. He mentioned that institutional sectors, enterprise or enterprise group, and establishments were the statistical units of EC.

Regarding timeframe and budget allocation, he informed that the EC 2016 of Indonesia was the five years' project extending from 2014 to 2018. In this time span, about 71.3 % of total budget was allocated in main census year 2016 followed by 20 % in 2017. Hence these two years were the important period with the view of census implementation.



Further he explained about the data collection approach in 2016 EC of Indonesia. He mentioned that in 2016, data collection was done using both household approach and location based approach. Combination of household and location based approach was applied to diminish the under coverage error and reduce the double coverage. He explained general idea about the political division of Indonesia for the purpose of conducting Economic Census. He elaborated that country is divided into provinces, provinces to municipalities or regency, municipality or regency to sub districts; sub districts to village, and village to business concentration area and non-business concentration area. Further, both business and non-business concentration area was divided into census block concentration and census block non- concentration. Each enumerator was assigned number of census blocks for enumeration from the respondents.

Mr. Sasmito further mentioned briefly about the data processing which was planned in two phases namely quick processing (target date August 19 2016 ), complete processing (). The decentralized quick data processing was undertaken at BPS regency or municipality while complete processing has been undertaken at BPS Province offices with target date of 15 December 2016. Most of the census forms were scanned using Intelligent Character Recognition (ICR) technology for quick as well as complete data processing.

He also informed about the monitoring approach for data collection as well as data processing of EC 2016. Main purpose of this was to detect and improve field collection and data processing at the regencies or municipalities, and scanner centers respectively.

He also pointed out the budget cut for conducting post enumeration survey which is considered as essential statistical activity to evaluate the census quality. However, to overcome the problems, BPS has formed a quality control team to *monitor, improve, & guarantee business' coverage and to monitor, improve, & ensure content/collected variables.*

He emphasized that public announcement or media campaigning is one of the important census activities to carry out the successful economic census. He informed that the public announcement of EC2016 mainly delivered the messages on goals and benefit of Economic Census 2016, date and duration of census listing as well as in-depth survey, its coverage industries, data collection mechanism, data collection items or variables, and assurance to concerned respondents that the information they provide will not be utilized for any kind of fee or tax collection. It was done for high rate of response in EC 2016. Public announcement was undertaken using different types of mass media like using television show, radios, newspapers, bill board, hoarding board, brochures, talk show,

workshops, seminars etc. Special T-shirts, caps and bags with census logo were distributed to each enumerators and supervisors during census operations.

In conclusion he mentioned that the different strategy and methods employed in Indonesian Economic Census will be more helpful for the planning of Nepal economic Census. He further suggested keeping the minimum set of questions for easy and quick response.

After his presentations, CBS delegates had made a couple of questions in his presentations. He was enquired about existence field organization set up and committees, budget formulation, qualification of enumerators for economic census, number of field workers, are the business units collected in EC registered or not?, what kinds of equipment were provided to enumerators?, what kinds of legal and organizational arrangement exist to conduct census? How coordination and cooperation among the stakeholders was were made for /during census operation? , what percentage of total budget is spent for media campaigning? What was the allocation of households or economic units per enumerator? Was self-enumeration approach also used in census? Is data from the tax office or any other registrar office accessible? And what was the duration of the trainings for the enumerators? The queries put by CBS delegates were answered by Mr. Sasmito and his team. They informed us that enumerators are recruited openly with qualifications having senior high school graduate (12 years of school education), and having clear hand writing. These field workers recruited from open bidding and written examination. Each selected enumerator was assigned on average of 300 households for a month of census enumeration.

Similarly, as statistical law of Indonesia explicitly defined the authority of BPS to conduct Economic Census, they do not make any steering committees for running census rather they call the concerned stakeholders for making input and feedback for better questionnaires and census.

Regarding training of enumerators, they informed that a four days training was conducted for listing operation which mainly included the contents like questionnaires, sketching enumeration map, and Indonesian industrial standard classification etc.

Regarding public announcement, they told that TV advertisement and use of social media like twitter; Facebook etc. were effective in campaigning the economic census field enumeration. With the suggestion and answers of Mr. Sasmito, the session was concluded for the first day.

Day 2:

Session I: Presentation on Form (Questionnaire) of Economic Census 2016

Second day of training was started with the presentation of Dr. (Ms.) Titi Kanti Lesari, Director. She made the presentation on Form (Questionnaire) of Economic Census 2016. In her presentation she explained on regulation/legal basis, economic census phase, who are the respondents? what kind of questions?, questionnaire (listing of business and establishment), type of questionnaire, questionnaire se2016-l1 and questionnaire se2016-l2.

Regarding the regulation/legal basis, she briefly introduced that Census is operated under the established statistical laws and regulations. She also mentioned that duration of economic census is of five years starting from 2014 to 2018 with following five major phases:

1. Preparation and Test: 2014-2015
2. Listing the whole establishment May 2016
3. Complete enumeration of Medium and Large Business and Sample for Small and Micro: May 2017
4. Analysis and dissemination of listing 2017
5. Analysis and dissemination of complete enumeration: 2018

Dr. Titi further explained about the respondents differ according to the type of businesses locations for example located in Permanent location/building, Non-Permanent Location (such as: streets vendors, Sunday market); Pedlar/ packman and Household, such as taverns, online business.

According to Ms. Titi, Economic Census of Indonesia covers the topics like Name of Establishment, Address of Establishment, and Main Activity, Types of business entity, Number of Workers, Business network, Expenditure, Income, Investment, and Constraint and Prospect Business. She further highlighted that the questions on the investment and the constraint and prospect of business will be covered in 2017 in-depth surveys while remaining topics were covered in 2016 census operation.

She informed that following seven types of questionnaires has been or will be used during the economic census period.

No.	Questionnaire	Usage
(1)	(2)	(3)
1.	SE2016-L1	Listing of building and establishment unit
2.	SE2016-L2	Enumerate the characteristic of establishment,
3.	SE2016-L1.P	Update business unit that printed in L1.P

4.	SE2016-L2.P	Updates characteristics of all business units / company that printed in SE2016 - L2.P
6.	SE2016-RBL	Recapitulation of the registration with the list - SE2016-L1 and results of updating the list – SE2016L1.P
7.	SE2016-KB	Recapitulation of the business / company ( the number of sheets SE2016 - L2 )

Questionnaire form L1 was designed with the purpose of listing of building and establishment unit. This form included the questions like physical location (address), details of assigned field staff, summary information, remarks, and listing of business or corporate units in Block 5. The block 5 of questionnaire contained the topics of investigation like segment number, building number, census house number, use of census house (code to be used) like 1. Business place 2. Combined 3. Residence house 3. Office (Places of worship, organizations (professional, civic, social, political), social institutions) 4. Agricultural business premises, offices of governments, embassies / consulates, building empty ), serial number of household, name of the head of household, number of establishments in the household, serial number of business enterprise, Name of Establishment/Owner of Establishment, Code of location of Household establishment).

She also explained about questionnaire L2 which contains the 23 questions on different business characteristics. Questionnaire L2 mainly contains address information of business unit, name of in-charge of business, sex of in-charge, year the business established, type of business entity, principal activity and principal products, business network, number of branches/ representative offices/ supporting units, name of head offices, number of persons engaged, working /operating months, total value of business or establishment expenditures, use of internet media, status of operation of business on franchise basis, total value of production or sales or revenue.

#### Session II: Presentation on Methodologies of Economic Census 2016

Session 2 of day 2 was started with the presentation of Mr. Heru Margono, Director. He presented about the methodologies of EC 2016 mainly focusing on sample frame, area coverage, sample list, listing method, and establishment identification. He informed that sampling frame was based on the population census 2010 data from which households doing nonagricultural activity was selected for sampling frame. Village was stratified into concentration business and non-concentration business based on the number of buildings for each economic activity. Further he showed a snapshot of census block stratification

which was useful to categorize the census block into concentration business and non-concentration business. He also mentioned about the area coverage made in EC 2016. He explained that each municipality and regency is divided into urban and rural which was completely different in defining the urban and rural in the context of Nepal. In Nepal, area of municipalities is defined as urban and area of village development committees is defined as rural.

However, complete enumeration method was employed in concentration and non-concentration business areas of municipalities and only urban areas of regency. Sampling scheme in EC 2016 was employed in concentration business (50% sample) and non-concentration business (25% sample) areas. Census blocks were independently selected in each concentration business area and non-concentration business area of each rural area of regency. Systematic sampling scheme was applied to select the census blocks from each stratum. During the presentation, sample list of census blocks for EC 2016 was also demonstrated. From the presentation it was known that listing was carried out door to door in each selected census block and pre-printed questionnaire (SE2016-L1.P) was used to check for economic activity building. Also it was known that enumerator need to identify economic activity carried out in each residential building namely in residential building, pedlar/packman, and in non-fixed location. Then enumerator need to identify that whether the economic activity was establishment or not. It was also interesting to know that information on economic activity carried out in fixed location was obtained from those fixed location while the information on the economic activities carried out in non-fixed location were collected from the household of the owners. He also showed the hierarchy of organization.

### Session III: Presentation on Census Mapping of Economic Census 2016

Ms. Isra Natalisa Ginting, Deputy Director of mapping section presented about the census mapping works carried out for EC 2016 in session 3 of day 2. She presented with title statistical area framework. At first she mentioned about the general hierarchy of administrative structure of Indonesia which was linked with census block. It was useful to know the administrative hierarchy of census. She explained that country is divided into provinces, provinces into regency or municipality, each R/M into District, each district into urban or rural village. Each village (urban or rural) was divided into three types of census blocks namely common, special and preparation. Enumeration map was prepared for each type of census block. She further explained that such census block maps are essential and required for undertaking the statistical activities in Indonesia. Without census block maps, census or survey is hard to be conducted.

It was also known that each census block contained 80 to 120 households. She further informed that statistical area framework is developed using sketching boundary on satellite imagery and making village sketch maps. On the base of village sketch maps, census block sketch map is developed by the field worker at the field. This was scanned and made a database of jpeg. She also demonstrated some sample sketch maps in the presentation. She also demonstrated the method of coding the census blocks, index maps. She further demonstrated the geodatabase of statistical area border, polygon of statistical area and satellite imagery. It is very useful to develop geo-database for making enumeration area maps in each statistical operation. She further informed that in 2010 population census about 842, 850 census blocks were developed while it was 844,129 in EC2016.

Economic census map updating was conducted in 2015 on the base of area frame 2010 population census. The kind of updated tasks were making sub-census block maps if the number of buildings is more than 160 in the concentration census block. If the new buildings are contained in the previous Preparation map, then it was split into common census block maps. Also census block map was developed for the area where economic buildings are non-existent. The census block maps were used by enumerator to identify their locations and identify the establishments of households during listing operation and filling up form L2. After her presentation, she showed the practical demonstration of geo-database in ArcGIS, real sketch maps, printing via plotters. However, the delegates were much impressed with strengthened GIS infrastructure and continuous updating of statistical area frame work. Such kinds of infrastructure are inevitable for carrying out any statistical surveys.

#### Session IV: Presentation on Data Processing and Monitoring Economic Census 2016

Ms. Marlina Kamil Director presented the topics on the data processing and monitoring of Economic Census 2016 in forth session of day 2. She mainly focused her presentation on different aspects like number of document to process, duration, data capture, hardware, software, human resource, and type of questionnaires for processing, data processing system, and monitoring system. She provided the information that it was estimated document to process more than 30 million (from block census more than 530 thousand and estimated business more than 26 million). Four types of questionnaires were made used for data processing. Scanning was used as data capture technology. RBL (recapitulation of the business each block census) forms were processed in one month duration while it is estimated about three months to process L1 (registration of building and business), L2 (business information), and KB (control blocks for documents L2) forms.

She introduced about hardware required for processing which consisted Scanner, Server, Workstation, PC, and Network Device. As data processing was decentralized, such hardware were made distribution and set up in 33 Provincial Data Processing Center (DPC), and 477 Regency DPC. Workstation and Server including the Operating System were installed in PCs. Regarding software requirements; data capture application was developed using Kofax Capture. In house application for validation was developed using Microsoft C#. Document management system was developed using Total Agility. Monitoring system was developed using web application.

Two types of trainings were organized for the human resources involved in data processing namely the use of devices and infrastructure, and the use of data processing system. Two persons per each BPS Province were trained as a supervisor in Province DPC and a trainer (*to train the BPS Regency*). Again BPS Province trained 1 person each BPS Regency to become supervisor for Regency DPC.

Regarding data processing system, the following information was gained in the session:

1. SE2106 –RBL was processed in BPS Regency
2. Listing Document ( SE2016-L1, SE2016-L2, and SE2016-KB) was processed in BPS Province
3. Document management system (SIPMEN) is processed both in BPS Regency and BPS Province. This system record the flow of document from receiving document filled by enumerator until the document is ready to process using data capture.

She further informed that BPS had developed monitoring system via website. Process activities that are monitored included the progress of field enumeration activities (Enumeration monitoring), document flow (Document monitoring), and data Processing activities (Data processing monitoring). She also displayed the document flow after enumeration which was very useful to plan the data processing system in Nepal. She also explained the document flow from regency to province DPC of BPS, scan, recognition, document review, and quality control, correction, completion and release (export data) process in brief. In summary, the presentations were very helpful in understanding the whole system of data processing minutely. The knowledge and practices carried out for DP will be more helpful in planning and implementation of data processing system of EC 2018 of Nepal. It was noted that although BPS Indonesia has lot of experience and knowledge towards processing of EC data, BPS was not at the stage of applying the e-census and CAPI technology for data capture. However, the management for data processing was more impressive.

In conclusion, the technical exchange provided unique and valuable opportunity to learn on the wide range of activities, from management, planning, preparation, to

implementation and evaluation. The lessons learnt are very much applicable for Cambodia and we do hope that the cooperation of Statistics Indonesia, Statistics Cambodia, and Statistics Japan and JICA will even further strengthened in the future.

### Day 3: Visit to Province BPS – Yogyakarta

According to schedule Nepal delegates moved Jakarta to Yogyakarta province office of BPS on 12 October 2016. A short introduction was made in BPS- Province office of Yogyakarta. Mr. Bambang Kristiano introduced his staff presented in the event. After shortly introduction with all BPS employees our sessions were started. Mr. Bambang Kristianto, Director the head of Province office BPS, gave the presentation on "ECONOMIC CENSUS 2016 BPS PROVINSI D.I. YOGYAKARTA".

During his presentation, he also introduced the organization structure on province level of BPS in Yogyakarta. He informed the existence of social statistics division, planning section, production statistics section, construction statistics section, agriculture statistics, economic census, and data processing sections. He mentioned in the beginning that any statistical activities are carried out with motto of professional, responsive, innovative, modern, enthusiastic motives. He told without this feeling, statistical activities cannot be succeeded.

The main points of the presentations were as follow:

- Target Of Listing Result Economic C2016
- Quality Assurance of EC2016
- Quality : Relevant, Accurate, Timely , Coherent, Accessibility, Easily Interpreted
- Accurate Methodology, technical /administration on aspect , & intensive socialization to business actors /household become the leverage of content quality dimension
- Indicator of Accurate Quality : number of business company and content variable
- The Utilization of Result EC 2016

He elaborated that the main aim of the listing operation of EC 2016 in Yogyakarta was to make result of basic economic indicators like the number of employees, status of online business, business turnover up to the village level, prepare complete directory of medium and large non-agricultural business companies, directory of small business units in urban areas. He also mentioned that the main variable of economic census was business turn over. Further, it was known that quality control was proceeded by investigation techniques using secondary data, big data and statistical analysis. Although the estimated number of business units were 525518 in Yogyakarta Province, the actual enumerated business units was 533,900 units. It was estimated that 900 small business companies did not response in EC 2016 while it was 100 for medium and large business companies.



Regarding the quality control strategy, he made elaboration that a formal letter of DG of BPS was dispatched to all ministries as well as about 500 big business companies group for having the response in EC 2016.

All the medium and large business units as well as small business units in the selected census blocks were enumerated. For the non-response, enumerators had to visit up to four times in the enterprise or business units, which were operated by BPS Regency office. To minimize the coverage and content errors, the enumerators were trained on subject matters in detail. Under coverage and over coverage errors were estimated to be between 1 to 20%, content of business turn over estimated by sector wise which was found to be the lowest rate in health services and highest in construction and transportation sectors. Still about 1 to 25% content of ISIC codes is wrongly coded during data collection. Manuals for questionnaires as well as data editing and coding are also developed to ensure the data quality. Further, the establishments are revisited or queried again if the data provided by them are inconsistent. This was done for maintaining the good data quality. Task forces constituting the subject matters experts of BPS Provinces are also formed for effective monitoring and assist BPS in the regency.

Similarly Mr. Bambang Kristianto's made second presentation on "EVALUATION of Economic Census 2016". He again mentioned that economic census operation was executed in all areas in special region of Yogyakarta which covered all scales of economic units except agriculture sectors. He emphasized that complete enumeration was carried out for medium and large business enterprises and in urban areas only.

The main points discussed in this presentation were:

- Progress of listing stage
- L1 and L2 form
- Monitoring of listing EC2016
- System of monitoring is guidance for evaluation and analysis.
- Team of subject matter has estimated the result before 22 June 2016.

Although the enumeration period of listing was set for one months, it was further extended to 15 days. All BPS staff were mobilized for field enumeration monitoring to minimize the under coverage of business units. Monitoring was intensively carried out to minimize the coverage as well as content errors.

The forms L1 and L2 were handled with care by administration unit of BPS-Yogyakarta. All the records of forms were managed properly. He also informed that the difference was seen between the estimation made by BPs HQ and BPS province office.

As a global issue, BPS-Yogyakarta has also problems of some enumerators for not probing properly to get the right information. Some of the major business enterprises and economic units were also missed from census operation. Issues like some census blocks not properly updating, not complete listing within selected census blocks, reluctant to response by owners of business, not complete enumeration of forms, mainly reluctant to fill or respond on income and expenditure information were still existent.

The delegated from Nepal side made queries and discussed on the data collection, quality and timeliness and respondent response. The discussion was also made about the coverage of census, decentralization on mapping of economic census and data processing. The participants of BPS were also interested about our countries practice on population census, manufacturing census and other surveys. CBS delegates also discussed on the system of recruitment of enumerator, work assignments to enumerators, training of enumerator.

#### Day 4: Visit to Province BPS – Yogyakarta

On October 13, session was started at 9.00 AM. .Mr. Arjuliwondo, Deputy Director, present on 9.00 to 10 on the topics "Data Processing of Economic Census 2016". During his presentations the following main points were discussed:

- Data processing methods
- Data Capture
- Data Entry
- Sequence Data Processing
- Stage pre-computer data processing
- Stage data processing by computer
- Data Processing System (KTA)
- Document Management System (SIPMEN)
- Website Monitoring ([monitoring.bps.go.id](http://monitoring.bps.go.id))
- SMS Gateway
- Pre-Processing Computer
- Monitoring Website SE2016
- Web Content monitoring
- completion field , The reception at the district / city
- Reception in the editing coding ,Completion editing coding

- processing RBL, Shipping to Province
- Acceptance by province, acceptance by provincial data processing
- Storage warehouse, processing L1
- L2 processing, L2 processing details
- recapitulation district / city, recapitulation province

Similarly the second presentation was made by Mr. Sugeng Waluyo, Deputy Director present on the topics " Execution of Economic Census-2016 in Yogyakarta: Lesson learned". The main points of this presentations were as follow:

- Steps Of SE2016
- Preparation
- Sampling Units
- Enumerator Recruitment
- Socialization
- Training of Enumerator
- Collecting
- Problems data collecting
- Enumerator supporting
- Enumerator assisting
- Processing
- Editing-Coding
- Receiving -batching
- Data processing
- Clean data process accelerating
- Finishing
- Data Output Discussion
- Re-entry Data
- Finalized

It was also discussed on the system of data processing and link of processing unit with head quarter and also on municipality and village. The lessons learnt from CE2016 and way of implement that lacking which occurred during previous CE2006 were also discussed. The mode of payment of enumerator in population census 2010 was per household basis but EC 2016 was made only on monthly salary basis. So they suggested to increase the coverage, payment should be made on household or establishment basis payment system. Nepalese delegates replied them that they will also take this suggestion into carefully for payment.

After presentation the delegates had an opportunity to observe the data processing unit, where the data processing of EC forms were still on the process. The delegates got to know the various aspects of processing practically at BPS lab. The BPS data processing team explained about the process of data capture to the consistency checking. Also the delegates had an opportunity to observe the kinds of business units or establishments at the field which were covered in the Economic Census of Indonesia. It was really great opportunity to visit respondent and learn about them on the field. After field visit we were returned back in Jakarta as our schedule.

Day 5: 14 October, 2016

Session I: Presentation on Tabulation and Analysis of the result of Economic Census 2016 and Data Quality Control Strategy (SPKD) Economic Census 2016

The first half the session of the fifth day of training was started with the "presentation on Tabulation and Analysis of the result of economic census" by Ms. Haerani Natali Agustini, Director of Analysis and Developments of Statistics. In this session, at the beginning, she explained the foundation for measurement of business activities and described the goals of listing result of 2016 Economic Census. The main goals of listing result of EC2016 are:

- To present a basic information about business of all non-agricultural sectors
- To provide an overview (complete picture) of levels and structures of Indonesian economy

In her presentation she explained the basic variables of Listing Activities in SE 2016. The basic variables are: Region Identity, ISIC (KBLI), sex of employer, business entity, Categories of business activities, business network, total employees, Production values / revenues, and Business expenses values.

She also explained the challenges in presenting the results. Two types of enumerations applied: Complete enumeration in urban areas, and samples in rural areas. It may have implications on:

- Estimation of number of businesses for rural areas
- Presentation of the result of SE2016 for small area of statistics would be challenging -- e.g. mapping of small businesses until the lowest administrative area (sub-district level) may not be easy to accomplish and
- Another challenge is how to estimate certain business characteristics (e.g. sector of business activity) in rural areas?

Conceptual changes in field enumeration for micro and small businesses from business location approach in 2006 Economic Census to households approach in 2016. Result of

2016 economic census cannot be fully compared to the results of SE2006 especially in comparing number of business by type of business location.

In her presentation, she explained the Tabulations design which was categorized based on: Region/Province, Size/scale of companies, Business locations, Business entity status, Utilization of internet media, Franchise system application, Sector of business activity, Business main activities. She also explained the "*Definitions of Micro, Small, Medium and Large Scales Enterprises*" during the presentation. In her presentation, she explained the objectives of Design of tabulation and its output as follow:

Objective 1: To provide a complete picture of the levels and structures of the economy.

Output: Mapping of businesses based on economic categories (sectors) to show the economic potential of a region and levels of economy will be used as Benchmarking of economic indicators (GDP, employment, etc.)

Objective 2: To obtain basic information of all economy.

Output: sampling frame for various surveys

Objective 3: To obtain the characteristics of businesses.

Output: Characteristics of business based on business scales and characteristics of a unique business (e-commerce, business on the basis of franchise system, etc.).

She also explained the tabulation plan and provides the example of tabulation plan at the end of her presentation. The Examples of tabulation plan:

- Number of businesses/companies by business size/scale
- Number of businesses/companies by business location
- Number of businesses/companies by industrial category (sector)
- Number of businesses/companies by business main activity
- Number of businesses/companies by number of workers
- Number of businesses/companies by total revenue
- Number of businesses/companies by year of starting business
- Number of businesses/companies by business qualification (special for hotel and construction)
- Number of businesses/companies by utilization of internet
- Number of businesses/companies by sex of owner/person responsible for running the business
- And so on.....for cross tabulation across characteristics and more than 100 tables will be produced (the draft of tabulation plan has been prepared).

Data Quality Control Strategy (SPKD) Economic Census 2016

The second half of the first session of the fifth day of training began with the "presentation on Data Quality Control Strategy of Economic Census 2016" by Dr. (Mr.) Said Mirza Pahlevi, Deputy Direct. During the session mainly he explained the missing data, Re-visitation and Imputation process. The problems such as unit nonresponse and item nonresponse are raised during the census. Despite investigators' best efforts, missing data were inevitable.

In BPS team was formed to handle missing data problems on SE2016-L2 questionnaire due to item nonresponse. Especially, question on business revenues/output, which is important indicator for classifying into a scale of a company.

In order to minimize missing data on SE2016: A special task force team was formed in each province and when task force person fails to obtain a value of a missing data through interview, an estimate value is provided for imputation purpose.

The Benefits of imputation using data quality strategy are: Completes the data matrix and missing data are handled comparably across secondary data analyses. In this session a lot of interaction was done regarding the quality control of the data.

Session II: Presentation on Dissemination of the result of Economic Census 2016

The second session of this fifth day was begins at 10:00 o'clock in the morning. This session was led by Mr. Adhi Wiriana, Director of Statistics Dissemination. He made the Presentation on Dissemination of the results of Economic Census 2016. He explained the dissemination media like press release, Official website (EC 2016 Website), Books/Publications, Leaflet/Booklet/Infographics and other media that were used and intended to be used for data disseminations.

PRESS RELEASE:

1. Schedule and Data Presentation (Headquarter): On 19 August 2016, preliminary data were presented in the headquarter based on group of islands (Sumatera, Jawa, Kalimantan, Sulawesi, Ambon dan Papua) and
2. Schedule and Data Presentation (Provinces): On 1 September 2016, data were presented based on regency/municipality based on the standard template made by BPS Head Quarter and comparative data is only allowed in the same island.

EC 2016 WEBSITE (<http://se2016.bps.go.id>): For the census data dissemination purpose BPS HQ will be prepared official website. For national level, province wise data will be presented while for province level municipality/city wise data it will be. All data will be based on L1 and L2 and the website will be launched at the mid of December 2016. The main features of the website: Table, Graph, Digital map, Comparisons between regions, Infographics. Other features are data search, data presentation based on (the smallest) KBLI (ISIC) codes.

BOOK/PUBLICATION : Business directory is presented by business category (finance, industry, real estate, health and etc.). Publication contains national and province levels data. The publication titles, variables, and presentation details will be decided after data processing.

BROCHURE/LEAFLET/BOOKLET/INFOGRAPHICS: For the purpose of census data dissemination, leaflet templates, booklet and infographics will be prepared by BPS HQ, but BPS Provinces may create their own templates. Leaflet, booklet and infographics will be printed and distributed, they can also distribute them via website and social media. Paper presenter showed the leaflet/booklet/info graphics as the examples in his presentation which were attractive and applicable.

Example of Info graphic



Example of Info leaflet



Session III: Closing (wrap up)

The third session of the fifth day was closing/wrap up session. The wrap up session was began at 11:00 o'clock at BPS HQ, Building 2, 2nd Floor, Room Small B immediately after concluding the Presentation on Dissemination of the Result of Economic Census 2016. In the this wrap up session , Economic Census Team(ECT) expected that Nepalese delegate particularly, CBS delegates would gain knowledge from BPS experience in planning, conducting, analyzing, and disseminating data from Economic Census of Indonesia.

In this wrap up session, JICA Chief Advisor Nishi San once again mentioned and explained the objectives of the training organized in BPS Indonesia and its benefits to Nepalese delegates for implementing economic census 2018 in Nepal with the technical assistance of Japan International Cooperation Agency (JICA). This Training on the 2016 Economic Census of Indonesia provides the wider knowledge and a lot of information on economic census from BPS to the Nepalese delegates. He said "He is quite hopeful of utilizing this knowledge and information in the planed economic census 2018 in Nepal by delegates". At the end of his saying, he gave the thanks to chief statistician of BPS, Indonesia and all the paper presenters and staffs of BPS HQ and BPS DI Yogyakarta Provincial Office for accepting request letter to organize training and their kind cooperation.

Mahesh Chand Pradhan, Director of Economic Census Section, on behalf of delegate team and CBS appreciated BPS Indonesia for accepting the request of CBS Nepal to organize the training on the 2016 Economic Census of Indonesia. He explained CBS will have a major role in the context that country has entered in achieving the Sustainable Development Goals by 2030. In this perspectives, he emphasized the Economic Census of Nepal will be most important statistical activities to supply the basic economic indicators. The knowledge and sharing of experiences of the Economic Census 2016 of Indonesia will be the important ingredients to plan and implement the EC in Nepal. He also mentioned that such technical exchange programs will enhance the friendship between two statistical organizations for a long period. Such programs are necessary events to be organized in the near future for strengthening the global official statistical systems.

On the behalf of delegate team and CBS, he gave the grateful thanks to Chief Statistician, BPS for accepting the request made by CBS Nepal. He also expressed pleasant thanks to Paper presenter and the others BPS staffs for sharing their knowledge and experience as well as for their cooperation and hospitalities to Nepalese delegate.

At the end of the session, group photos were taken in the same room and close the formal session. For few minutes, an informal discussion between Nepalese delegate and Economic Census Team of Indonesia was held after formal session. At last the chief Statistician Dr. Kecuk Suhariyanto, Chief Statistician of BPS Indonesia see off to us (Nepalese delegates) and we leaved the BPS formally for this mission.

#### Session IV: Courtesy Call to JICA Indonesia Office

The last (forth) session of the fifth day was Courtesy Call to JICA Indonesia Office. We visited JICA Indonesia Office after leaving the BPS for Courtesy call. The Courtesy call to JICA Office was begun at 1:30 PM at Central Senayan II 14<sup>th</sup> floor, Jakarta. Nepalese delegates visit the SAITO Mikiya, Senior Representative and KAMBE Hiroaki, Representative, Indonesia office. At the beginning of the session, we introduced between each other and exchanged our visiting cards. After introduction, JICA Chief Advisor Nishi San briefly explained the objective of the mission and why the training organized in BPS Indonesia? He also elaborated that CBS, is planning to implement the Economic Census in 2018 with the technical assistance of Japan International Cooperation Agency (JICA) under the Capacity Development for the implementation of Economic Census in Nepal.

Also we are grateful to BPS for wonderful arrangement of training and sharing the experiences about the ongoing Economic Census 2016 in Indonesia. We are equally grateful to JICA-Indonesia for cooperating and coordinating the event in Jakarta. We are indebted to Central Bureau of Statistics Nepal for giving the opportunity for the capacity development in implementing the Economic Census for the first time in Nepal.



On the behalf of the delegate team and CBS, Mahesh Chand Pradhan appreciated JICA, Indonesia for coordinating, arranging and co-operating the training program in Jakarta. He also elaborated the motive of conducting the Economic Census in Nepal as first endeavor in the country. In this regards, he explained the Economic Census of Nepal will be most important statistical activities to supply the basic economic indicators. The knowledge and sharing of experiences from the Economic Census 2016 of Indonesia will be the important ingredients to plan and implement the EC in Nepal. He mentioned that such technical exchange programs will enhance the friendship between two statistical organizations for a long period. He also added, such programs or events are necessary to be organized in the near future for strengthening the global official statistical systems.

In this courtesy call session, Mr. Anil Sharma gave grateful thanks to JICA and BPS, Indonesia for their cooperation and support for the mission and expected that the training will be more fruitful to start Economic Census 2018 in Nepal.

Mr. Rajesh Dhital also expressed appreciation for their cooperation and coordination for the training on the **2016 economic census of Indonesia**. Knowledge acquire from the training will also be very helpful in planning and implementing the economic census as well as in census of manufacturing establishments along with Economic Census.

At last, Gopal Gurung, Senior administrative officer of Nepal appreciated the JICA, Indonesia for the cooperation and arrangement of the training. He also mentioned JICA has made its technical support to Nepal Economic census for statistical development of Nepal.

On the behalf of JICA, Indonesia, Mr. SAITO Mikiya, Senior Representative welcome to us and expected that CBS delegate would gain knowledge from BPS experience in planning, conducting, analyzing, and disseminating data from Economic Census of Indonesia. He also expected that acquired knowledge and sharing of experiences from the Economic Census 2016 of Indonesia will be the important ingredients to plan and implement the EC in Nepal. At the end, Mr. SAITO Mikiya and KAMBE Hiroaki together closed the session and see off we delegate.

#### Conclusion:

The exchange visit program to BPS – Indonesia was organized under the project on capacity development for the implementation of Economic Census 2018 in Nepal with the technical assistance of Japan International Cooperation Agency (JICA which has. BPS has four decades of experiences on conducting the Economic Censuses in Indonesia. The training was successful in obtaining the useful information and knowledge on various aspects of issues of Economic Census.

It was known that Economic Census of Indonesia has been operated based on the law - Indonesia Republic Act No. 16 of 1997, Statistics section 8, providing a census economic tasks and responsibilities Statistics of Indonesia (BPS). The Economic Census is usually implemented every ten years. Economic Census is considered as the primary source of statistical database constituting the data on various economic sectors, except agriculture sector that the data collected through the Agriculture Census. The reason behind the success of economic census in Indonesia was its strength in legal authority, organizational set up at the level of regency and municipality level, a large number of permanent human resources, government ownership on EC operation, huge mass media campaigning, well statistical infrastructure like mapping, data collection and data processing, and motivation of BPS.

Mainly the knowledge and experiences on the following issues were received from the BPS –Indonesia

- overall census management ( like the importance of relevance, census planning, quality assurance, organizational structure, use of sampling),
- preparatory tasks like establishing the basis of enumeration, workforce structure, mapping, questionnaire design),
- field operations (publicity, recruitment, training),
- Distribution and return of materials,
- Data processing (strategies, location of processing centers, quality assurance),
- census products (dissemination, product development), and
- evaluation measures of economic census

In conclusion, training was successful in providing a snapshot of overall management of economic census on Indonesia. In coming days, abroad trainings on some thematic matters like mapping, application development, data processing, and data dissemination are also necessary for the capacity development of CBS to undertake Economic Census in the country.

References:

- The power point slides and materials provided by BPS-Indonesia (the soft copy will be sent by JICA Chief Advisor F. Nishi).

Photo Gallery:



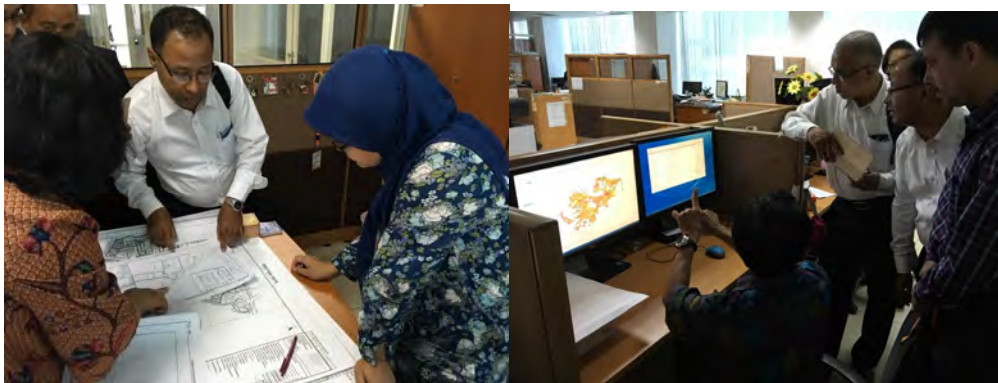
**Figure 1** Courtesy Visit of CBS delegates with Dr. Suhariyanto (Kecuk) Director General of BPS-Indonesia



**Figure 2** Opening Event of the Training on the 2016 Economic Census of Indonesia in BPS-HQ Jakarta



**Figure 3 Training at BPS- Province Office in Yogyakarta**



**Figure 4 Observation of Preparation of Census Blocks in GIS Lab, BPS**