

UNITED NATIONS  
ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC

STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC (SIAP)

**Third Regional Training Course on Sampling Methods  
for Producing Core Data Items for Agricultural and Rural Statistics**

**10 – 21 October 2016  
Jakarta, Indonesia**

**CONCEPT NOTE**

**I. BACKGROUND & RATIONALE**

The *Global Strategy to Improve Agricultural and Rural Statistics* (Global Strategy) provides a framework for national and international statistical systems to produce and to apply the basic data and information needed to guide policy on rural development and sustainable agricultural production. By identifying country-specific minimum core data and statistics, it aims to significantly increase the availability and quality of agricultural and rural statistics, produced by a sustainable agricultural statistical system with appropriate institutional, human and financial capacity.

A number of constraints affect production of country specific minimum core set of agricultural and rural statistics, including lack of technical skills of staff to apply appropriate sample survey methodologies. With many of the statistical data production systems for crops, livestock, horticultural, aquaculture and fisheries anchored on sample surveys, it is imperative that the technical capacity of national agencies be strengthened through adoption and awareness of best sampling methods to increase availability of and enhance quality of core data items. Towards this end, the Statistical Institute for Asia and the Pacific (SIAP), the Food and Agricultural Organization (FAO) and BPS-Statistics Indonesia will conduct the *Second Regional Training Course on Sampling Methods for Producing Core Data Items for Agricultural and Rural Statistics*.

The course will run from 10– 21 October 2016 in Jakarta, Indonesia.

**II. OBJECTIVES OF THE TRAINING COURSE**

The course aims to provide technical guidance on the selection and application of appropriate sampling methods for producing the minimum set of core data items for agricultural and rural statistics. Specifically, the objectives of the course are to:

- (i) examine the minimum set of core data items for agricultural and rural statistics in the context of the application of sampling methods for data collection and production of associated statistics and indicators and
- (ii) increase capability of participants in designing sample surveys for production of agricultural and rural statistics

### **III. LEARNING OUTCOMES**

By the end of the course, participants are expected to be able to:

- (a) Describe country practices in using sampling methods for core agricultural data in terms of the language and concepts of statistical sampling (sampling techniques, sampling frame, estimation, etc);
- (b) Demonstrate understanding of and ability to apply sampling methods through course case study exercises; and
- (c) Evaluate and determine the suitability of sampling methods in collecting and producing minimum core set of data items for agricultural and rural statistics in their respective countries.

### **IV. TARGET PARTICIPANTS**

SIAP will invite national statistical offices and statistical units of ministries engaged in the production of agricultural and rural statistics of *priority countries* of the Asia-Pacific Regional Action Plan to implement the Global Strategy to nominate qualified officials to participate in the Course. To be accepted to participate in the Course, nominees should:

- Be senior and middle level government statisticians directly engaged in the design of primary data collection of data on crops, livestock, horticulture, fishing and aquaculture statistics and in producing survey estimates of associated statistics and indicators;
- Have technical, training and managerial responsibilities covering statistical surveys and other data collection systems relating to collection and production of agricultural and rural statistics;
- In addition to practical experience in designing sample surveys, applying sampling techniques and producing statistical estimates, have sound knowledge of basic sampling theory and applications; and
- Are proficient in written and verbal communication using the English language.

Approximately 25 participants will be selected to attend the course.

## V. COURSE DESIGN AND CONTENT

### Design:

The course will involve a mix of lectures, individual assessment exercises, and case study exercises. The training design also features knowledge-sharing on country practices and methods.

### Content of the Course:

Module	Content
Module 1: Sampling in the Context of the Minimum Set of Core Data Items	<ul style="list-style-type: none"> <li>• Overview of the Global Strategy for Agriculture and Rural Statistics and the Asia-Pacific Regional Action Plan</li> <li>• Minimum Set of Core Data Items: Output, Resources and Input Variables</li> </ul>
Module 2: Review of Basics of Sampling Methods: Probability Sampling, Sample Selection and Sample Design and Estimation	<ul style="list-style-type: none"> <li>• Terminology, concepts and definitions</li> <li>• Systematic sampling</li> <li>• Objectives and uses of stratification in sampling design</li> <li>• Objectives and uses of clustering in sampling design</li> <li>• Objectives of multi-stage sampling and illustrative designs</li> <li>• Sampling errors and design effects</li> <li>• Estimation, sampling weights and variance estimation</li> <li>• Sampling frames</li> </ul>
Module 3: Sampling Methods for Crop Cutting Surveys  Module 4: Sampling Methods for Horticulture Surveys  Module 5: Sampling Methods for Production of Livestock Statistics  Module 6: Sampling Methods for Production of Fishing and	<i>For each module:</i> <ul style="list-style-type: none"> <li>• Basic concepts, variables (output, resource and input), survey objectives and statistical units for survey collection of core data and estimation of basic indicators</li> <li>• Sampling designs</li> <li>• Estimation Methods for Output, Resource and Input Indicators</li> <li>• Data Collection Tools: Considerations in</li> </ul>

Module	Content
Aquaculture Statistics	designing tools to facilitate sampling requirements <ul style="list-style-type: none"> <li>• Field Operations: Ensuring proper implementation of sample design and selection and minimizing non-sampling errors</li> </ul>

## VI PRE-COURSE REQUIREMENTS

[The required documents should be sent to [staff@unsiap.or.jp](mailto:staff@unsiap.or.jp) no later than **4 October 2016.**]

The course will promote knowledge sharing among countries as well as includes provision of expert advice. The inputs required from participants to be submitted to SIAP prior to the training course are:

- (i) Country paper documenting the sampling methods and techniques for agricultural surveys conducted in the country on the topics outlined for Modules 3 – 6 in section V. The paper should describe specific methods used, rationale, special considerations, constraints and plans for improvement (if any). These papers will be the basis for presentations and discussions on country practices and methods in relevant training sessions.
- (ii) In relation to the constraints and plans for improvement mentioned in the country paper, a one-pager listing 3-5 questions on specific issues regarding application of sampling methods that are relevant to addressing the constraints or/and carrying out the plans for improvement.