CONCEPT NOTE

Regional Training for SAARC Countries on Master Sampling Frames for Agricultural Statistics

Date: 19-23 November, 2018

Venue: Colombo, Sri Lanka

Jointly organize by Regional Office of the Global Strategy, Improving Agricultural and Rural Statistics, Food and Agriculture Organization of the United Nations (FAO) and SAARC Secretariat

1. Background

The *Global Strategy to Improve Agricultural and Rural Statistics* (GS) is a multi-partner initiative endorsed in 2010 by the United Nations Statistical Commission. The GS aims to significantly increase the availability and quality of agricultural and rural statistics by developing the relevant institutional, human and financial capacities. It provides a framework and a blueprint to meet current and emerging data requirements and needs of policymakers and other data users. Its goal is to contribute to greater food security, reduced food price volatility, higher incomes and greater well-being for rural populations, through evidence-based policies. The GS is centred upon three pillars: (1) the establishment of a minimum set of core data; (2) the integration of agriculture into National Statistical Systems (NSSs); and (3) the sustainability of the statistical system through governance and statistical capacity building.

As indicated in the GS foundational document, the implementation of the Second Pillar "begins with the development of a Master Sampling Frame (MSF) for agriculture that will be the foundation for all data collection based on sample surveys or censuses". Indeed, the use of an MSF has several advantages. For example, it enables the selection of all probability-based samples of farms and households, thus guaranteeing more coherence and efficiency in the production of basic statistics in the long term. It also allows for farm characteristics to be connected with those of the households, as well as with the dimensions of both land cover and land use.

The research component of the Global Strategy has produced a number of technical reports and guidelines dealing with improved statistical methodologies for collection of agricultural and rural statistics. The Handbook on Master Sampling Frames for Agricultural Statistics is one

among various and has been an important contribution of the GS to countries that are in the early stages of building an MSF or improving an existing MSF. The adoption of improved methodologies for the creation and use of an MSF could help countries to prioritize the required technical assistance from development partners and capacity building requirements to meet current and emerging data requirements for making evidence based policies and monitoring Sustainable Development Goal (SDG) indicators.

The South Asian Association for Regional Cooperation (SAARC) is a regional inter-governmental organization, which was established with the signing of the SAARC Charter in Dhaka on 8 December 1985. SAARC comprises eight Member States: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. The objectives of the Association, as outlined in the SAARC Charter are, to promote the welfare of the peoples of South Asia and to improve their quality of life; to accelerate economic growth, social progress and cultural development in the region and to provide all individuals the opportunity to live in dignity and to realize their full potentials, among others.

SAARC has around 20 agreed thematic areas of cooperation and statistics is one of them. Meetings of the Heads of SAARC Statistical Organizations (SAARCSTAT) were introduced to provide crucial statistical information to take informed-decisions in relevant areas and to track progress. So far, SAARCSTAT held nine Meetings. Although agriculture statistics was theme for the 6th SAARCSTAT (June 2014), rural statistics is yet to be duly highlighted. Eighth Meeting of the SAARC Technical Committee on Agriculture and Rural Development (TCARD) (Dhaka, April 2016) appreciated FAO's decision to include SAARC in the Regional Steering Committee for Asia and the Pacific for the Global Strategy to Improve Agricultural and Rural Statistics (RSC) since 2015 and expressed the hope that the collaboration would lead to strengthening of SAARC's capacity in rural statistics.

SAARC Agriculture Centre (SAC) was established in 1988, with the mandate of agricultural research and development, policy planning, and knowledge management. The SAC has also been contributing to the compilation of regional agricultural statistics through publishing Statistical Data Book/Statistical Bulletin since 2002. Statistical Data Book publications, however, discontinued in 2010 due to some constraints.

2. Objectives of the Training

This training programme aims to provide details of the Guidelines on Master Sampling Frames for Agricultural Statistics and to facilitate the transfer of knowledge to the staff involved in the construction, use and maintenance of MSFs and to assist trainers and technical assistance providers in carrying out their capacity-building activities at regional and country level.

The training is designed with the following specific objectives:

a) Promote the creation and use of an MSF to strengthen, modernize and transform the production of agricultural and rural statistics and better integrate them within NSSs;

b) Improve the capacity of statisticians and technicians working in the area of agriculture statistics to construct, use and maintain an MSF; and
c) Improve the capacity of participating countries to adopt cost-effective and reliable methods for producing a minimum set of agricultural and rural statistics.

3. Key Activities

The five days of training activities consist of a judicious mix of lectures, discussions and hands-on exercises. The training also features knowledge-sharing on country practices and methods in building and using an MSF. The training will broadly cover the following topics:

a) Introduction to MSFs (basic definitions, rationale, type of MSF and advantages and disadvantages of each MSF type, steps to identify which MSF type is relevant to the country's specificities);
b) How to build an MSF using list frames, area frames or multiple frames;
c) Use of technology to build an MSF;
d) Sampling designs and estimation methods for the various types of MSF;
e) Hands-on exercises to construct an area frame using GIS and remote sensing technologies; and
f) Countries experiences in building and using an MSF.

4. Target Participants, Number and Minimum Requirements

The training is designed for about 20 participants from national statistical offices and statistical units within ministries of agriculture of SAARC Countries namely Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka and SAARC Agriculture Centre. The participants from the countries other than SAARC in the region, who are planning to conduct agriculture census in near future and requested for technical assistance for developing MSF would be included in target participants. The target participants are statisticians particularly sampling experts for agricultural statistics. The participants are expected to have knowledge of basic computer skills, basic notions of map reading, GPS/GIS skills along with sampling techniques.

5. Expected Learning Outcomes

The main objective of the training is to provide a strong foundation in all aspects related to the promotion, construction, maintenance and use of an MSF. Therefore, by the end of the training, participants are expected to have acquired the necessary skills and knowledge to:

a) Understand the concepts and main characteristics of an MSF, the benefits of an MSF in facilitating the production of agricultural and rural statistics, and the implications of building and maintaining an MSF;
b) Understand and list the basic concepts associated with area, list and multiple frames, and the advantages and disadvantages of adopting them as an MSF;

c) List the steps required to create area, list or multiple frames as an MSF using data from agricultural censuses, population censuses, business registers, administrative sources, digital maps, aerial photographs or satellite images;
d) Use new technologies such as GPS, GIS or remote sensing to build and maintain an MSF for agricultural statistics;
e) Apply sound methodologies and statistical theory to improve the efficiency and quality of survey designs and estimations, using various types of MSFs; and
f) Aware of the regional practices and global initiatives on building and maintaining an MSF.

6. Tentative* Sessions of Training

*****The topic, content and duration of sessions will be finalized after consultation with resource persons. Sessions 2 to 6 would include hands-on exercises and/or country presentations.

Session 1: Introduction to the Workshop, and 5-10 minutes overview country presentations to share their experiences with agricultural surveys. Such presentation would be asked to be prepared in advance, by the time of the invitation to the Workshop. Master Sampling Frame (MSF) for agricultural statistics – basic principles and requirements.

Session 2: List frame-based surveys: building, using and updating list frames. The role of registers and censuses. Basic idea of record linkage. Major sampling designs and estimation methods.

Session 3: Area frame-based surveys: building, using and updating area frames. Major sampling designs and estimation methods.

Session 4: Use of technology for sample frame development and hands-on exercises to construct an area frame using GIS and remote sensing technologies.

Session 5: Multiple frames-based surveys: concepts, sampling and estimation from intersecting frames.

Session 6: Knowledge-sharing on countries experiences, practices and methods in building and using an MSF and global initiatives on building and maintaining an MSF. Criteria to consider to choose a suitable MSF depending on the country conditions.

Session 7: Q&A and Discussion period on each Session

	1st Day	2nd Day	3rd Day	4th Day	5th Day
Morning	Session 1	Session 3	Session 4	Session 5	Session 6
Afternoon	Session 2	Session 3	Session 4	Session 5	Session 7