UNITED NATIONS ECONOMIC AND SOCIAL COMMISSION FOR
ASIA AND THE PACIFIC
STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC (SIAP)

**Regional Training Course On
Communication and Advocacy for Agricultural and Rural
Statistics**
27 June – 1 July 2016
Daejeon, Republic of Korea

MYANMAR AGRICULTURAL AND RURAL STATISTICS SYSTEM AND DEVELOPMENT PLANS

Country Paper

Presented by

Mr. Yar Zar Myo Thant (Assistant Director)
Department of Agricultural Land Management and Statistics
Ministry of Agriculture, Livestock and Irrigation

Ms. Htay Htay Win (Deputy Statistician)
Central Statistical Organization
Ministry of Planning and Finance

The Republic of the Union of Myanmar

CONTENTS

MYANMAR AGRICULTURAL AND RURAL STATISTICS SYSTEM AND DEVELOPMENT PLANS

I.   Introduction

The Republic of the Union of Myanmar is the second largest country in Southeast Asia. It has abundant arable land, forests, natural resources, minerals, gas, oil and freshwater and marine products. It has an estimated population of about 52.48 million, with a growth rate of 0.89 percent per year. Myanmar is richly endowed with land and water resources and favourable climates for agricultural production. The Agriculture sector, comprising Agriculture, Livestock, Fisheries and, Forestry, is the largest contributor to Gross Domestic Product (GDP), accounting for more than 29.8% (2014-15) of GDP. About 70 percent of the population resides in rural areas. The Agriculture sector, including the livestock and fisheries subsectors, employs 61.2% of the total labour force and earns 20% of total exports. Out of Myanmar's total geographical area of 67.66 million hectares, about 17.24 million hectares (excluding forests) (25.50%) remain suitable for cultivation. However, current crop land totals only 11.97 million hectares. The majority of agricultural land is used for the production of basic grains for internal consumption and livestock feed. The country has been taking steps to gradually bring fallow and culturable wasteland under cultivation.

Land Utilization in Myanmar 2014-15 (Actual)

	Million Hectares	Percent
Net Area Sown	11.97	17.7
Fallow Land	0.44	0.7
Cultivable Wasteland	5.27	7.8
Reserved Forests	18.57	27.5
Other Forests	14.73	21.8
Others	16.66	24.6
Total	67.66	100.00

The 2008 constitution organized Myanmar into seven states and seven regions, six self-administered zones and divisions, and one union territory containing the capital Nay Pyi Taw and surrounding townships. There are 330 townships and 67 districts in the states and regions. Key functions of the government take place at the township level such as birth and citizenship registration, land registration, and tax collection activities. Statistically activities are organized through central government ministries and agencies.

Myanmar is basically an agricultural country, endowed with a wealth of resources, including fertile land, water resources, forests and remarkably - young population. The development of agricultural sector is crucial to the Government of the Republic of Myanmar for its role in achieving food security and nutrition for the country as well as being a significant

contributor to the economic output, export earnings and employment in Myanmar. Given the importance of the sector, the current agricultural policy of the Ministry of Agriculture, Livestock and Irrigation (MOALI) focuses on improving production and productivity, promoting sustainable and climate-smart agriculture, encouraging transition from conventional to mechanized agriculture and extension of irrigated area.

II.   Major Agricultural Statistics Organizations and their Responsibilities

Myanmar has a decentralized statistical system where the Central Statistical Organization (CSO) and line ministries have responsibilities for data collections in their respective domains. As a decentralized statistical system, statistical production activities are scattered across the ministries and agencies. Some major statistics agencies related to the agriculture sector of Myanmar are as follows:

The present **Central Statistical Organization (CSO)** under the Ministry of Planning and Finance traces its origin to the Central Statistical and Economics Department (CSED) established under the Central Statistical Authority Act of 1952. Its objective is to: improve the present system to realize comprehensive efficient and reliable statistical system for social and economic policy, carry out effective planning and administration, review and advise on all statistical operations of the Government, coordinate and integrate statistical operations in the country, set statistical standards and organize and conduct socio-economic surveys for the Government. At present, the primary function of CSO is to collect, process, organize and supply data for planners, policy makers and other country based users, as well as international bodies. Data is compiled through statistics provided by concerned agencies, statistics jointly compiled by agencies and CSO, or statistics obtained from surveys conducted by the CSO itself. The CSO has been conducting various surveys, including those on population, household expenditure, agriculture, health and social life, vital statistics, livestock, the labour force, transport, and the private industries. The CSO also collaborates with the DALMS for obtaining agricultural production and land use statistics, as well as with other agencies, such as the Livestock Breeding and Veterinary, Fisheries and Forest Departments for relevant statistics.

The Planning Department (PD) is responsible for compiling Myanmar's national accounts. National accounts compilations are undertaken in 14 sector divisions, including agriculture. Annual and quarterly GDP are compiled using a production approach at current and constant prices. While annual GDP is published in the CSO Statistical Yearbook, quarterly GDP is mainly for internal official use. Source data flows from several agencies, including the Ministries and regional offices and townships. Agricultural data is provided by Department of Agricultural Land Management and Statistics (DALMS). There is a strong need to improve the source data.

In Myanmar's decentralized Agricultural Statistics System, agriculture includes crops and land use, livestock and fisheries, and forestry. While the **Ministry of Agriculture, Livestock and Irrigation (MOALI**) is mandated to develop agriculture, livestock and fisheries in the country, and the **Ministry of Natural Resources and Environmental Conservation (MNREC)** deal with improving forestry.

The Department of Agricultural Land Management and Statistics (DALMS) under the Ministry of Agriculture, Livestock and Irrigation is the only government agency responsible for collection, compilation and dissemination of agricultural statistics with particular reference to production statistics, such as planted area, harvested area, yield and production of crops. It is also responsible for land use statistics and agricultural land management. Activities for collection of agricultural statistics include monitoring the progress of land preparation for cropping and condition of weather and crops production, carrying out periodic crop surveys, compiling data on farmers and farms, participating in an annual inventory of agricultural machineries and implements for the whole country, and compiling annual and seasonal crop reports, which comprise statistics on rainfall, land use, irrigation and flood protection, crop acreage, yield per acre and production. In addition, the Department is responsible for the annual assessment of land revenue and land rent, deeds of registration and agricultural land administration.

Under the MOALI, the **Department of Planning (DOP)** is responsible for formulation of agricultural policies and plans, strengthening relations with regional and international agencies and governments, and cooperation and coordination amongst different agencies. Additionally, this department is also responsible for reporting and compiling agricultural statistics, conducting surveys, making recommendations for the further development of the agriculture sector and collecting and disseminating wholesale prices of agricultural commodities.

The Agricultural Mechanization Department (AMD) under the MOALI is responsible for the transformation from conventional labour intensive agriculture to mechanized agriculture. It is also responsible for statistics relating to capital formation in the agricultural sector.

The Department of Agricultural Research (DAR) under the MOALI is required to systematically conduct research activities that would suit the needs of all stakeholders in developing and disseminating regionally adaptable crop varieties and crop production technologies.

The **Department of Agriculture's (DOA)** main task is to transfer technologies to farmers for getting better economic returns by increasing yield rate and improving crop quality. This includes industrial crops through the strengthening of profitable and sustainable markets for farmers, advocating for the utilization of good quality seeds and good agricultural practices with proper application of agricultural inputs, encouraging agro-based industries, and reducing production and transactional costs.

The **Department of Irrigation and Management of Water Resources (DIMWR)** is another important department in the MOALI with the objective of building a modern,

industrialized Myanmar through agricultural development. It does this specifically by conducting water resources development planning, particularly for surface water management, providing adequate storage of water for irrigation and protection from inundation to ensure year round crop cultivation and constructing and maintaining sea water protection embankments and polders. The Department recently encompassed the Management of Water Resources too. Accordingly the department is required to supply irrigation water by pumping water from rivers and streams and also promote utilization of underground water for boosting crop production. It is additionally required to support the of rural population by supplying safe drinking water from both tube wells and piped water supply reticulation systems. The department also supplies crop water and drinking water from spring sources via gravity flow systems in the mountainous regions of border and remote areas. The DIMWR is also responsible for water related statistics.

The **Myanmar Agricultural Development Bank (MADB)** is under the purview of the MOALI. The Bank manages the banking needs of all stakeholders through receiving deposits and advancing annual, short and long-term loans to State owned agricultural organizations, livestock organizations, cooperative societies, private individuals, village banks, farmers, entrepreneurs and labourers.

The **Yezin Agricultural University (YAU)** is the only higher learning institution in agriculture in Myanmar. The primary functions of YAU are teaching and training, conducting research and providing extension services to the public. The university's objectives are to produce highly qualified professionals needed for agriculture sector development that are well equipped in leadership, management, planning and analysis and interpretation skills, and to provide technical trainings on modern methods of agriculture for farming communities, including non-degree training programs. In spite of the increasing use of statistics, the university does not have a department for statistics nor teach statistics for improving agricultural practices.

The **Livestock Breeding and Veterinary Department's (LBVD)** objectives are to enhance livestock production through technology and services, in addition to managing animal health care to develop the national livestock sector. The LBVD functions under a Director General. The department has an administrative division, which includes a planning and statistics sub division.

The **Department of Fisheries** is responsible for the management and conservation of fisheries. Additionally, the DOF is responsible for extension services, conducting research, compiling fishery statistics and advancing the socio-economic status of fishery communities.

Also under the MOALI, the **Department of Rural Development (DRD)** is the national executing body for development of Myanmar's rural areas. The DRD's objectives are to assist national rural development and poverty alleviation programs, improve the socio-economic life of the rural populace and minimize the development gap between urban and rural areas, and preserve Myanmar's rural cultures.

Ministry of Natural Resources and Environmental Conservation (MNREC) is dedicated to issues and work related to forestry and environment. The **Forest Department (FD)** is responsible for protection and conservation of biodiversity and sustainable management of the country's forest resources. **Myanmar Timber Enterprise (MTE)** is responsible for timber harvesting, milling and downstream processing and marketing of forest products. The **Dry Zone Greening Department (DZGD)** is responsible for reforestation of degraded forest lands, protection and conservation of remaining natural forests, and restoration of the environment in the dry zone of Central Myanmar. The **Environmental Conservation Department (ECD)** is responsible for the implementation of environmental conservation and management. The **Survey Department (SD)** is responsible for producing topographical maps and project maps, boundary demarcation and inspection. Planning and Statistics functions are the responsibility of the office of the Permanent Secretary of the ministry.

Other Departments: The **Department of Population (DOP)** is under the Ministry of Immigration and Population and has responsibility to conduct population censuses and demographic surveys, and estimate and publish Myanmar's national and sun-national urban/rural population figures. The **Department of Labour (DOL),** under the Ministry of Labour, is another important department that contributes to agricultural statistics. The DOL also conducts labour force surveys and disseminates agricultural labour force statistics through various statistics reports. The **Department of Trade Promotion and Consumer Affairs** in the Ministry of Commerce is responsible for the national export strategy, export and import taxes for agro- products, de-regulation of the farm produce trade, financial support for enhancing exports, strengthening of export-competition power and management of post-harvest products, facilities and marketing. The **Department of Food and Drug Administration** under the Ministry of Health is responsible for issuing health recommendations and certification for local food manufacturing, and regulating import and export commodities in their production process, storage, distribution, and within the market based on the National Food Law, 1997.

User Organizations: While the Ministry of Agriculture, Livestock and Irrigation (MOALI) and Ministry of Natural Resources and Environmental Conservation (MNREC), together with other Government organizations such as the CSO, produce agricultural statistics, there are other organizations such as the Planning Department in the Ministry of Planning and Finance, in addition to several private organizations, that use the statistics. These include several private development committees for specific sectors, including the Agriculture Development Affairs Committee, the Livestock Development Committee, and trade and service associations and federations such as the Myanmar Rice Federation, Myanmar Livestock Federation, the Myanmar Fruit, Flower and Vegetable Producer and Exporter Association, etc.

Development Partners: Myanmar has been getting considerable international support for development of statistics from its development partners. The 1993 Myanmar Agricultural Census was launched with financial assistance from the United Nations Development Programme (**UNDP**) and the United Nations Food and Agriculture Organization (**FAO**). The Myanmar Census of Agriculture 2010 was also implemented with FAO's technical assistance. The **World Bank** has also offered a loan for increasing crop yields and cropping intensity in selected existing irrigation sites in Myanmar. The International Fund for Agricultural Development (**IFAD**) has additionally provided assistance to the Fostering Agricultural Revitalization in Myanmar (**FARM**) project. Under a bilateral assistance and cooperation program, India and several other countries have assisted Myanmar in establishing a number of projects related to agriculture and agricultural statistics.

III.   Data Collection

In the MOALI and MONREC, data collection is done using only paper based methods. Myanmar, however, has improved enormously in communications infrastructure, particularly in cell phone ownership and usage, which creates opportunities for more efficient data collection methods. The efficacy of data collection methods can be significantly improved through the use of laptops, tablet computers or personal digital assistants, Global Positioning Systems, etc. Use of the internet and electronic transfer of data through emails etc., can also improve the efficiency and timeliness of statistical activities, particularly data collection and transmission.

The DALMS is now seeking opportunities to introduce modern data collection, compilation and dissemination of agricultural statistics by applying computer and communication technologies. In order to upgrade data collection methods, the DALMS is trying to apply remote sensing and GIS technology for crop statistics estimation. Changing the present paper based data collection to digital will make this process faster and more efficient.

IV.   Data Processing

In the DALMS, electronic data processing facilities are available to some extent. Computers are used for data compilation. Staffs are generally trained in normal computer operations. The majority of the processing is done on spreadsheets. One reason for this is that the DALMS does not receive basic data for all village tracts and instead receives only consolidated data at district or state/regional levels. Date is therefore mostly compiled and not processed. Given this, more computers are required for statistical activities. The department is already well equipped with computers for land management functions. However, there is an urgent need for transforming the manually developed cadastral, or kwin maps into digital maps and updating them. Recently, the DALMS has developed its own database called "seasons and crop reporting system". This database system is helpful for reducing data compilation time and checking the correctness of crop statistics.

In other departments as well, data is merely compiled and not often processed. , However, to improve statistics several sample surveys need to be conducted, and in turn data processing becomes inevitable. Departments therefore need to develop their data processing capabilities in terms of processing skills, equipment and software.

V.   Data Dissemination and User Relations

For summarizing of the country's statistics, the Central Statistical Organization compiles data and information from the concerned statistical agencies and publishes the data in the Myanmar Statistical Yearbook (annually), Selected Monthly Economic Indicators (SMEI) and Quarterly Planning and Economic Journal.

The publication of Myanmar Statistical Yearbook (2015) has now come out with new graphic, content and dissemination. A great attention to graphics and visual elements is paid while methodology sheets on statistical sources, a glossary and an analytical index are the tools to better respond to the information scope and depth of users needs. It provides update compendium of statistics on demographic, socio-economic and environmental aspects of the country to a national and international audience. The statistics are compiled mainly from administrative records from the relevant ministries, departments, private agencies and partly from the 2014 Census and surveys conducted in the country.

In addition to the printed version, the Yearbook is available on a web page of the Central Statistical Organization Institutional site www.csostat.gov.mm and www.mmsis.gov.mm accompanied by tables in excel format. Myanmar Statistical Information Services (MMSIS) (www.mmsis.gov.mm) website has been officially launched on 2015 World Statistics Day for statistical information dissemination with support from KOICA, it helps us translate all those efforts, activities and improvements in statistical production into data that is easily accessible and usable for everyone in Myanmar as well as around the world.

At present, statistical dissemination relies mainly on the Statistical Yearbook and the Selected Monthly Economic Indicators. There is no clear policy on dissemination except for a narrow range of statistics governed by international agency. Myanmar has become, in 2013, the 110th country to join the IMF's General Data Dissemination Standard focusing largely on financial and monetary statistics. There is also no policy on data revision or quality assurance mechanism. A national dissemination policy comprising advance release calendar, meta-data and methodological explanations, a data revision policy, and data assurance procedures has been strongly recommended by the assessments made on Myanmar's national statistical system. Given that the bulk of the statistical products are produced by the ministries or agencies, such a policy to ensure compliance in the decentralized system is urgently needed.

VI. Types of Agricultural Statistics of Myanmar and Concerned Departments

Following table shows the types of agricultural statistics currently available in Myanmar and responsible departments for those agricultural statistics.

Domain	Statistics/ Indicators	Source	Coverage	Periodicity of Data Collection	Available Time Series
Production	Volume of production	DALMS	National, Sub-national	quarterly	1970 to 2015
	Value of production	PD	National	quarterly	1970 to 2015
	Major Crops Inventory		National, Sub-national	Yearly	1970 to 2015
	Gross national product	PD	National	Yearly	1985 to 2015
	Gross domestic product	PD	National	Yearly	1985 to 2015
	Gross value added in agriculture	PD	National	Yearly	1985 to 2015
Trade	Total merchandise export and import value	CSO & PD	National	Yearly	1985 to 2015
	Volume of agricultural exports and imports	CSO & PD	National	Yearly	1985 to 2015
Prices	Averagey yearly prices of selected agricultural products	CSO	National	Yearly	1985 to 2015

	Consumer price index by commodity group	CSO	National	Yearly	1985 to 2015
Agricultural machinery	numbers	PD, MOAI	National	Yearly	1985 to 2015
Fertilizer	Imports	CSO, Ministry of com-merce	National	Yearly	1985 to 2015
Land use	Total farm area	DALMS	National Sub-national	Yearly	1970 to 2015
	Irrigated area	DALMS	National Sub-national	Yearly	1970 to 2015
	Area planted/harvested of crops	DALMS	National Sub-national	Yearly	1970 to 2015
Labour and employment	Labour force in agriculture	DOL	National	Yearly	1985 to 2015
	Employment in agriculture	DOL	National	Yearly	1985 to 2015

VII. Survey methods applied for agricultural statistics

Survey methods used for collecting and compiling agricultural statistics in Myanmar can be summarized as follows;

Domain of Statistics	Collecting Method
Production	Complete
Trade	Administrative Records
Price	Sample Surveys
Agricultural Machineries	Administrative Records
Fertilizer	Both surveys and administrative records
Pesticides, insecticides, herbicides	Both surveys and administrative records
Land use	Complete
Labour and Employment	Sample Surveys, Administrative Records

VIII. Development Strategy and Vision of the Government

Myanmar's economic development strategy gives high priority to the agriculture sector. Agriculture sector development has been considered as one of the major driving forces for enhancing the wellbeing of the people. As part of its current agricultural policy, Ministry of Agriculture, Livestock and Irrigation(MOALI) has also identified 'accuracy of agriculture statistics' as a target in itself in recognition of their importance for planning and policy making and for measuring the progress of agriculture sector credibly, timely and adequately. For production of accurate agricultural statistics on a sustainable basis, development of a good Agricultural and Rural Statistics (ARS) system is a pre-requisite.

Government of Myanmar has accorded high priority to the development of National Statistical System and has identified 'Generating better quality and accurate statistics for evidence based policy and decision making' as the fourth economic policy of the current administration. Enactment of a new Myanmar Statistics Law and preparation of National Strategy for Development of Statistics (NSDS) are the agenda of the Government and both the activities have gathered momentum. CSO, in collaboration with the World Bank and the Asian Development Bank (ADB), is working to accomplish these two tasks during the current year. At this juncture, FAO has taken up the task of implementing the Global Strategy to Improve Agricultural and Rural Statistics in Myanmar. As envisaged in the NSDS set-up, an Agricultural and Rural Statistics Cluster Group (ARSCG) in the Department of Agricultural Land Management and Statistics (DALMS) has been constituted and FAO has taken the lead to assist DALMS in preparing a Strategic Plan for Agricultural and Rural Statistics (SPARS) as a component of NSDS.

IX. Recognition and Importance of Agricultural and Rural Statistics

The Government of Myanmar has recognized the importance of the agricultural sector in the economy and its contribution to GDP, as well as its role in food security and eradicating hunger and malnutrition in the country. The Government has laid down the four economic policies, of which first major economic objective is "Building the modern industrialized nation through the agricultural development, and all-round development of other sectors of the economy". Moreover, the Government declared that "the fourth economic policy is to compile quality and accurate statistics through field studies, check, re-check and counter check on reports, and feasibility study… Only with reliable statistics and information will correct decisions be made."

The economic policies of the government with special reference to agricultural policies are prepared based on agricultural statistics collected through different censuses and surveys and through its regular reporting mechanism. Recognizing the importance of statistics, the government has included improving statistics as one of its economic policies. Conducting

Myanmar Census of Agriculture 2010 and Myanmar Housing and Population Census 2014 were examples of acknowledging the importance of statistics. In addition, criticism of crop production statistics in particular has led the government to recognize the need for improving methodologies and plugging the data gaps. To raise the level of Myanmar agricultural statistics to international standards, the government has welcomed the Global Strategy initiative and ensured the active participation of all stakeholders.

X.   National Strategy for the Development of Statistics in Myanmar

The Myanmar government has initiated in recent months several actions to strengthen the coordination mechanism of the national statistical system. In Myanmar, there is strong political will for improving statistics. Government of Republic of the Union of Myanmar established the High Level Committee for Accurate and Quality Statistics with the Honourable Vice-President – 2 as patron, the Minister of the Ministry of Planning and Finance as the Chairperson and Permanent Secretary from concerning ministries of the Union Government, together with Ministers of Planning and Economics from all State and regional governments, as members. The Committee had set developing a statistical master plan in the form of the National Strategy for Development of Statistics (NSDS) as one of its objectives. All ministries are represented. The committee has constituted six different cluster groups and they cover the following topics: a) National Accounts and Macro-economics, b) Civil Registration and Vital Statistics, c) Agriculture and the Rural Statistics, d) Survey Coordination and Statistical Standards, e) Energy and Environment and f) Social Statistics. In the future, there will be one more cluster on Macroeconomic Monitoring and Financial Statistics. Each cluster is currently supported by relevant development partners with FAO, UNICEF, ADB, IMF, WB and UNFPA being actively involved.

The NSDS process has already recognized that agricultural and rural statistics is one of the building blocks of the National Statistical System. Under the ARS cluster group the process for developing a Strategic Plan to Improve Agricultural Statistics (SPARS) has started.

XI.   Global Strategy Implementation in Myanmar

The Global Strategy is an initiative of the World Bank, the United Nations Statistical Commission and the Food and Agriculture Organization of the United Nations (FAO) to arrest the steady decline in the availability and quality of agricultural and rural statistics in the developing countries. The main purpose of the Global Strategy is to provide a framework to enable national and international statistical systems to produce the basic agricultural information needed to guide decision making. The Strategy is based on three pillars:

Pillar 1: Establish a minimum set of core data required to meet current and emerging needs.

Pillar 2: Integrate agriculture into national statistical systems and use sound data management systems; and

Pillar 3: Establish suitable governance processes and build the necessary statistical capacity to ensure sustainability of agricultural statistics systems.

The Global Strategy implementation has commenced in Asia Pacific region in 2013 and in Myanmar in 2015. The outcome of the implementation will be a SPARS to develop sustainable agricultural statistics system for production and dissemination of accurate and timely agricultural and rural statistics, comparable over time and across countries.

XII.   IdCA Process in Myanmar

First phase assessment on the capacity of agricultural statistics in Myanmar conducted by the FAO in 2011-12 through the country assessment questionnaire revealed weaknesses in the capacity of the agricultural statistics system in three broad areas namely institutional infrastructure, statistical methods and practices, and availability of statistical information. Coordination mechanisms that were needed to leverage efficient use of statistical infrastructure across data producing agencies were found to be lacking and there was no national strategy in operation to develop an integrated national statistical system. As a result, Myanmar was chosen as one of the priority countries in the Asia-Pacific region for implementation of the Global Strategy in 2014. Various delays resulted in GS activities starting only in May 2015.

Global Strategy activities in Myanmar were set in motion by the nomination of a National Strategic Coordinator (NSC) to coordinate the preparation of the SPARS and other related documents. An International Consultant and a National Consultant were also appointed for carrying out the assessment of the agriculture sector and to prepare short term and long term strategic plan proposals.

The IdCA work in Myanmar commenced on May 4, 2015in its capital city Nay Pyi Taw. The Regional Coordinator and International and National consultants held discussions with the NSC and his team and developed a plan for carrying out the assessment. After identifying the stakeholders, the team, along with officers from the Department of Agricultural Land Management and Statistics (DALMS), held discussions with different stakeholders connected with agricultural and rural statistics in Nay Pyi Taw during their first mission from May 4 to May 15, 2015. An initial assessment was made based on discussions in each sub-sector of the present statistics system, data needs, data gaps and the quality of current statistics.

A National Statistical Coordination Committee (NCC) was also established under the chairmanship of the Deputy Minister of previous Ministry of National Planning and Economic Development (MNPED) with representation from all ministries. The NCC is also mandated to monitor the progress of the NSDS process. The NSDS is set out to be composed of sectoral

strategic plans, in addition to cross cutting issues for overall improvement of the National Statistical System. The NCC has accordingly decided to form six sectoral statistical cluster groups, which includes Agricultural and Rural Statistics (ARS). The Department of Agricultural Land Management and Statistics (DALMS) in the Ministry of Agriculture, Livestock and Irrigation (MOALI) plays the leading role in the ARS cluster, with the Director General of the DALMS serving as the chairman of the cluster group. The ARS Cluster Group (ARSCG) was constituted through a Government notification dated April 6, 2015. The framework of the ARSCG facilitates steering of the SPARS process and its implementation. The structure also constructively aids the process of integration of the ARS into the NSS. As stated in the mission statement provided in the ToRs, the ARSCG is responsible for a comprehensive assessment of the data needs, gaps and quality of existing data, as well as identification of priority areas for improvement and preparation of a long term Strategic Plan for Agriculture and Rural Statistics as a component of the NSDS.

The first meeting of the ARSCG was organized on May 13, 2015 at the meeting hall of the DALMS. Apart from the members of the group, special invitees included an FAO team, an NSDS consultancy team from the World Bank, a National Accounts Consultancy team from Asian Development Bank and other key stakeholders. The aim of the meeting was to introduce Global Strategy activities in Myanmar and the SPARS process, and to discuss and finalize a timeframe for the development of SPARS.

A three week long second mission to Myanmar was organized from the 9th to the 28th of August 2015 to follow up on the evaluation of the agricultural statistics system in the first mission. Further discussions were held with different stakeholders to firm up the first mission findings and also discuss any new issues. The agricultural statistics system was also evaluated sub-sector wise to identify its drawbacks and areas requiring improvement. Discussion was also held on the minimum set of core data required to be identified for Myanmar. A workshop cum meeting of the ARSCG was organized on August 25, 2015 to further sensitize the stakeholders, including private organizations and development partners. Also discussed at the meeting were initial findings of the IdCA, core data items of the different sub-sectors, training needs, technical assistance required and various other issues for the improvement of the Agricultural and Rural Statistics. Before the commencement of the second mission, the Roadmap for the preparation of the SPARS was prepared and circulated amongst the stakeholders for their comments and suggestions. The comments and suggestions were taken into account and suitably incorporated. The finalized Roadmap was presented and endorsed at the meeting of the ARSCG on August 25, 2015. The second mission also got inputs for the preparation of the vision and mission statements, and helped identify the Strategic Objectives.

FAO send a third mission to Myanmar during February 2016 after the completion of the first mission in May 2015 and second mission in August 2015.The mission paid visits to

government departments in Nay Pyi Taw and held meetings to discuss matters relating to SPARS including findings of In-depth Country Assessment (IdCA), first draft of SPARS, country proposal activities, and sub-sector action plans, financial plans and M&E mechanism for SPARS. Mission members also participated in the "Workshop cum ARS Cluster Group Meeting" in Nay Pyi Taw and "Briefing Meeting" in Yangon.

During the three missions to Myanmar all the relevant departments were visited. Some departments gave presentations on their activities while others held face to face discussions Issues needing improvement and data gaps were discussed. Discussions were held on the livestock, fisheries, rural development and forests and environment. Field visits to Pyinmana and Zayarthiri townships were undertaken to better understand the reporting mechanism of the crop sector.

XIII. Integration of ARS System into NSS of Myanmar

(1) Extent of Integration in Agricultural Data Collections

The second pillar of the Global Strategy specifies the need for integration of agricultural statistics in the national statistical system. In Myanmar, with the ARS system, as well as the NSS, being decentralized, there is no integration of the ARS into the NSS, except that ARS are forwarded to the CSO for publication in the statistical year book. The NSS does not have exclusive statistical cadre, which also hampers integration.

Integration may be achieved by developing a master sample frame that is used for all agricultural data collection. This would make it necessary to define statistical units linking households and farms using Geographic Information Systems (GIS) and Geographic Positioning Systems (GPS). This approach enables integrated and coordinated data collection using standard concepts and definitions in different sectors and sub-sectors across economic, social and environmental dimensions.

The integration of agricultural data collection into the national statistical system will also affect roles and division of responsibilities among agricultural statistics' different stakeholders, including the CSO. In order to achieve this integrated approach an umbrella organization coordinating the work should be put in place.

(2) Duplication in Data Collection

While a great deal of data collected and consumed in Myanmar is for official and internal purposes, very little of that data is published. There appears to be no duplication in published data, but this may not be the case for data collected for internal purposes, so further investigation in this area is recommended. To avoid data duplication, it is essential that one main organization oversees all statistical operations that additionally includes a mandate for all agricultural statistics operations.

(3) Scope for Building Synergies and Partnerships

Myanmar has a lot of scope for building statistical synergies and partnerships. The Government has already committed to improving the statistical system by including statistics as one of its economic policies. The high level Committee for Accurate and Quality Statistics has been set up. It initiated a review of the existing statistical act and is replacing it. The NSDS process has already started. Six cluster groups, including one on Agricultural and Rural Statistics, have been formed. The development process for a Strategic Plan for Improving Agricultural Statistics (SPARS) is already underway. These measures clearly indicate that Myanmar has the drive to build statistical synergies. Efforts to bring all of the different stakeholders together for improving statistics and integrating agricultural and rural statistics into the National Statistics System are moving forward.

XIV. Needs for Capacity Building

Agricultural statistics in Myanmar is still in the early stage of development and Ministry of Agriculture, Livestock and Irrigation intends to develop its capacity in this area of data collection, analysis and dissemination of agricultural statistics. MOALI also desire to contribute wider information for food security information system in ASEAN countries by providing timely and reliable data to the member countries. To meet those destination, Myanmar needs the following backup for the improvement of Food and Agriculture Statistics:

a) Determine requirements of statistical personnel including officers and staff in the different departments, in regards to the crop (including inputs), livestock, fisheries, forestry and rural development sub-sectors for a revitalized agricultural and rural statistics system and to determine the appropriate organizational structure of the system.

b) Identify gaps in the capacity of current agricultural statistics staff, considering all aspects of a revitalized ARS, through an evaluation

c) Develop and implement a training plan for statistics staff that includes policy makers, officers and staff of all the sub-sectors of ARS to improve skills in using agricultural data for policy making, organizing large scale statistical operations, data collection, compilation, preparation of statistical reports, analyzing results and interpreting data, and disseminating data and results

d) Evaluate requirements for computers, software and other ICT tools for use at headquarters and ARS field offices

e) Establish teaching of agricultural statistics at Yezin Agricultural University through an exclusive Department of Statistics

f) Develop and implement a plan for training abroad on statistical issues

g) Develop and implement a plan for statistical software and database management training

h) Prepare and implement suitable proposals for encouraging research in ARS

XV. Conclusion

In Myanmar this is an exciting time for the development of statistics. Myanmar is now trying very hard to achieve growth and development with momentum in antenatal economic life, although, Myanmar's economy is still mainly relied on the agriculture sector and the majority of the population is rural based. Hence, Myanmar pays special attention for all-round development of the country based on sector and development of other agriculture sector as well.

Developing quality statistics is the need for evidence-based policy making and these can set the stage, but they need to translate into "better data" , "better informed policy and implementation" and eventually "better lives" through committed statistical activities.

Due to its resources constraints and the present situation of agriculture statistics of Myanmar, international collaboration programs are welcome for the assistance and improvement for the development of accurate and timely. Myanmar will actively take part in the formulation of those activities to make rapid achievement on the welfare and well being of the nation and on the other hand for the improvement of the agricultural statistical system.