



REPUBLIC OF THE UNION OF MYANMAR

NATIONAL STRATEGY FOR DEVELOPMENT OF STATISTICS

Part One: Core Strategies

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CSO Central Statistical Organization
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CONTENTS

1. INTRODUCTION	1
1.1. Background.....	1
1.2. Purpose and Use of NSDS	4
2. ASSESSMENT OF THE NATIONAL STATISTICAL SYSTEM OF MYANMAR.....	5
2.1. The Assessment Process	5
2.2. Institutional and Legal Framework.....	6
2.3. National Data Production Framework.....	8
2.4. Role and Function of Central Statistical Organization.....	10
2.5. Data Dissemination and User Relations	12
3. STRATEGIC OBJECTIVES OF NSDS.....	13
4. STRATEGIC DIRECTIONS AND PROPOSED ACTIVITIES	14
A. Strategic Directions for Strengthening the Architecture of the Myanmar Statistical System	14
B. Strategic Directions for the Central Statistical Organization as National Coordinator and Statistical Authority.....	22
C. Strategic Directions for Improving User and Respondents Relations.....	29
D. Strategic Directions for Critical Statistical Programmes	32
5. RESULTS FRAMEWORK AND MONITORING.....	37

Explanatory Notes

The following abbreviations have been used:

ADB	Asian Development Bank
CDAQS	Committee on Data Accuracy and Quality of Statistics
CPI	Consumer Price Index
CSED	Central Statistics and Economic Department
CSO	Central Statistical Organization
EU	European Union
FAO	Food and Agriculture Organization
GFS	Government Finance Statistics
GSS	Government Statistical Service
HIES	Household Income and Expenditure Survey
IMF	International Monetary Fund
ITAB	International Technical Advisory Board
IHLCA	Integrated Household Living Conditions Assessment
MICS	Multi-Indicator Cluster Survey
MLCS	Myanmar Living Condition Survey
MNPED	Ministry of National Planning and Economic Development
MoPF	Ministry of Planning and Finance
MSA	Myanmar Statistical Association
NCC	National Statistical Coordination Committee
NCDP	National Comprehensive Development Plan
NLD	National League for Democracy
NSDS	National Strategy for the Development of Statistics
NSO	National Statistical Organization
NSS	National Statistical System
PD	Planning Department
PPI	Producer Price Index
SNA	System of National Accounts
SWG _s	Sectoral Working Groups
SSWG	Statistics Sectoral Working Group
TFSCB	Trust Fund for Statistical Capacity Building
UNFPA	United Nations Fund for Population Activities
WB	World Bank

1. INTRODUCTION

1.1. Background

Myanmar is a large, populous country with a population of about 52 million and a land mass of 676577sq. km. The 2008 constitution organized Myanmar into seven states and seven regions, six self-administered regions and one union territory containing the capital Nay Pyi Taw and surrounding townships. There are 330 townships and 74 districts in the states and regions. Important administrative functions of the government take place at the township level such as birth and citizenship registration, land registration, and tax collection activities. Statistically activities of the government are organized through central government ministries and agencies.

Myanmar gained independence in 1948 with a democratically elected government. In 1962, the military took control of the government. It was only in 2011 that the military government was replaced by a civilian-led government headed by President U Thein Sein. A general election was held in November 2015. With the National League for Democracy (NLD) winning a majority of seats in the combined national government, this election marked the transition to a fully elected government for the second time.

President U Thein Sein's government (2011-2016) hoped to transform Myanmar into a modern democratic nation with a vibrant economy. It launched a long-term National Comprehensive Development Plan (NCDP 2011-2030), followed by the first five-year National Development Plan for 2011-12 to 2015-16. The government has identified improving its statistical system as one of its key priorities. In a speech on June 19, 2012, President U Thein Sein declared that "the fourth economic policy is to compile data accuracy and quality of statistics through field studies, check, re-check and countercheck on reports, and feasibility study. Only with reliable statistics and information can develop correct decisions for policy making, planning, implementation, monitoring, and evaluation."

The declared intention of improving Myanmar's national statistical system reflects recognition that critical improvements are urgently needed to bring the system on par with international practices. The central statistical organization, created by law in 1952 through the Act No (34), 1952 has lost much of its mandate and core functions. The fragmentation of statistical activities was rampant with no central core and coordinating structure.

In January 2013, the Nay Pyi Taw Accord for Effective Development Cooperation made explicit the government's intention to reform its statistical system. It emphasized the need to "build and use an evidence based for decision making, including by increasing the quality of statistics and statistical systems". A high level committee was subsequently established by the President U Thein Sein on 12 July 2013. The Committee, appropriately named as the Committee for Data Accuracy and Quality of Statistics, was chaired by the Minister of National Planning and

Economic Development, under the patronage of the Vice President U Nyan Tun. The tasks for the Committee were specified as follows:

- a) To promote the credibility of statistics,
- b) To supervise and give direction on survey and statistical activities for the socio-economic development of Myanmar,
- c) To coordinate among Ministries so that a good statistical system will emerge in various sectors,
- d) To give advice and direction for the integration of the NSS,
- e) To supervise and provide direction for the management of the NSS-related organizations,
- f) To submit a report on the consistency of the NSS with international standards in statistics.

In a speech made on September 9, at the inaugural meeting of the Committee, the Vice President U Nyan Tun emphasized the importance of the Committee and made the intentions of the government very clear: “[the] 20-year National Comprehensive Development Plan (2011-2031) is being drafted for economic reform strategy. In doing so, accurate and reliable statistics is the lifeblood of the plan. Quality of facts and figures is crucial for compilation of reliable statistics. Reengineering of statistical organizations and mechanisms is a must for all countries including Myanmar”.

At the Myanmar Development Cooperation Forum held in 2013, the Myanmar government and its development partners agreed to establish Sectoral Working Groups (SWGs) to ensure effective coordination at the sector level, and to support the development priorities as contained in the Nay Pyi Taw Accord which was issued at the Forum. In response to the government’s emphasis on improving the national statistical system in general as well as the quality and reliability of statistics in particular, a Statistical Quality Development SWG was established, co-chaired by European Union (EU) and United Nations Fund for Population Activities (UNFPA). This SWG was subsequently renamed Statistics Sectoral Working Group (SSWG) with the aim of improving and developing sector strategies, priority programmes and ‘quick win’ initiatives for quick implementations with the support of the development partners.

Since 2012, informal consultations among development partners have noted the importance of a coordinated approach to support Myanmar’s efforts in developing quality of statistics and statistical systems. There is widespread recognition that a significant reform of the entire national statistical system is needed. The SSWG subsequently agreed to support the government in the preparation of a strategic document, the National Strategy for the Development of Statistics (NSDS), which would provide a medium-term framework for a more systematic approach to the development of statistics and statistical systems in Myanmar. This decision was formalized in July 2013 meeting of SSWG. The World Bank was then asked to mobilize funding support through the Trust Fund for Statistical Capacity Building (TFSCB) as well as to coordinate the project. A letter of agreement was subsequently signed between the Government of Myanmar and the World Bank. The process of drafting the NSDS officially began in 2014.

The first draft of the Core strategies of the NSDS was prepared by Aug 2015. It was widely circulated for comments. The finalization of the Core Strategies was however delayed due to the 2015 election and subsequent political transition.

On 15 March, 2016, U Htin Kyaw became the ninth president of Myanmar and formed a new Government. On 3 May, 2016, the President's Office issued Order 7/2016, forming the Committee for Data Accuracy and Quality of Statistics with Vice President (II) U Henry Van Thio as Patron, and Union Minister for Planning and Finance as chairman. The Director General of Central Statistical Organization was appointed as secretary to the committee. The committee comprises 19 Permanent Secretaries from Government ministries and agencies, as well as ministers from all State and Regional Governments. The first meeting was held on 13th May, 2016 where the Vice President stressed the need for valid and reliable social and economic statistics.

The terms of reference for this new Committee is similar to that of the old committee formed in 2013, but with some important new additions. The Committee explicitly recognized the need to establish a national statistical system, to supervise the implementation of NSDS and to report to the committee on sectoral statistics gaps. The tasks for this new committee are as follows:

- (a) To give guidance for promulgation of new National Statistical Law to meet the requirement of the current situations and to supervise the enforcement of the law,
- (b) To promote the credibility of Statistics,
- (c) To give advice and guidance for the establishment of National Statistical System (NSS),
- (d) To supervise and give guidance on surveys and statistical activities for the socio-economic development of Myanmar,
- (e) To coordinate for the emergence of good statistical system in various sectors with the responsible line ministries,
- (f) To make Peer Review on the National Statistical System to be consistent with international statistical systems and to submit report to the Cabinet on the sectoral review of gaps for the necessary preparations,
- (g) To coordinate and manage in providing trainings for the unification of data collection system and statistical methods among Union Ministries, Local Governments and Regional Governments,
- (h) To supervise National Strategy for Development of Statistics (NSDS) implementation and management of National Statistical Institutions for statistical development,

The forming of this important, high level Committee for Data Accuracy and Quality of Statistics signifies the continuation of the Myanmar government's efforts to improve its national statistical system.

1.2. Purpose and Use of NSDS

The NSDS is an instrument used globally to help countries develop their national statistical systems. It is a comprehensive planning guideline focusing on improving the statistical infrastructure and the processes. It has two main objectives. First, based on detailed assessments, it presents a coherent strategy for a country to improve its national statistical system. Second, it presents an implementation plan with budget provisions over a medium-term time frame. The two objectives are complementary. A strategy with no implementation plan will not have any practical impact. Likewise, action plans to help improve the system without an overall direction will lead to further fragmentation.

The Myanmar NSDS process is divided into two parts. Part 1 explains the rationale for the statistical reform and presents the core strategies on statistical development. It identifies the strategic objectives and priorities of the national statistical system and proposes activities to strengthen institutional and organizational framework. The report on Myanmar NSDS: Core Strategies will be presented to the government for endorsement when completed.

The implementation plan of the NSDS will be presented in Part 2 of the NSDS and will be developed by the respective statistical clusters by in due course. It will draw on detailed assessments and discussions in the clusters groups in identifying the gaps in the various statistical areas, measures and activities needed to rectify the shortcomings, as well as the budget required for their implementation. A national conference will be held to discuss Part 1 and Part 2 of the NSDS at a time to be decided at a later stage.

With the election of a new government, it is understandable that there may be some delays as the new government try to address national issues. The initial consideration of the core strategies by the new government is likely to take place in June 2016. The full report, incorporating both the Core Strategies and the Implementation Plan, is to be endorsed and implemented by the government sometime later.

The Myanmar NSDS: Core Strategies is presented in this report. It summarizes the assessment of the Myanmar national statistical system as it stands now. A number of reviews and studies have been conducted to assess the functioning of the system by the development partners (see chapter 2.1). Building on these and in consultation with government officials, subject matter experts and development partners, a set of strategic objectives have been identified. They are essential for providing the direction in the restructuring of the system and in setting the strategic priorities.

The Core Strategies are meant as a development framework. They will guide the government as a concept plan for re-organizing the government units responsible for statistics and for re-allocating responsibilities. It should be used by the development partners as a blueprint for supporting the Myanmar national statistical system to transform into an effective entity.

2. ASSESSMENT OF THE NATIONAL STATISTICAL SYSTEM OF MYANMAR

The Myanmar NSDS: Core Strategies was prepared in close consultation with the statistical units of the Myanmar government, especially the Central Statistical Organization (CSO) which serves as the national coordinating body. Meetings with senior government officials were held. The assessment phase benefited tremendously from the assessment efforts undertaken by the development partners, detailed in the following section. There could be omissions of additional assessment reports, but there is clear consensus among the assessments reviewed. Discussions with development partners were held. Knowledgeable Myanmar nationals were also consulted. The drafting of the report also benefited from consultation with members of the Myanmar Statistical Association (MSA), an importing grouping of informed experts.

The assessment focused on four key aspects: a) institutional and legal framework, b) national data production framework, c) role and function of the CSO as national statistical coordinator, and) data dissemination and user relations.

2.1. The Assessment Process

There is no shortage of assessments on Myanmar's statistical system. One could even say that too many assessments have been made, and too few follow-up actions have been taken. Development partners and informed observers have undertaken various assessment studies in the last decade. The major assessments that have been made known to the current NSDS process are described below. These assessments, together with the observations made by the NSDS team, formed the basis for the formulation of the core strategies.

- a) The 2011 report on 'Review of the Statistical System of Myanmar and Recommendations' submitted by Dr. Viet Vu. The report was commissioned by United Nations Development Programme. It focused largely on statistical issues related to the compilation of Myanmar national accounts and the adequacies of economic statistics.
- b) The 2013 report on the 'Assessment of the Myanmar Birth Registration System' submitted by Dr. Tomas Africa. The report was commissioned by the United Nations Children's Fund (UNICEF) as part of a larger project to improve civil registration and vital statistics.
- c) The 2014 report on 'Assessment of Statistical Activity in Myanmar' submitted by Dr. Alex Korns. The report was commissioned by the Asian Development Bank.

- d) The 2014 report on ‘Strategic Review and Assessment of Myanmar National Statistical System and Recommendations for Re-engineering Institutions’ submitted by Dr. Jose Ramon Albert. The report was commissioned by the Asian Development Bank.
- e) The IMF has conducted several staff assessments of the macro-economic indicators through their Article IV consultation processes and also through technical capacity development work coordinated by Dr. Thomas Elkjaer. They cover mainly CPI, PPI, and Government Finance indicators. These staff assessments are on file with the IMF.
- f) Assessments were made during the preparation process of the 2014 Population and Housing Census on the quality of population data, the demographic data system, the use of statistical concepts, and data processing capabilities. These assessments were made by the Population Department of the Ministry of Immigration and Population and supported by the United Nations Population Fund (UNFPA).
- g) Some assessments are currently underway and formal reports have yet to be submitted. UNDP has commissioned a study on the quality of economic indicators which are used by the United Nations to define a country’s ‘Least Developed Status’. The Food and Agriculture Organization (FAO) is commissioning a study to assess the quality of the statistics related to the agricultural and rural sector within the context of its global programme to improve agricultural statistics.
- h) The President’s economic adviser, Mr. U Myint, has written several insightful documents assessing the adequacy of Myanmar’s statistical system, particularly in relation to trade flows and value-added computation.

2.2. Institutional and Legal Framework

Myanmar has a highly decentralized statistical system. Some observers have labelled it as a highly fragmented statistical system. The 1952 Central Statistical Authority Act empowered the director of the then Central Statistics and Economic Department (CSED) to develop a statistical system, to advise on ‘all statistical operations of the Union Government... coordinate and integrate statistics and statistical operations... [and] establish the highest statistical standards’. The 1952 Act was written with the best intentions in mind, and was formulated in a manner similar to what were enacted in many other Common wealth countries.

In 1974, CSED was re-organized as into Central Statistical Organization (CSO). In name, the CSO might be in a better position to discharge its professional duties since it was being designated as a National Statistical Organization (NSO) in line with the nomenclature of the day. However, in substance, CSO’s role had been significantly reduced since then. National accounts was taken away from the CSO and given to Planning Department of the same ministry. In recent years, the Planning Department had also been tasked with conducting key social surveys such as

the Integrated Household Living Conditions Assessment (IHLCA) and the Multi-Indicator Cluster Survey (MICS). This had not only undermined the ability and authority of the CSO to act as the main statistical authority of Myanmar, but also had a detrimental effect on the CSO's own survey program including the large-scale Household Income and Expenditure Survey (HIES), which was severely under-utilized and generally disregarded as a source for official statistics. Similarly, the Population Census was given to the Ministry of Immigration and Population. As a result, CSO has over time evolved to focus mainly on processing, compilation and dissemination of secondary data. Its main responsibility is the dissemination of secondary data through the statistical yearbook and other publications.

The assessment of Myanmar's national statistical system points to the following observations:

a) Absence of a Legal Mandate

The Statistics Act of 1952 has ceased to be a meaningful document. While the Act refers to the national statistical authority as the CSED, the CSED no longer exists. The Act legally does not confer the mandate on coordination to the present CSO. It is also evidently clear that no government ministry or agency seems to pay much attention to a 1952 legislation.

b) Fragmentation of Statistical Activities

Statistical activities at present are managed independently by ministries and agencies according to their own needs. In their eagerness to work with development partners, the ministries and agencies are often guided by specific development projects. Observers have noted the total lack of coordination in statistical activities at the national level. It has also been observed that statistical activities are considered 'sideline' work, and there is seldom professional compliance to the best practices of official statistics. The hugely successful 2014 Population Census, for example, was conducted by the Ministry of Immigration and Population with the support of United Nations Fund for Population Activities (UNFPA), but with only minor logistic-related involvement from other ministries or agencies. The lack of national statistical coordination creates a tendency of fragmentation. If unchecked, this trend will continue to paralyze national statistical development.

c) Absence of Professional Protocol in the Production of Official Statistics

Official Statistics are compiled with a standardized professional protocol that helps ensure quality, consistency, and accuracy. This protocol is derived from best practices across countries and founded on scientific principles of social sciences. Observers have noted a significant lack of professionalism in the conduct of statistical activities in Myanmar, despite the best of intentions. There is no established procedure for drafting questionnaires with standardized guidelines on the use of statistical concepts and definitions; there are no accepted national classification systems to codify complex measures; there is no established procedure for drawing samples in conducting surveys; there is no explanation of meta-data or quality assurance measures. The total lack of central coordination and the marginalization of statistical activities at the ministries and agencies are the apparent reasons for this lack of professional protocol.

The recent 2014 Population and Housing Census could perhaps serve as an example that, if taken seriously, a high-quality professional statistical activity could be implemented in accordance to the best international standards. Guided by UNFPA, and with technical advice from an International Technical Advisory Board (ITAB) and witnessed by a group of international observers, the census activities were conducted professionally and diligently. It is desirable that a similar professional protocol is to be extended to other statistical activities.

d) Lack of a Clear, Coherent System Linking Local, Provincial, and National Data

The current production of statistical outputs relies heavily on administrative data. Presumably, administrative data also form the basis of the national data system flowing from local to the national level. But it is unclear how the national and sub-national data are being coordinated. With the absence of a census on population, housing, and commercial establishments providing benchmark data, it is unclear how accurate is the current data production system. The recently conducted population and agricultural censuses could perhaps be used as a test, to measure the discrepancy between local administrative data vis-à-vis census data. It is also unclear how the statistical activities conducted at the national level are linked back to the local or provincial level.

2.3. National Data Production Framework

As a decentralized statistical system, statistical production activities are scattered across the ministries and agencies. The table below shows the major statistical activities by agencies. The information is drawn from reports by ADB consultants. A more detailed description and analysis can be found in the 2014 report by Dr Alex Kornis and issued by the Asian Development Bank:

Agency	Key activities
<i>Central Statistical Organization</i>	<ul style="list-style-type: none"> a) Compiles social and labour statistics from administrative data, b) Compiles vital statistics from birth registration forms, c) Compiles construction, transport and communication statistics from administrative data sources, d) Compiles export and import data based on forms from Customs Department, e) Collects and compiles retail commodity prices from 80 townships and compile monthly CPI, f) Compiles indicators on manufacturing products as well as the production of precious minerals through administrative data and survey of state-owned enterprises, g) Conducts Private Sector Industry Survey on an ad hoc basis. The last survey was conducted in 2009-2010, h) Conducts Household Income and Expenditure Surveys. The last

	<p>survey was 2012,</p> <p>i) Conducts ad hoc surveys such as Rural Development Survey (2005) and Informal Sector Survey (2009).</p>
<i>Planning Department, MoPF</i>	<p>a) Compiles Myanmar System of National Accounts based on 1968 methodology,</p> <p>b) Conducts ad hoc Integrated Household Living Conditions Assessment,</p> <p>c) Conducts the Multi-Indicator Cluster Survey (2010).</p>
<i>Ministry of Immigration and Population</i>	<p>a) Conducts demographic surveys. The latest survey was in 2007,</p> <p>b) Conducts the 2014 Population and Housing Census.</p>
<i>Ministry of Agriculture and Irrigation</i>	<p>a) Collects and compiles data on sown and harvested area, yield and crop production,</p> <p>b) Collects and compiles information on farming households and their land holdings,</p> <p>c) Conducts Agriculture Census. The latest was in 2010.</p>
<i>Department of Health Planning</i>	<p>a) Collects and compiles data on health services from service units.</p>
<i>Department of Education Planning and Training</i>	<p>a) Compiles education monitoring indicators,</p> <p>b) Conducts ‘Education for All’ baseline surveys.</p>
<i>Ministry of Industry</i>	<p>a) Compiles form registration data on employment and turnover.</p>
<i>Ministry of Labour, Employment and Social Security</i>	<p>a) Compiles human resource indicators including size of labour force, labour force participation rate, and unemployment rate.</p> <p>b) Conduct Labor Force Survey (2015)</p>
<i>Central Bank of Myanmar</i>	<p>a) Compiles balance of payments and money supply indicators.</p> <p>b) Compiles trade in services statistics</p> <p>c) Conducts non-residence expenditure survey</p>

Assessments of Myanmar's data production framework to date have made the following observations:

- a) **Lack of Coordination:** This is the most obvious assessment. Statistical activities tend to occur at the ministry level, with very little coordination across ministries and agencies. There is no central coordination in the use of standardized classification schemes and statistical concepts. The level of coordination may have increased somewhat with the establishment of the high level Committee for Data Accuracy and Quality of Statistics but actual impact has yet to materialize. The 2014 Population Census for example was conducted without effective professional participation of CSO, although it is nominally represented in some committees. The coding schemes on occupation and industry for the census were also not discussed nationally. It remains unclear how the population census will be used by other ministries or agencies for their policy making. A coordinated, intensive utilization of census data could lead to a healthy pattern of cooperation at the working level taking full advantage of the availability of census data.
- b) **Unknown Data Quality:** Assessments have shown that statistical activities conducted at many ministries and agencies are often conducted by staff with no statistical background. It is also unclear the level of professional guidance they receive when conducting statistical activities. Consequently, there is great doubt regarding the quality of the statistics produced. The most glaring statistical error was revealed in 2014. Myanmar has consistently released population estimates in excess of 60 million. The 2014 census, however, showed a population size of below 52 million. The large difference attracted media interest nationally and internationally.
- c) **Data Processing Bottleneck:** Some ministries do not have data processing capabilities and have to rely on CSO to process the data. As a result, CSO is burdened with data capture and processing responsibilities. A centralized data capture and processing unit has its advantages and is currently being deployed in countries such as Japan. However, in the case of CSO, the lack of adequate equipment and IT infrastructure negated the advantages of experienced data entry and processing staff members. This results in significant bottle neck in data processing.

2.4. Role and Function of Central Statistical Organization

Assessments of Myanmar's national statistical system have universally lamented the inability of the CSO to perform the roles as the apex national statistical authority to advise the government on all statistical matters and to organize and manage a decentralized statistical system. CSO's roles and functions have been much diminished from the 1970s to the present, with key statistical activities being handled by other agencies. CSO has not been able to exercise any effective leadership thus far and its professional views have largely been ignored.

Will a strengthened Statistics Act help CSO to regain leadership? This is possible. A new Statistical Act will set a new tone for the national statistical system. The new Act, however, is a necessary but not sufficient condition. Three other conditions are equally important.

a) **Coordination of government ministries**

While some countries have adopted the ‘whole-government approach’ as a model for greater coordination across ministries, Myanmar’s ministries are still very much independent of each other. Statistical coordination can only improve if inter-ministry coordination is given stronger emphasis by the government, and if there is a willingness on the part of other ministries to accept guidance and advice from the CSO. Practical tools to facilitate greater coordination could include the development of a prescheduled inventory of key statistical indicators to be used by all entities engaged in the production of official statistics, development of compendia of common statistical standards and concepts and the use of common sampling frames for household and establishment-based surveys. The CSO should aim to take the lead in developing and implementing these centralized, coordinating tools.

b) **Strong professional leadership**

The CSO must exercise strong professional leadership and win credibility and respect from other ministries. In the past year, there has been an outflow of experienced staff either due to retirement or promotion. The net effect on CSO personnel is negative: many of the senior staff members in CSO are new in their job with no in-depth understanding of statistical activities. Many are also not familiar with domain knowledge. It will take time for the senior staff member of the CSO to acquire the professional standing and to exercise effective leadership.

c) **Resources and Infrastructure**

The statistical infrastructure at present is very poor. There is a lack of IT hardware and software in handling the transfer and processing of statistical data. There is also a lack of networking mechanism to link up with the townships for data transfer. It is doubtful that financial resources could be found in the short term to significantly upgrade the statistical infrastructure. The 2014 population census however showed that a large scale statistical project can be implemented efficiently and with high quality when financial resources are made available. In the case of the Census, a significant sum was contributed by the development partners.

2.5. Data Dissemination and User Relations

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 mandated by international agencies. 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 various 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.

Myanmar currently does not have a protocol on relating the data producers to data users and respondents. As it moves forward, such a protocol would be useful to establish and enhance the credibility of Myanmar's national statistical system. Internationally, it has become a standard practice for National Statistical Offices to issue a mission statement and a set of principles of dealing with users and respondents. Administrative procedures are often put in place to address users or respondents concerns. Central to this is the assurance of confidentiality among the data providers and accessibility of the data by the users. These are clearly stated in the United Nations Fundamental Principles of Official Statistics adopted in 1993 and widely subscribed around the world.

3. STRATEGIC OBJECTIVES OF NSDS

The Myanmar NSDS proposes the following strategic objectives. When translated into concrete actions, they set the stage for the Myanmar National Statistical System to produce timely and reliable national statistical information in accordance with internationally accepted methodological standards.

- 3.1. The establishment of a forward looking legal framework and an enhanced, enforceable legal mandate for statistical production, dissemination, and coordination activities within the decentralized national statistical system.
- 3.2. The identification of a comprehensive list of national and sub-national indicators relevant for national development planning, as well as a corresponding list of work programmes and the ministries and agencies held responsible for the production and quality assurance of such indicators.
- 3.3. The development of a set of national statistical classifications and standards as common statistical platform for decentralized statistical activities.
- 3.4. The subscription to and compliance with internationally accepted methodological standards in the production and dissemination of national statistics.
- 3.5. The easy availability of statistical information to users at regional, national and international levels, with such information and data sets released according to internationally accepted periodicity and quality.
- 3.6. The improvement of statistical capacity and knowledge across the national statistical system, from human resources to IT infrastructure, as well as the acceptance of 'statistician' as a recognized professional service within the government with its rights and privileges.
- 3.7. The inculcation of ethics and values in accordance to the United Nations Fundamental Principles of Official Statistics among professionals engaging in the production and dissemination of statistical information throughout the national statistical system.

4. STRATEGIC DIRECTIONS AND PROPOSED ACTIVITIES

A. Strategic Directions for Strengthening the Architecture of the Myanmar National Statistical System

A1. Enhancing the Effectiveness of Decentralization

The current decentralized system needs urgent improvement to enhance its effectiveness. The advantage of a decentralized system is that the production of statistics is closer to the users of statistics. This synergy between the producers and users of statistics is presumed to yield a more responsive and relevant data system. This is a valid premise. However, extreme decentralization can lead to fragmentation of the national statistical system with disparate application of measurement protocols and duplication of data compilation efforts. The end results of a fragmented decentralized system is one that has no uniform statistical standards and no ability to compare and contrast data collected by different ministries or agencies. This lack of an integrated data framework severely reduces the usefulness of the data collected. The lack of data sharing in a decentralized system will also result in a proliferation of duplicative efforts to measure the same social, environmental or economic phenomena. This can lead to respondent fatigue and to wasteful use of scarce human and financial resources. Finally, in a highly decentralized system, there is no obvious entity that can officially and authoritatively represent the country on statistical matters in international **fora**. Myanmar's statistical system is close to this extreme.

Making decentralization work requires three essential features. First, there should be a strong element of coordination of activities and standards through a recognized center in the decentralized system comprising a network of identifiable units. A recognized center will also enable the development of a 'brand' and 'brand recognition', which can help instill confidence among data providers and users of statistical products and services.

Second, there should be shared professional knowledge, expertise and ethics among the statistical units and professionals within the system. This can be achieved by developing a common code for statisticians, joint training events, enhancement of career opportunities across government and frequent, professional interactions between statisticians through a professional association or society.

Third, there should be a shared vision of how to develop the national statistical system and a willingness to accept responsibilities and ownership.

The following sections elaborate on the strategies for enhancing the effectiveness of the decentralized statistical system:

a) Political Leadership in Coordination

Political leadership is critical within the government for coherence in policy and actions across ministries and agencies. The statistical system is no exception. In Myanmar, political leadership is in place. The establishment of the High Level Committee for Data Accuracy and Quality of Statistics on 12 July 2013, led by the Vice President as Mentor and chaired by the Union Minister for the MNPED, has been widely seen a positive first step towards addressing a fragmented statistical system. The new Committee for Data Accuracy and Quality of Statistics established by the current government in May 2016 is another positive signal that the political leadership takes this issue seriously.

The expanded terms of reference for the Committee, as announced in Presidential Order 7/2016, are highly appropriate and relevant. This Committee has been tasked to: (a) to give guidance for promulgation of new National Statistical Law to meet the requirement of the current situations and to supervise the enforcement of the law; (b) to promote the credibility of Statistics; (c) to give advice and guidance for the establishment of National Statistical System (NSS); (d) to supervise and give guidance on surveys and statistical activities for the socio-economic development of Myanmar; (e) to coordinate for the emergence of good statistical system in various sectors with the responsible line ministries; (f) to make Peer Review on the National Statistical System to be consistent with international statistical systems and to submit report to the Cabinet on the sectoral review of gaps for the necessary preparations; (g) to coordinate and manage in providing trainings for the unification of data collection system and statistical methods among Union Ministries, Local Governments and Regional Governments; (h) To supervise National Strategy for Development of Statistics (NSDS) implementation and management of National Statistical Institutions for statistical development.

Political leadership needs to be expressed in real actions and outcomes. It is extremely important for the High-Level Committee to be seen as effective and credible. In this regard, the Committee is encouraged to undertake the following actions:

- i) Establish a regular meeting schedule
- ii) Establish a forward-looking policy agenda
- iii) Strengthen the secretariat in support of the Committee
- iv) Release periodic reports on the decisions made by the Committee
- v) Release progress reports on the improvement of the national statistical system

b) Establishing the Legal Mandate

A new legislation governing the production and dissemination of national statistics is currently being considered. This will be a revision of the current Central Statistical Authority Act which was enacted in 1952. A draft has been being circulated for consultation and is posted on the Website of Central Statistical Organization (CSO). The consultation process was adequate and transparent.

Five elements are critical in the new legislation if it is to be effective:

- i) The clear identification of a national statistical coordinator who will deal with all professional issues on official statistics within the government, and an official definition of the ‘national statistical system’;
- ii) The provision for a clear coordinating mechanism, spelling out the respective roles and responsibilities in data collection, compilation, archiving, quality assurance, and dissemination;
- iii) The establishment of national statistical standards and the mechanism for ensuring compliance from all government ministries and agencies;
- iv) The provision of a quality assurance mechanism throughout the entire statistical system;
- v) The provision of a clear definition of ‘official statistics’ vis-a-vis ‘government information’ and their respective characteristics, recognitions, and privileges, and a clear mandate to enable their effective integration and sharing for statistical compilations

c) The Coordinating Mechanism

The Myanmar government has initiated in recent months several actions to strengthen the coordination mechanism of the national statistical system. At the working level, a system-wide National Statistical Coordination Committee (NCC) has been established under the chairmanship of the Deputy Minister of Ministry of National Planning and Economic Development (MNPED). All ministries are represented. Two meetings have been held so far in 2015. This working level committee has the potential of evolving a concrete work programme and meaningful outcomes. It is therefore essential for the Coordination Committee to have a forward looking agenda and a concrete work programme. Under the current government, the Minister for Planning and Finance has issued guidance on the creation of statistical units in all ministries. The future meetings of the NCC is likely to be better organized and coordinated. (direct control by the committee for CDAQS)

The second action is the creation of clusters or working groups on specific topics to review gaps and recommend improvements in the statistical system. Six clusters have been organized, and they cover the following topics: a) National Accounts Statistics, b) Trade and Investment Sector Statistics, c) Agriculture and the Rural Statistics, d) Survey Coordination and Statistical Standards, e) Energy Statistics f) Environment Statistics g) Social and Vital Statistics h) Macroeconomic Monitoring and Financial Statistics Cluster. Each cluster is currently supported by relevant development partners with FAO, UNICEF, ADB, IMF, WB and UNFPA being actively involved

These clusters provide an effective platform for important subject matters to be reviewed and improved upon by relevant ministries and agencies. For the time being, these clusters will provide assessment on the statistical gaps and the resources required to meet these gaps. Such

assessment will be incorporated in the implementation plans of the NSDS. However, for the clusters to be sustainable and remain effective in the long term, the following actions will be undertaken:

- i) The clusters will produce concrete work plans and submit to the National Statistical Coordinator (CSO), the National Statistical Coordination Committee, and the High Level Committee for Data Accuracy and Quality of Statistics;
- ii) Performance of the clusters in implementing the work plan will be closely monitored. The National Statistical Coordinator will produce annual report on the implementation of the work plan. This report should be made public.
- iii) These work plans will eventually evolve to become an official system-wide work programme on official statistics.

A1. Summary of recommendations

Goal	Drivers	Key Activities	Time-frame
<i>A1. Enhanced effectiveness of a decentralized system</i>	a) Effective political leadership	<ul style="list-style-type: none"> • Establish visible meeting schedule and agenda • Release periodic reports on decisions • Release periodic progress reports 	Immediate
	b) An updated legal mandate	<ul style="list-style-type: none"> • Identification and empowerment of national statistical coordinator • Legal mandate for coordination mechanism • Legal mandate for ‘official statistics’ and associated standards setting and quality assurance mechanisms 	By 2016
	c) A dynamic coordinating mechanism	<ul style="list-style-type: none"> • Establish and maintain a National Statistical Coordination Committee • Creation substantive clusters to review gaps and areas for improvement • Clusters to produce work plans for implementation 	Immediate

A2. Integrating the Systems

For a decentralized system to work effectively, there must be a high degree of integration at the working level. The preceding section has addressed the governance issue and the coordination mechanism. This section will address integration at the systems level.

a) Integrating the People

The government officials working in the statistical and information field must have a common professional context to unify them in their work. In some countries, this is done through the Government Statistical Service (GSS), whereby recruits into the service must undergo standardized training before being dispatched to ministries and agencies. The head of the service is also known as ‘head of profession’, and is accorded much professional credibility and respect. Creating a Government Statistical Service is a serious undertaking and would require a thorough understanding of the government civil structure and manpower needs. The benefits it brings however fully justify its existence. This is a long-term goal for the Myanmar statistical system.

In the interim, it is essential to recognize the units within the ministries and agencies dealing with statistics and information. They should be given proper identity and accorded appropriate professional status. A national capability building platform will be established to train all staff members in the CSO as well as the statistical units in critical subject matters such as statistical standards, computation techniques, data processing and analysis, and report writing.

In this regard, a good example is Indonesia’s Statistical Training Institute, which offers a formalized degree programme for all officers before they are sent to government offices in central government or the provinces. It is strongly recommended that a study on the relevance of Indonesia’s Statistical Training Institute for Myanmar is made as soon as possible. A similar institute could be considered for Myanmar.

Integrating statistical professionals would require significant professional leadership. This leadership is expected to come from the National Statistical Coordinator who is expected to be the head of the profession. The development of professional expertise, the building of an esprit de corps, and the evolution of professional ethics and quality standards, are some of the key tasks that the head of profession must undertake. The National Statistical Coordinator, once designated, should call for a town hall meeting of all statisticians to discuss issues of mutual concern and to give a sense of direction for the future.

b) Integrating the Data

Statistical information does not operate in silos; its usefulness is much enhanced when it is integrated and shared across domains and over time. Statistical databases are an essential part of

national statistical system and form the backbone of all statistical operations. It is observed globally that with the advances in e-government operations, many governments are taking full advantage of administrative or statistical information in databases to enhance productivity gains.

The 2014 census is a case in point. It forms the most up-to-date database on the population of Myanmar. It is now being used as a sample frame for surveys, and its information is being analyzed for substantive reports. But the 2014 census database should not be considered as a one-off exercise. Its usefulness will be much enhanced if it can serve as the base of a population information system of the future.

While a national statistical database system will take time to evolve, it is important to build the necessary linkages so that data merging will be possible in the future. In this regard, the new legislation should have adequate provisions for the integration of data to build national databases. Definitions and data structures should be harmonized across ministries and agencies. Meta data should be made compulsory for every database established. Data sharing principles should be clearly established to avoid misunderstanding.

c) Integrating Geospatial and Statistical Information

Myanmar is a large country with numerous local government units. Integrating local information to form national databases is an important task for local and national planning. The Myanmar statistical system can take advantage of recent advances in geospatial location information platform. This ensures information can be locality specific, and yet scalable to the national level. The 2014 population census for example could provide important data for sub-national analysis if the information are linked through the geo-codes to local districts.

The essential element of such integration is the geocoding of the local information. In some countries, this could simply be the addressing system. Myanmar does not have an effective addressing system to geocode location information. The development of a national geocode system or a national addressing system is highly recommended. It is also important to establish a national standard on geographic classifications.

d) Integrating the IT Infrastructure

At present, data capture and processing appears to be the responsibility of each ministry or agency. There is no central coordination of the system specifications or the software to be used. There is also no systematic training of personnel working on IT systems for statistical operations. During the preparation of the 2014 Population Census, the census operational staff was trained to handle data processing equipment including scanners and IT systems. Such training was invaluable. The National Statistical Coordinator should devise a proper national statistical IT system with appropriate hardware and software. A proper training programme should be introduced.

A so-called ‘information revolution’ is taking place around the world. Information captured no longer depends solely on censuses, surveys, or administrative data, but now extends also to unstructured data flowing through the internet and other sensors. Myanmar must not be left behind as it seeks to put in place a proper IT infrastructure. Statistical Offices around the world

are experimenting with the use of satellite images for the compilation of agricultural output, mobile phone data for monitoring tourism, and internet search data as predictive economic variables. The new infrastructure must have the capability and flexibility to accommodate these new advances.

A2. Summary of Recommendations

Goal	Drivers	Key Activities	Time-frame
<i>A2. An integrated system for statistical production, analysis and dissemination</i>	a) Integrated system for managing statistical personnel and expertise	<ul style="list-style-type: none"> • Provide common professional reference point for statistical personnel with national statistical coordinator as apex entity • Accord professional identity and status • Create a system of training for statistical personnel • National Statistical Coordinator to meet all statisticians in ministries and agencies 	From 2016
	b) Integrated data platform for official statistical information	<ul style="list-style-type: none"> • Begin efforts to build national databases • Establish common definitions and meta data to facilitate data transfer • Establishing policies and protocols on data sharing and governance mechanism for data pooling in databases 	From 2016
	c) Integrated platform for merging geo-information and statistical information	<ul style="list-style-type: none"> • Establish geo-information database for sharing of geospatial information including base map, address system • Improve national address system for geo-coding 	From 2016
	d) Integrated IT infrastructure for efficient data capture, transfer, processing and dissemination	<ul style="list-style-type: none"> • Harmonize the It systems across the ministries for statistical production and related processes • Provide adequate training to manage and deploy new IT software and systems • Establish a system to collect new information sources such as mobile phone or internet 	From 2016

A3. Advancing Professionalism and Technical Competence

It is fair to say that Myanmar's national statistical system lacks a thorough understanding of the intricacies and requirements of international statistical standards and the requisite expertise to raise the national standard to meet these requirements. However, experiences from the 2014 Population and Housing Census have shown that, once given the opportunity, the civil servants can rise up to the occasion and deliver a high-quality statistical product that meets international standards. The establishment of the International Technical Advisory Board was able to bridge the 30-year knowledge gap on best practices in census operations during which no census was conducted. The question is how we can replicate the experience of the 2014 census and bring improvements across the board.

The success of the 2014 Population and Housing census can be attributed to four factors: i) high level of political support for a successful census, ii) the dedicated staff of the Department of Population (and the support of the entire Ministry of Immigration and Population), iii) an effective transfer of technology for data capture and processing, and iv) the availability of external experts to offer support through the International Technical Advisory Board.

To bring the statistical standard across the ministries and agencies, the following steps are recommended:

- i) Officers dealing with statistical matters should be recognized within the government and accorded a 'professional' status. They should be encouraged to acquire the knowledge and expertise within their area of specialization. In this regard, there must be recognized experts within the government who can speak with authority on various statistical standards, such as the national accounts, the consumer price index, the retail price index, the producer price index, the sampling methodology. Such experts should be encouraged to interact with experts from other countries to enhance their knowledge.
- ii) A human resource development programme should be evolved to identify potential statistical professionals and provide them with long-term training opportunities. Training opportunities are easy to find, but identifying the right person may take time. This will be an important task of the National Statistical Coordinator.
- iii) Statistical experts within the government should not only possess technical expertise, they should also subscribe to the culture and ethics of official statistics. The Fundamental Principles of Official Statistics, approved by the United Nations 21 years ago and widely adopted globally, should be shared within the ministries and agencies. Statistical experts should use the Fundamental Principles as an ethical guide for their professional behavior.
- iv) The National Statistical Coordinator should adopt a system-wide quality-assurance system for statistical production and dissemination processes. This would help to build quality awareness into all processes and yield high-quality statistics.

A3. Summary of recommendations

Goal	Drivers	Key Activities	Time-frame
<i>A3. A professional, well-trained and dedicated statistical workforce</i>	a) Develop systematic training programme in modern statistical practices from data capture to data compilation	<ul style="list-style-type: none"> • Draw out a road map for professional training programme for all statistical personnel • Identify expertise involved in substantive areas and assign priorities in training 	From 2016
	b) Establishment of a human resource development programme	<ul style="list-style-type: none"> • Identify career path of statisticians within the government and accord appropriate advancement • Identify qualifications for recruitment and advancement 	From 2016
	c) Inculcate a professional ethics in line with Fundamental Principles of Official Statistics	<ul style="list-style-type: none"> • Conduct training courses on the values and ethics of professional statisticians 	From 2016

B. Strategic Directions for the Central Statistical Organization as National Coordinator and Statistical Authority

B1. Strengthening its Mandate

The CSO is widely regarded as the national coordinator in name but not in substance. The 1952 Central Statistical Authority Act gave the legal mandate to the Central Statistical and Economics Department (CSED). The Act was not revised to extend the authority to CSO legally. Historically, key statistical activities were undertaken by the CSED, but they have been transferred out over time. For example, the System of National Accounts, a central integrative measurement framework for the economy, was taken out of the CSO and placed with the Planning Department. Similarly, the Population Census of 2014 was undertaken by the Department of Population (from the Ministry of Immigration and Population) with little

professional input from the CSO. The absence of these two central projects reflects a significant lack of influence of the CSO in official statistics.

The new proposed legislation will strengthen the legal mandate of the CSO as the national coordinator, as described in the previous section. This legal mandate could be further strengthened through the administrative coordinating tasks that the CSO has assumed. For example, CSO is the secretariat to the Committee on Data Accuracy and Quality of Statistics. Through this Committee, the CSO could exercise a level of influence far exceeding what is described in the legal mandate. But to be truly effective, the CSO must implement the following steps:

- i) Acquire the necessary confidence and expertise in order to play the leadership role in the national statistical system.
- ii) Work effectively as secretariat to the Committee on Data Accuracy and Quality of Statistics by providing sound advice and meaningful programmes to strengthen the national statistical system.
- iii) Work through the National Coordination Committee to implement appropriate measures on statistical standards as well as a quality assurance mechanism.
- iv) Exercise strong leadership in technical and organizational roles in large-scale national projects involving statistical information.

B1. Summary of recommendations

Goal	Drivers	Key Activities	Time-frame
<i>B1. A legally empowered CSO as national statistical authority</i>	a) Enactment of the new statistical law	<ul style="list-style-type: none"> • Develop education and publicity efforts to inform the new legal mandate • Work with ministries and agencies to develop working relationship in line with new mandate 	From 2016
	b) Develop work programme for the entire system especially injecting statistical standards	<ul style="list-style-type: none"> • Identify the statistical standards that need to be introduced • Work with the Committee on Data Accuracy and Quality of Statistics to evolve a national programme 	From 2016
	c) Exercise leadership in national statistical projects	<ul style="list-style-type: none"> • Involve in national statistical projects and provide professional leadership 	Immediate

B2. Demonstrating Organizational and Professional Leadership

The leadership of the CSO is exercised through the office of its Director General. It has been suggested that the top-position should be renamed to Chief Statistician, as is the case in Singapore, Malaysia, Indonesia, India, and Canada. In other countries, the positions also known as National Statistician (UK) or Government Statistician (Australia and New Zealand).

Adding the word ‘Statistician’ to the title helps to bring special recognition to the office. The office bearer will have the added responsibility of being the top professional in the country and will be required to comment on all statistical matters. This might be a heavy responsibility, but it brings great rewards. It is recommended that the post of a ‘National Statistician’ be established at a level equivalent to a Deputy Minister.

Globally, it has been well-recognized that the National Statistician will hold a certain stature in the country as the head of its statistical system. He or she must speak up on behalf of the national statistical system on critical statistical issues, and must also know the intricacies of the national and global statistical system.

In Myanmar, the Office of the National Statistician can be expected to perform the following key tasks:

- i) Serve as Head of Secretariat to the Committee on Data Accuracy and Quality of Statistics.
- ii) Serve as the Chair of the National Statistical Coordination Committee.
- iii) Decide on overall statistical policy, in consultation with the NCC and the Committee on Data Accuracy and Quality of Statistics.
- iv) Initiate a progressive work programme to improve statistical capacity, instill appropriate standards and quality awareness, and develop new areas of statistics.

B2. Summary of recommendations

Goal	Drivers	Key Activities	Time-frame
<i>B2. Demonstrate Organizational and Professional Leadership</i>	a) Evolve a national statistical policy on professional matters	<ul style="list-style-type: none"> • Consult with ministries, the NCC, and the Committee on Data Accuracy and Quality of Statistics 	Immediate
	b) Establish programmes to improve capacity and instill professionalism	<ul style="list-style-type: none"> • Establish professional dialogue and training programmes 	From 2016

B3. Building a Meaningful and Critical Work Programme at CSO

It is essential that the CSO's work programme reflects the core activities of the national statistical system. The flagship projects of the NSS should either reside within the CSO, or be strongly linked with the activities of the CSO. CSO's work program will be expanded both by developing new data collections and statistical operations, but also by gradually transferring selected statistical activities from other government ministries and departments to the CSO. This transfer of tasks and responsibilities will not occur at once and will have to be managed carefully with respect to available skills, experience and resources.

As a first step, the government will seek to consolidate statistical activities within Ministry of Planning and Finance (MoPF). Currently, statistical operations are undertaken both in Planning Department (PD) and CSO. By gradually moving statistical work from PD to CSO, the PD will be free to focus on its core functions of policy development and monitoring and evaluation of policies and projects. It will also enable better use of scarce financial and human resources in addition to strengthening CSO's profile in the National Statistical System (NSS).

In this regard, it is strongly recommended that the following programmes be designated under the CSO and that the CSO evolve an appropriate organization structure to deliver this work programme:

- i) **National Accounts:** In line with global best practice, it is that National Accounts is compiled and managed by the CSO as an independent and professional body. The System of National Accounts builds on multiple data sources and requires an in-depth understanding of all economic statistics. It will become the core work programme for the CSO of the future.
- ii) **Key economic surveys:** Surveys of key economic sectors should be implemented by the CSO, which should also manage the database on the establishments. These sector surveys could be jointly organized with the line ministries or agencies. Survey findings will provide key inputs for the compilation of the national accounts. The CSO should not just handle the data-processing part of the survey process, but should take charge of the entire process.
- iii) **Key household surveys:** All key household surveys should be centrally managed by the CSO. The interviewers and data processing personnel should be trained and managed by the CSO. This will ensure the highest possible quality of all the surveys.
- iv) **Consumer Price Index:** The Index is currently managed by the CSO and this should continue.
- v) **Sub-national indicators:** Myanmar is a large country and will require a system of locality indicators to monitor regional and sub-regional development. This set of indicators should be developed in conjunction with the local provincial government. They should be reviewed periodically to ensure their relevance within the national and regional

development framework. CSO is the most appropriate agency to evolve this locality indicator framework.

- vi) **Myanmar statistical classification system:** Myanmar’s national statistical system requires a set of classifications to standardize the use of statistical concepts and measurements. The CSO should take on board the international classification standards that have been evolved over time and adapt them to the local context. The Myanmar classification system should include the following classification schemes: Myanmar Central Product Classification, Myanmar Standard Industrial Classification, Myanmar Standard Commodity Classification, Myanmar Standard Occupational Classification, Myanmar Standard classification of Education, Myanmar Standard Geographic Code, and Myanmar Classification of Diseases.
- vii) **Statistical Administration:** Within the CSO, a unit should be established to deal with policies and programmes relating to statistical personnel throughout the whole government. It should address the training needs of the government, administer training and evaluation programmes, and serve as the focal point for all professional issues among all government statisticians.
- viii) **Integration with the International Statistical System:** Myanmar needs to engage stronger with the international statistical community. This means participation by CSO in international for a such as the annual United Nations Statistical Commission meetings as well regional conferences organized by ASEAN and others. Secondly, the CSO should ensure that data for Myanmar is transmitted on a timely basis and accurately reflected in international databases such as the World Bank’s World Development Indicators, IMF’s International Debt Statistics, and the United Nations indicator databases.

B3. Summary of recommendations

Goal	Drivers	Key Activities	Time-frame
<i>B3. Establish substantive work programme for CSO as a National Statistical Authority</i>	a) Create coherence of statistical activities in CSO in line with global practices	<ul style="list-style-type: none"> • Anchor National Accounts and economic surveys in CSO • Establish a household survey programme 	Immediate
	b) Establish statistical administration in CSO to steer the system	<ul style="list-style-type: none"> • Give higher prominence of the administration of system-wide activities 	From 2016

	c) Engage in international statistical system	<ul style="list-style-type: none"> • Participate in international meetings and conferences like UNSC and ASEAN-organized events • Ensure timely transmission of data to international organizations such as UN and IMF 	Immediate
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B4. Establishing a National Framework for Data Dissemination and Revision

The CSO should evolve a programme to coordinate the dissemination of statistical information on behalf of the government. It is unavoidable that some data may need to be revised after release due to updated information. It is therefore essential that, alongside a dissemination policy, the CSO should publish a revision policy to explain its revision procedures. This reinforces transparency and accountability, and will ensure user confidence in the statistical information produced by CSO. These set of policies should focus on the following key tasks:

- i) Assess the current international trend of adopting an ‘open data’ policy and recommend to the government a coherent policy on data dissemination to the public and information sharing across government ministries and agencies. This assessment and recommendation can take the form of a policy review paper. It has been observed that an ‘open data’ policy has tremendous economic benefits. It also enables better understanding and scrutiny of policy decisions. The policy review paper should address these issues and make appropriate recommendations.
- ii) Develop an online data.gov platform for the Myanmar government for data sharing, building on current data dissemination platforms such as the Myanmar Statistical Yearbook and the CSO website.
- iii) Decide on a policy for micro-data access. Demand for the release of micro-data files will surge as more censuses and surveys are conducted. A decision should be made on whether the release of micro-data files is a relevant policy for Myanmar. The discussion should be managed by the CSO as the national statistical coordinator. Piecemeal decisions on micro-data release will create confusion regarding the government’s policy, and will also lead to abuse of such data files.
- iv) Formulate a data revision procedure. Data revision is necessary and unavoidable. But data revision should not be done haphazardly, nor should it be politically motivated. Hence, the conditions for data revision must be clearly spelt out before hand. The revision procedure should be widely publicized.

B4. Summary of recommendations

Goal	Drivers	Key Activities	Time-frame
<i>B4. Establish national framework for data dissemination and revision</i>	a) Establish an appropriate policy on data dissemination	<ul style="list-style-type: none"> Examine relevance of ‘open data’ policy for Myanmar Adopt new platforms for data release 	Immediate
	b) Establish a policy on micro-data access	<ul style="list-style-type: none"> Consider release of micro-data files from household surveys and census 	From 2017
	c) Establish a data revision policy	<ul style="list-style-type: none"> Examine data revision practices and determine best approach across the system 	From 2017

B5. Establishing a National Integrated IT Platform

It is CSO’s responsibility to design, build and implement an integrated IT platform for the entire government for statistical processing. This integrated system should include an appropriate architecture for data capture, data processing, the generation of statistical tables, and the dissemination of data through the internet. Specialized platforms should also be developed for designing questionnaires, creating survey frames, selecting samples, and editing data. The data platform created for the 2014 Population and Housing Census can be used as an example.

There are some urgent, critical tasks that need to be carried out. The CSO is strongly advised to look into the following improvements:

- i) A modern, efficient data processing platform must be established quickly to resolve the bottle-neck faced by the CSO. The migration from key-entry system to automated scanning is an essential step for increasing productivity. A proper IT facility should be built for data processing which includes proper ventilation, appropriate security systems, and storage space for the survey questionnaires. In this regard, it is useful to consult the Population and Census Office to see how a modern data processing system and facility could be evolved.
- ii) Steps should be taken to build an appropriate platform for statistical databases. Currently, the only national database for statistical purpose is the Population and Housing Census. It is unclear if this population database will transform into a ‘live’ population register for the tracking of population change and movement. Four databases could be considered as national databases: Population, Housing, Land, and Commercial Establishments.

- iii) Electronic transfer of data across ministries has become a normal procedure in many countries. Some countries have made their databases machine-readable to facilitate easy transfer. It is important for Myanmar to begin work on a platform that will allow the easy transfer of administrative data for statistical processing.

B5. Summary of recommendations

Goal	Drivers	Key Activities	Time-frame
<i>B5. An effective IT platform located with CSO as focal point for a national IT platform for statistical operations</i>	a) Enhance efficiency of data processing	<ul style="list-style-type: none"> • Install new data capture processes including scanning and intelligent character recognition 	Immediate
	b) Establish data management protocols	<ul style="list-style-type: none"> • Procedures on data management should be spelled out to ensuring confidentiality of data 	From 2016
	c) Initiate training programmes on data management tools	<ul style="list-style-type: none"> • Training in advance software and processing systems should be initiated 	Immediate

C. Strategic Directions for Improving User and Respondents Relations

The importance of building a strong relationship between the users of statistical information and the statistical agencies has long been recognized globally. Established statistical agencies often measure regularly the degree of public trust and satisfaction of their work, as well as how they can meet the demand of users more effectively. These serve as key performance indicators for these statistical agencies. Currently, Myanmar relates to the users more on an informal basis, especially for academic users. As Myanmar begins to collect more information from the public, it is necessary to develop an appropriate strategy to engage data providers, and to assure them of their rights and responsibilities.

C1. Engaging the Users

Currently, there is no standard procedure in the government for dealing with users of official statistics from CSO, the ministries, or from other government agencies. There has also been no attempt to measure the needs or requirements of users in statistical information and their level of confidence and satisfaction. The government does consult with the development partners regularly through the Statistical Quality Development Sector Working Group to receive feedback on the government's statistics programmes. The government also occasionally consults the

academic sector such as the professors in Universities of Economics and the Myanmar Statistics Association.

The Myanmar national statistical system should develop a programme of user consultation and implement the following activities:

- i) Conduct a general user requirement analysis for different areas of statistics. This can be done through surveys and focus groups.
- ii) Organize regular user-producer consultation meetings to discuss user requirements and constraints faced by statistical agencies. Such consultation should cover a broad spectrum of user groups. The Myanmar Statistical Association could be an important user group for regular consultation.
- iii) Design and conduct a user satisfaction survey periodically to gauge the level of satisfaction.
- iv) Consider the establishment of a User Advisory Council which could help provides period feedback and advice. Such advice could be channeled back to the ministries and agencies and eventually to the High-Level Committee on Data Accuracy and Quality of Statistics.

C2. Engaging the Media

Myanmar has an active media community. During the 2014 Population and Housing Census, the media played an active part in informing and educating the public. It also raised critical issues on census procedures through media reports or formal feedback. The 2014 census serves as an excellent example of the importance of engaging the media and facilitating their role in data dissemination and building public trust. Engaging the media has gained greater recognition among statistical offices around the world. The following activities are recommended.

- i) Conduct briefing sessions to the media and journalists on the statistical procedures, statistical policies, and major statistical projects.
- ii) Provide feature articles on selected statistical topics to appear in various media outlets.
- iii) Provide a release calendar so that the media is alerted on the release date of important statistics.

C3. Relating to the Respondents

At present, Myanmar national statistical system does not have a policy on how it relates to the data providers (respondents). Perhaps this is due to the fact that the respondents' burden is not as high and the number of surveys is still relatively low. It is however important for the national statistical system to put in place an explicit policy of dealing with data providers. The policy should include the following elements:

- i) A detailed description of the responsibilities of the data providers as specified by the legal mandate of statistical activities.
- ii) A detailed guarantee of the confidentiality and rights of data providers.
- iii) A system to measure and monitor respondent burden.

C. Summary of recommendations

Goal	Drivers	Key Activities	Time-frame
<i>C. A set of good practices in relating to the users, the media, and the respondents</i>	a) Establish a system-wide policy on relating to users	<ul style="list-style-type: none"> • Conduct user surveys to understand the need of users of official statistics • Consider issuing 'standard of service' to guarantee high level services to users 	From 2016
	b) Establish a system-wide policy on relating to media	<ul style="list-style-type: none"> • Issue instructions on how to relate to the media including confidentiality provisions and equal access to data • Align media policy with the data dissemination standards which specify data release timetable 	From 2016
	c) Establish a system-wide protocol in dealing with respondents	<ul style="list-style-type: none"> • Ensure good service to respondents to win their support • Assure the respondents the principle of confidentiality and their contribution to statistical information 	Immediate

D. Strategic Directions for Critical Statistical Programmes

The mission of a sound national statistical system is to produce relevant, timely and reliable data on national and sub-national indicators in line with internationally accepted methodology and best practices. A key strategic objective is to produce a set of national and sub-national statistical indicators that can inform the government of the social, economic and environmental situation and trends in the country. The preceding part of the report addresses the creation of an effective infrastructure for the production of these indicators in the Myanmar national statistical system. The following sections will address what need to be done in critical priority statistical areas.

The key national statistical indicators should cover all critical statistical domains. An initial 12 statistical domains have been identified. They are: 1) Myanmar System of National Accounts, 2) Price Statistics, 3) Industry, Tourism and Investment statistics, 4) Agricultural and Rural Sector Statistics, 5) External Trade Statistics, 6) population and demographic statistics, 7) Social, Gender, and Labour Statistics, 8) Civil Registration and Vital Statistics, 9) Health Statistics, 10) Energy and Environment Statistics, 11) Education Statistics, 12) Geospatial Information.

For the purpose of this NSDS document, it is not possible to critically assess all the domains. Based on available resources and the expertise made possible by the development partners, the following have been chosen as priority Phase-1 areas. Detailed assessments will be made, and concrete implementation plans will be reviewed and included in the Part 2 of the NSDS document.

Similarly, the Government of Myanmar will have to prioritize statistical domains to improve in order to not dilute the effectiveness of development initiatives by taking on too much at once. Thus, the following improvement programmes are not intended to cover the whole range of statistical domains that could be of interest to users, but reflect what the government sees as the main priorities in the period 2016 – 2018.

Phase 1 Statistical Programmes

D1. Improving National Accounts

At present, Myanmar's System of National Accounts (SNA) is compiled by the Department of Planning. As proposed earlier, it is strongly recommended that national accounts compilation be moved to the CSO so that a greater synergy of statistical work can be achieved.

A cluster on National Accounts and Macro-economic Statistics has been formed. The first meeting of the cluster was held on 14 May 2015 chaired by DG PD, MoPF. The immediate priority for the cluster is to oversee the implementation of a full SNA, moving towards the 2008 standard. An assessment of national accounts compilation is being undertaken under an ongoing

ADB technical assistance project and milestones are being set for the short, medium and long term progress towards SNA 2008.

In the short term, the goal for national accounts is to achieve milestone 2 towards implementation of SNA, i.e. compilation of production accounts of institutional sectors, computation of gross national income, and establishment of a supply-use table using the data available from different sources including the recently completed population census 2014 (by the Department of Population) and the ongoing Labor Force Survey (by the Department of Labor).

Implementation of a full SNA is closely interlinked with complementary data systems like Government Finance Statistics (GFS), Balance of Payment Statistics, Monetary and Financial Statistics, and price statistics. To ensure consistency and sufficiency of source data, these complementary data systems will be developed in parallel with the SNA work by the concerned agencies. ADB will focus their technical assistance on SNA, while IMF is focusing on price statistics, GFS and monetary statistics. While PD in MoPF is responsible for SNA, the CSO, Central Bank of Myanmar and the Ministry of Finance are responsible for complementary macroeconomic data systems mentioned above.

Close cooperation between the involved agencies, is necessary to achieve coherent, timely and high frequency macroeconomic datasets. As a next step, the cluster agreed to develop a timeline up to Milestone 2 for the implementation of SNA, to list the data required for national accounts compilation in the short, medium and long-term and to identify corresponding responsible agencies for these data.

D2. Improving the Measurement of Prices

A system of price measurement is critical in understanding the supply and demand of goods and services, as well as their impact on the economy and the household sector. The CSO currently produces a periodic Consumer Price Index (CPI) which tracks a limited range of goods and is limited in a real coverage. Improvements in the CPI are currently underway, facilitated by a consultant from the International Monetary Fund. The new CPI will be based on a much larger basket of goods and services, an updated sample of outlets and a new system to calculate the index at the union and regional level. Expected dissemination of the new CPI is the end of June 2016.

Going forward, Myanmar should produce a full range of price indices which includes producer price indices, wholesale and retail price indices, and relevant specialized price indices including import and export prices. It is recommended that the cluster on national accounts and macroeconomic statistics review this domain of work and introduce a work programme and timeline for the implementation of these indices.

D3. Improving Agriculture and Rural Statistics

The agricultural censuses of 2003 and 2010 have provided some important benchmarks on statistical information for this sector. The Food and Agriculture Organization has initiated an assessment of the agriculture and rural system statistics and its report is due shortly. Myanmar is an agricultural country where 60% of the workforce engages in agricultural activities. The focus on this sector will be on indicators reflecting on the status of agricultural structure and resources such as land-use, irrigation system, and fertilizer usage. Indicators on the wellbeing of farm workers, especially rural poverty, will be equally important. Current indicators tracking agricultural and fishery production may need to be extended to improve coverage. Agriculture Census will be undertaken in 2020.

D4. Improving External Trade Statistics

CSO currently compiles foreign trade statistics from custom declarations. For merchandise trade, it receives data from the Customs Department, performs simple checks and controls and edits the data for any glaring errors and omissions. Results are transmitted to the Government on a weekly basis. CSO can further improve the quality of this data by working together with trade statistics units in major trading partners to estimate the extent of underreporting, which may be large. Improvements are urgently needed to ensure the completeness of coverage and the accuracy of the declarations.

It is the aim of the Government of Myanmar to comply with ASEAN standards in trade and investment statistics. A committee on harmonization of statistics on trade in goods and services as well as foreign direct investment has been established. This group is chaired by Ministry of Commerce and with the participation of CSO and Customs Department. The group is receiving technical assistance from EU as well as from the EU-ASEAN COMPASS Program.

Currently, Myanmar is the only country in the ASEAN community that prepares weekly trade reports for government users only. No separate press release is prepared for a wider audience. The standard for most other countries is monthly reports distributed to both the government and a public audience, with a lag of one month. A monthly trade data report is commonly done in most of the other ASEAN countries and should also be introduced in Myanmar.

Several observers have recommended that CSO shift its focus away from prompt weekly reporting of incomplete data to less frequent but more reliable reporting of data that has been adjusted for suspected coverage and credibility errors. Going forward, CSO aims to become more skilled and effective in preparing these alternative estimates that are more comprehensive than available from the raw administrative data from Customs, and which can serve to adjust for underreporting. This is expected to improve not only the quality of external trade statistics, but also the National Accounts and the Balance of Payments. Mirror Statistics need to be developed.

D5. Improving Poverty, Social, Gender, and Labour Statistics

In line with national development priorities, a set of indicators on living standards, social conditions, gender aspects and the labour force should be produced. This will be done through the development and implementation of an integrated household survey program as well as an enhanced use of appropriate administrative data sources.

The International Labour Organization is assisting the government on labour market indicators. These indicators are critical to understand the manpower dynamics of the local economy, especially in terms of unemployment, seasonable work, and employability. The ILO is also supporting a Labor Force Survey, which will provide important information on employment

The World Bank has expressed interest in supporting the next household living conditions survey, which will yield official poverty rates and other essential indicators of household well-being and access to services. It will be important to consolidate the various household surveys that measure related phenomena such as the CSO Household Income and Expenditure Survey (HIES) and the Integrated Household Living Conditions Assessment (IHLCA), which has been carried out two times before by PD (2004-05 and 2009-10). It is expected that the next household poverty survey (MLCS) will be carried out in 2016.

D6. Improving Population and Demographic Statistics

The 2014 population census has helped to improve population and demographic statistics by providing an important benchmark. The tracking of population characteristics over time will be done through demographic estimates which are usually produced yearly. The Ministry of Immigration and Population has the necessary expertise to carry out the detailed yearly estimates. However, these estimates need to be validated against administrative data and be shared across government ministries and agencies. The demographic variables would require the input of vital events from civil registration system. Distortions in the civil registration system may affect the accuracies of the demographic variables which may in turn affect the quality of the population estimates.

D7. Improving Industry, Tourism and Investments Statistics

As Myanmar progresses economically, the demand for economic statistics will increase. It is essential for a proper system to be established to meet these demands. A coherent system of economic indicators should be produced for the critical economic sectors. This would include a system of regular surveys on establishments, tracking their performance, investment profile and business expectations. Current surveys are mainly ad hoc in nature. An economic census could be considered in the near future to provide the benchmark for future analysis. The development of a registrar for the establishments should be considered.

D8. Improving Civil Registration and Vital Statistics

An inter-agency working group for birth registration comprising key government ministries and agencies was formed in 2013 to examine ways to improve registration of births and other vital events. UNICEF is providing assistance to this group. The deliberation is still ongoing especially with the recommendation of appoint a Civil Registrar general, the rationalization of the practice in issuing birth certificates.

The degree of completeness of birth and death registration is directly linked to the accuracy of vital statistics. It is important for this working group to complete its deliberation and for the government to act on its recommendations. (Death Registration Bloomberg Health Initiative)

D9. Improving Geocoding and Geospatial Information

Myanmar is a large country, and development at all levels of the country would require information to facilitate their development. Availability of location-based information is critical, especially at the township or village level. One key prerequisite is the capability to link statistical information to a particular location. In this regard, the ability to geo-code statistical units to facilitate aggregation to a locality is essential. Many countries have devoted significant amount of resources to develop an address system as a national infrastructure. This national address system could also serve as a national geo-coding mechanism. It is necessary for Myanmar to develop a comprehensive national addressing system, to serve as the first step to integrate statistical data with spatial information. The improvement of the technical platform for capturing, displaying and analyzing geospatial information will take time. This, however, is essential to improve understanding of place-based development.

In addition to the above, the Government of Myanmar is exploring opportunities to improve energy statistics as well as statistics on education and health. More details will be revealed as further discussions in these areas are needed.(Vice President (CSO) National Geospatial and Geo Coding System)

5. Results Framework and Monitoring

The core strategies of the Myanmar NSDS will guide the transformative activities of the statistical system in the next five to 10 years. Critical initial steps of institutional re-arrangement and building of systems and professional expertise should be taken immediately, but the evolution and maturation of a modern, effective system will take time. The initial actions, however, will send firm signals that the government intends to reform the current system and implement the NSDS. The implementation of concrete statistical projects will be further discussed with the development partners through the cluster groups. Implementable action plans will be laid out in part two of the NSDS.

The core strategies contain a large number of initiatives under the following headings:

- a) Enhancing the effectiveness of decentralization
- b) Integrating the systems, people and data
- c) Advancing professionalism and technical competencies across the system
- d) Building CSO into a National Coordinating Body and Statistical Authority
- e) Improving relations with user and respondents
- f) Undertaking of programme of improvement of critical statistical areas

These initiatives will need to be closely monitored and evaluated, against their stated purpose and objective. To this ends, a proposed results framework has been established as shown below.

The government aims to adopt this as the basis for periodic monitoring of progress and to decide on adjustments to the course. An annual report will be discussed at the NCC, and subsequently submitted to the newly formed Committee on Data Accuracy and Quality of Statistics for information and endorsement. Development Partners are likewise encouraged to utilize this results framework as the basis to evaluate the progress of development in the Myanmar national statistical system.

Results Framework and Monitoring

Results Framework

Strategic Development Objectives	Operational targets	Timeframe
A. Strengthening the Architecture of Myanmar's Statistical System by...		
A1) Enhancing the effectiveness of Decentralization	1. Updated legal mandate for coordination, production and dissemination of official statistics adopted	2016
	2. Inter-agency cooperation and governance structure created and operational	2016 -
A2) Integrating the systems, data and people	3. <i>Statistician</i> established as formal career stream/profession in civil service	2016 -
	4. Begin building national databases (metadata, time-series, micro-data library, GIS etc.)	2016 -
	5. Intra-government data sharing policies and transfer protocols established	2016 -
A3) Advancing professionalism and technical competencies	6. Training needs assessment conducted and training program for government statisticians developed	2016 -
B. Building CSO into a National Statistical Authority and coordinating body by...		
B1) Strengthening CSO's mandate	7. Enactment of new law, implementation of regulations and agreement on working relationship in new system	2016
B2) Demonstrating organizational and professional leadership	8. Priority national statistical standards identified and development initiated	2016
	9. Participation in international data transmission programs and representation of Myanmar in international databases	2016 -

Strategic Development Objectives	Operational targets	Timeframe
B3) Building a substantive work programme at CSO	10. Transfer of national accounts	In Future
	11. Key household surveys to CSO	2016
	12. Official Statistical Program developed including a ten-year national household survey program	2016 -
B4) Establishing a national framework for Data Dissemination and Revision	13. Data dissemination policy including micro-data access policy developed and adopted	2017 -
	14. Open Data Readiness Assessment conducted	2017 -
	15. Data revision policy developed and adopted	2017 -
B5) Establishing a national integrated IT platform	16. 'One-stop shop' for national data developed	In Future
	17. New data capture technology through experimentation with internet, mobile phones, tablets	2017 -
<i>C. Improving user and respondent relations by...</i>		
C1) Engaging users	18. Regular User Survey initiated	2016 -
C2) Engaging the media	19. Media policy developed and implemented	2016 -
C3) Engaging and relating to respondents and other providers of information	20. New confidentiality guidelines developed	2016 -

Strategic Development Objectives	Operational targets	Timeframe
<i>D. Improvement of Critical Statistical Areas by implementing a phased improvement program</i>		
D1) Improvement of the System National Accounts and related Macroeconomic Statistics	21. SNA 2008 milestone 2 reached	2016 -
D2) Improvement of price statistics	22. Launch of new Consumer Price Index	2016-
D3) Improvement of external trade statistics	23. Monthly import-export trade reports published using 'mirror data' for enhanced accuracy	2017 -
D4) Improvement of Agricultural and Rural Statistics	24. Strategic Plans for Agricultural and Rural Statistics Developed and Adopted	2016 -
D5) Improvement of statistics on poverty, employment and household living conditions	25. New Household Survey Program adopted and under implementation	2016 -
D6) Improving Civil Registration and Vita Statistics	26. Adopts the proposal to establish a comprehensive birth and death registration system to improve coverage of vital events	2016-
Phase 2 (plans to be developed and decided through relevant cluster group). Themes include: Geocoding and geospatial data; Population and demographics; Industry, trade and investment statistics; Health and Education; Energy and Environment and more.	27. Improvement plans for other statistical domains developed and adopted by respective clusters	2017 -