Indonesia Country Paper

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Regional Training Course on
Communication and Advocacy for Agricultural Statistics
27 June – 1 July 2016
Daejon, Republic of Korea

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Chapter 1.

Dissemination and Communication Strategies and Practices, including medial relationships, on agricultural and rural statistics

1.1 Key Stakeholders of Agricultural and Rural Statistics

Most of the key stakeholders are agencies in the national government and include BPS Statistics Indonesia, the Ministries of Agriculture, Marine Affairs and Fisheries, and Environment and Forestry all of which are both data producers and users. National government agencies that are primarily data users include but are not limited to the National Development Planning Board (BAPPENAS), the Coordinating Ministry for Economic Affairs, the Ministry of Finance, the Indonesian Agency for the Assessment and Application of Technology, the Office of the President, and the Bank of Indonesia.

Key Stakeholders of Agricultural Statistics in details are

- President
- Vice President
- Ministry of Agriculture
- Ministry of National Planning (the National Development Planning Board/Bappenas)
- Coordinating Ministry for Economic Affairs
- Coordinating Ministry for Human Development and Culture
- Ministry of Trade
- Ministry of National Development Planning
- Ministry of State Secretary
- Ministry of Finance
- Food Logistics Agency
- Indonesian State Inteligence Agency
- Ministry of Marine Affairs and Fisheries
- Food and Agriculture Organization (FAO)
- US Embassy
- Indonesia Chamber of Commerce and Industry (KADIN)

Provincial governments and the 514 autonomous District and 7,071 Sub-District Local Government Authorities are also significant stakeholders and data users as the National Government programs are established and delivered at the local level. In the case of many statistical programs such as those for smallholder survey data regarding the agriculture, fisheries and forestry sectors, they are both data users and producers.

The other significant data users are those in the Indonesian private sector, agriculture, fisheries and forestry producer associations, and the Chambers of Commerce, non-government agencies, universities, and international organizations.

For a reliable, effective and efficient National Statistics System, cooperation amongst various stakeholders is necessary. Activities in Coordination with Stakeholders are such as

1. The formation of a Statistical Inter-Personnel Forum
2. Persuasion of Respondent
3. Intensifying the Use of Standard Statistical Concepts
4. Increasing the Socialization of Statististics
5. **Improving Services to Users**
6. Developing Positions for Statisticians and Computer Personnel
7. Increasing Cooperation with Government and Private Institutions
8. Increasing Cooperation with Interntional Donors

Among activities in Coordination with Stakeholders, Improving Services to Users is the most important one through

a) Applying the appropriate dissemination technology to improve the quality services to central and regional governments.

b) Improving the quality of statistical information dissemination through statistical publication using national and international guidelines, while maintaining the basic characteristics and the image of BPS

c) Developing a meta data system which covers information on basic statistics, sectoral statistics and specifics statistics to be used as reference point for national statistical activities.

d) Further improving the library system and developing a reliable statistics documentation system, with the compilation of international and national statistical publication, and book references regarding statistical techniques and methodology.

1.2 Advocacy-Communication Plan

Raising awareness among both survey respondents and data users regarding the proposed changes to the statistical programs for the agriculture, fisheries and forestry sectors is a component of the Strategic Plan for Agricultural and Rural Statistics (SPARS). As the proposed changes to the survey programs are expected to result in substantive changes to a number of the statistical estimates, specifically

those for rice, and other food crops such as corn, soybean and cassava, horticulture and estate crops and livestock it would be helpful to involve the *Communications Division* for advice and assistance with a communications strategy on how to best inform, prepare and brief data users on the reasons for the revisions and the rigorous statistical procedures used in establishing the new estimates.

BPS Statistics Indonesia's website as shown in Figure 1 would be an ideal instrument for posting information to users of coming changes, improvements, expected impacts on the estimates, and the implementation schedule. A webpage could be created to provide that information. The statistical information web links at the Ministries of Agriculture, Marine Affairs and Fisheries, Environment and Forestry, Development and Planning (BAPPENAS), and the Coordinating Ministry for Economic affairs could be linked to the BPS Statistics Indonesia website to ensure that the plans and timetable for improving the quality of the statistical information is widely available to data users without any duplication of effort.

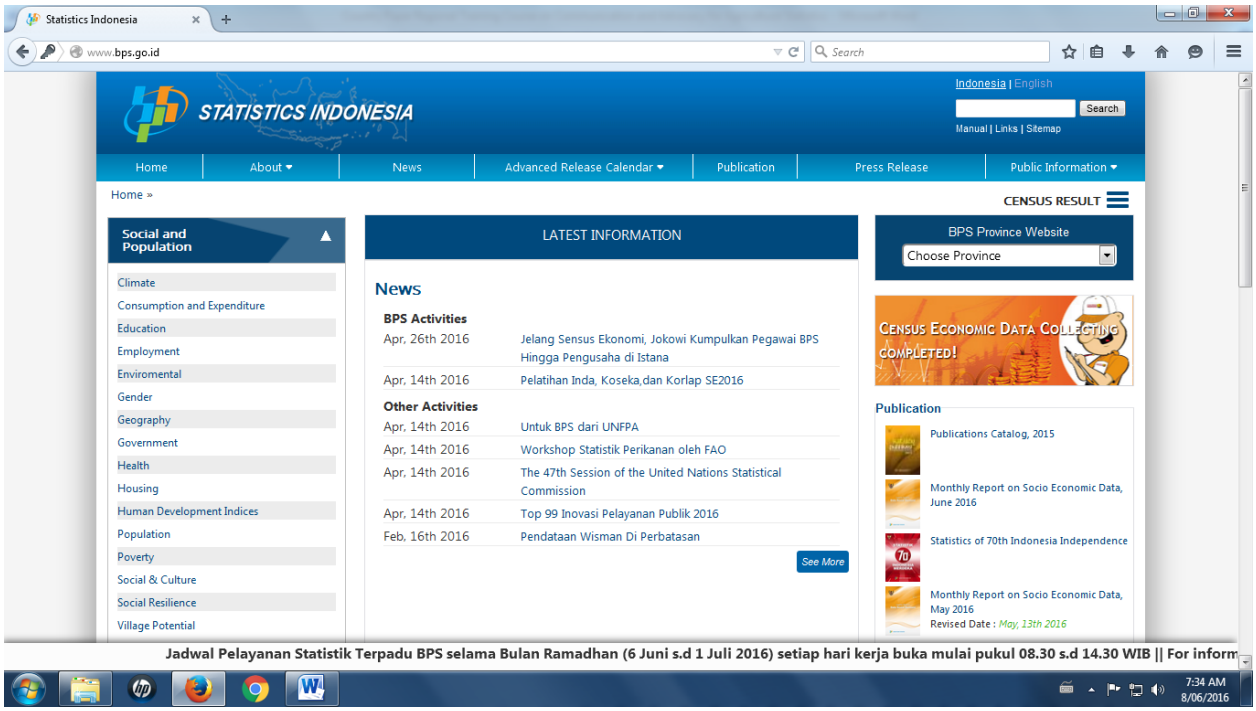

Figure 1. BPS-Statistics Indonesia Website

The webpage could be used as the main mode for disseminating reports on progress. As a portal for disseminating outputs of research activity and other technical documents it should be accessible to all stakeholders (under **Press Release** tab on BPS Website). Communication brochures and other materials could also be printed and periodically distributed to data users and survey respondents.

The preparation and publication of an annual statistics release calendar of the pre-determined publication dates for each of the agriculture, fisheries and forestry

statistics programs would also be an important addition to the advocacy-communication strategy (under **Advanced Released Calendar** tab on BPS Website).

Communication is crucial for strengthening institutional collaboration and partnership at national and regional levels

- Daily exchange via email
- Phone
- Regular or Coordination Meetings
- Interaction with data users and data producers is enhanced through Social Media such as **Facebook** (Figure 2)**, Twitter** (Figure 3), and **You Tube** (Figure 4)

- BPS Facebook Account :

  https://www.facebook.com/pages/Badan-Pusat-Statistik/1394866840805957

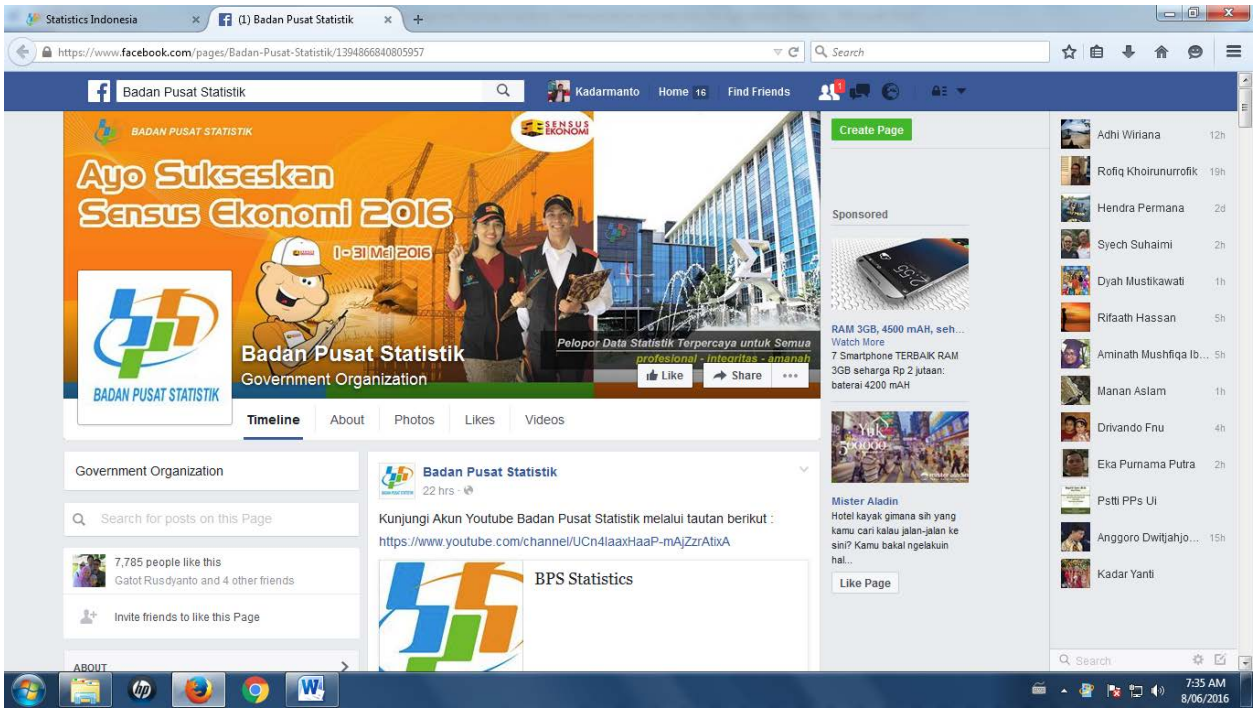

Figure 2. BPS-Statistics Indonesia Facebook Account

- BPS Twitter Account : **https://twitter.com/bps_statistics**

Figure 3. BPS-Statistics Indonesia Twitter Account

- BPS YouTube Account : https://www.youtube.com/channel/UCn4IaaxHaaP-mAjZzrAtixA

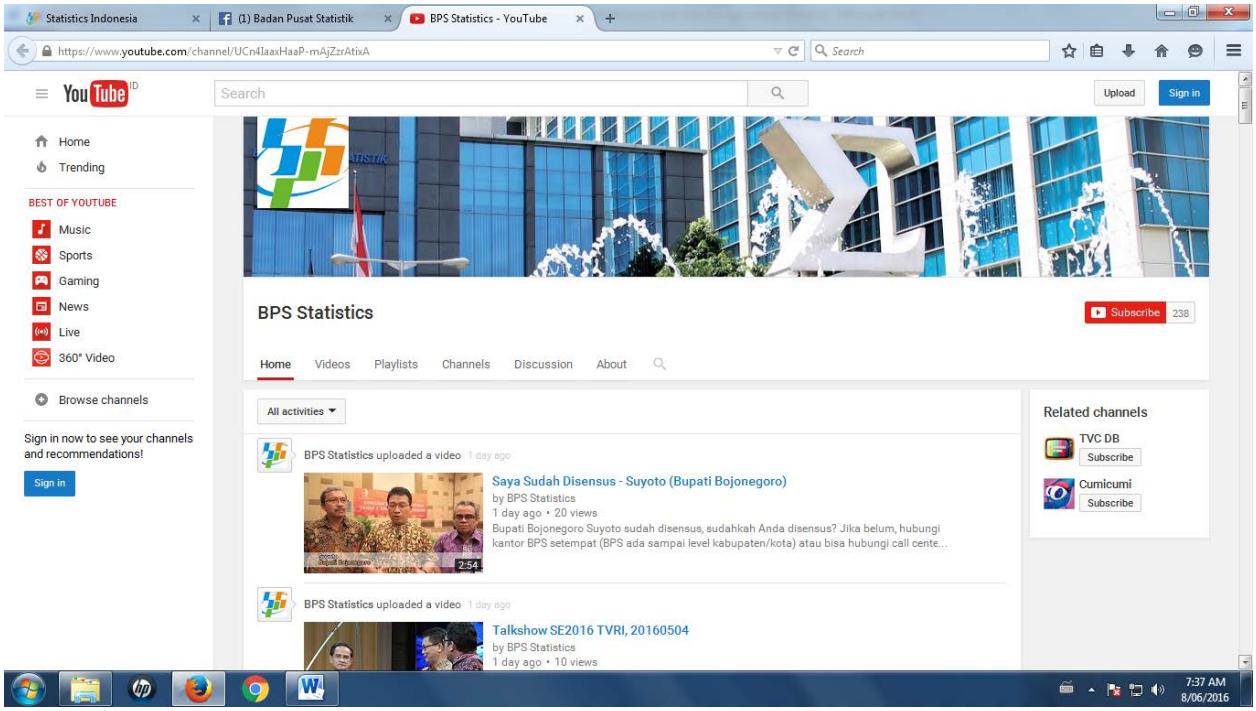

Figure 4. BPS-Statistics Indonesia Youtube Account

Chapter 2.
Data and Statistics in Agricultural Policy Making

2.1. Utilization of Statistics in Agriculture Sector

Food is the most basic requirements for human resources of a nation. To achieve food security, availability of food in sufficient quantity and quality, distributed with affordable prices and securely consumed for every citizen to sustain daily activities all the time. The level of food needs continues to increase along the increase of population in the world. Based on Indonesian population projection for the next twenty-five years, Indonesian Population continuously increased from 238.5 million in 2010 to 305.6 million in 2035.

One source of food is agriculture. Agriculture is a strategic sector in the economic development of Indonesia. The agricultural sector which is an integral part of national development system will be felt more important and strategic. However, the increase in demand for agricultural commodities is not in line with the increase of agricultural products produced.

In order to analyze the availability and the needs of food, statistics is very important to provide information as the basis for the analysis of needs and food availability.

2.2. Role of Statistics for Agricultural Sector

In agriculture, statistics have a crucial role and functions, namely:

a. As a Communication Tool

Statistics can be used as a link between some of the parties that generate statistical data or statistical analysis of data users as a tool for decision making. For example, the government in determining the rice import policy will use data from data producer, namely BPS or Ministry of Agriculture. Is there any surplus or shortage of rice? According to this condition, the taken policy will be appropriate as needed. Another example is the distribution of subsidized fertilizer, seeds, and so forth which must be appropriately targeted by looking at the number of farmers and distributed wetland etc.

b. As a tool or description method.

that gives an overview based on survey data in various ways such as tables, graphs and diagrams. For example report of production, report of diseases/pests, etc. which can be easily understood by users.

c. As a tool or Regression method

That is to predict the effect of one data to another data For example: predicting the starting time of the rainy season by observing the rainfall data from previous years (inferential statistics).

d. As a tool or Correlation method

i.e to measure the strength of the relationship between variable. For example, is there any relationship between the use of fertilizers with the use of plant seeds.

e. As a tool or Comparison method

i.e to compare statistical data on two groups of data or more. For example comparing the use of organic fertilizers and inorganic fertilizers to determine which fertilizer is more profitable for farmers.

2.3. Policy Context and the Demand for Agricultural Data

The long-term strategy for the socio-economic development of Indonesia is to make the country more self-sufficient in food production and to alleviate hunger and severe poverty. A high priority is given to the further development of the agricultural sector, particularly with respect to farm incomes, facilitating access to markets, increasing farm mechanization, access to and use of commercial fertilizers, agricultural productivity, and ensuring environmental conservation. The Government values evidence-based decision-making and recognizes that improving the quality and timeliness of agricultural and rural statistics is a key component to better information and decision-making.

Indonesia has three levels of Government (1) National, (2) Provincial and (3) Local District and Sub-District Government Authorities. In 2000 Indonesia's national government granted greater autonomy to the District/Regency governments. Local Governments have their roots in traditional governance practices based on chiefs, village heads and elders. This form of governance is the underlying basis of Local Governments that continue to have a significant amount of influence. Local Governments also deliver many of the National and Provincial government programs and services. The National and Provincial governments are dependent on Local Governments to help maintain socio-economic stability throughout the widely dispersed rural and remote territories.

Agriculture, fisheries and forestry play a key role in Indonesia's economy. Paddy rice is the most important agricultural and food crop measured in terms of both production and consumption. Paddy rice is the dominant crop and the single most important Indonesian crop with respect to the National Development Goals, proportion of GDP and contribution to food security. Therefore, stable prices and

adequate supplies are central to the nation's food security. The other major food crops are corn, soybeans, groundnuts, mungbean, sweet potato, and cassava.

With regard to horticulture crops, only chillies and shallots have been declared as "core". The annual survey program does however, collect area and production data for some 17 key horticulture crops representing about 80 per cent of total horticulture production, measured in terms of their contribution to GDP.

Indonesia also produces beef cattle, dairy cattle, buffalo, horses, goats, sheep, pigs, native chickens, layers, broilers and ducks, milk, and eggs.

Fisheries, both aquaculture and the fish capture, are an important source of protein for many Indonesians.

Forestry activities, especially because of the importance of firewood as well as non-wood products for example, plants and insects with medicinal properties, and employment opportunities associated with tourism and recreation are also important economic activities of households.

Examples of the utilization of statistics in the agricultural sector are:

- To calculate needs and food availability to create a food balance sheet.
- To prepare a map of vulnerability and food insecurity
- To see energy needs in the agricultural sector, etc.
- To take decision in importing agricultural commodities
- To be used as a basis to make any policy in agriculture development
- To evaluate any program which has been implemented

BPS-Statistics Indonesia the nation's national statistics agency has identified the development of an integrated statistical system for food crops as a high priority in the agency's short and long term action plan and the December 2013 release of the results of the 2013 Agricultural Census, means that the Census of Agriculture is now available as master sampling frame.

Ministry of Agriculture is the responsible agency for compiling food balance sheets, which were last produced in respect of 2014.

At a more aggregate level the Input-Output tables of the National Account's Production Directorate of BPS-Statistics Indonesia are also a major analytic undertaking by the National Accounts.

A number of key data users also use balance sheets, supply and use/consumption or input output table to verify and assess the accuracy and reliability of the food crop estimates

Chapter 3.

Country action plans developed or being developed through in-dept country assesment (IdCa) or SPARS or NSDS process advocate for improving agricultural and rural statistics.

3.1 In-Depth Country Assesment (IdCa)

The assessment is a cooperative effort of the Government and FAO, and is the basis of a detailed diagnostic report for developing a Strategic Plan for Agriculture and Rural Statistics (SPARS). The assessment is an effort to assess the statistical capacity and state of the' (1) institutional infrastructure, (2) human, financial and technical resources, (3) statistical methods and practices and (4) the availability and accessibility of the "core data" required for an integrated and sustainable agriculture and rural statistics system.

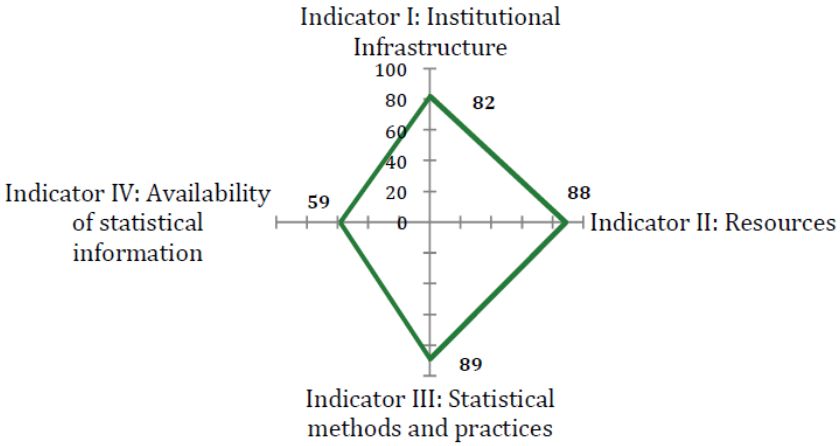

Figure 5. Four dimensions of country capacity in Indonesia, 2014

Note: A score of 100 represents a perfect representation of the defined criteria

Of the four dimensions of country capacity, Indonesia scored strongest in its state of institutional infrastructure (Figure 6), resources (Figure 7), and statistical methods and practices (Figure 8) – reflecting a world-class statistical program that is supported by a clear legal framework, access to and efficient utilization of financial and human resources, and well-defined methodologies for producing robust estimates. Despite this relative strength, the framework also identified weaknesses in Indonesia's state of available statistical information (Figure 9), where the quality of agricultural and rural indicators being reported were deemed unacceptable.

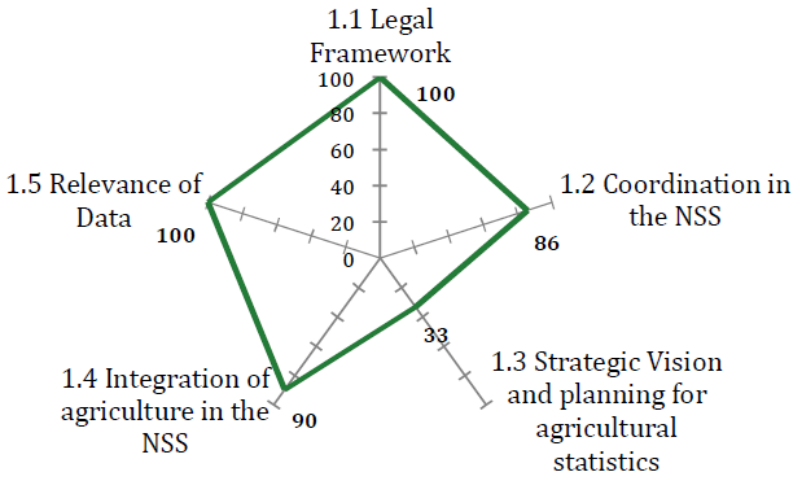

Figure 6. Five elements of Institutional Infrastructure in Indonesia, 2014

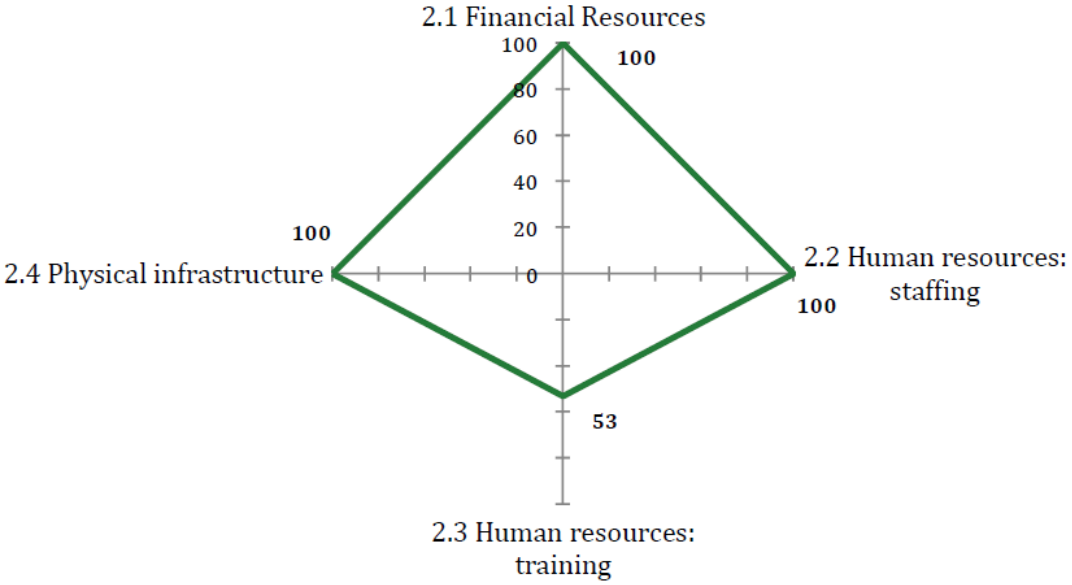

Figure 7. Four elements of Resources in Indonesia, 2014

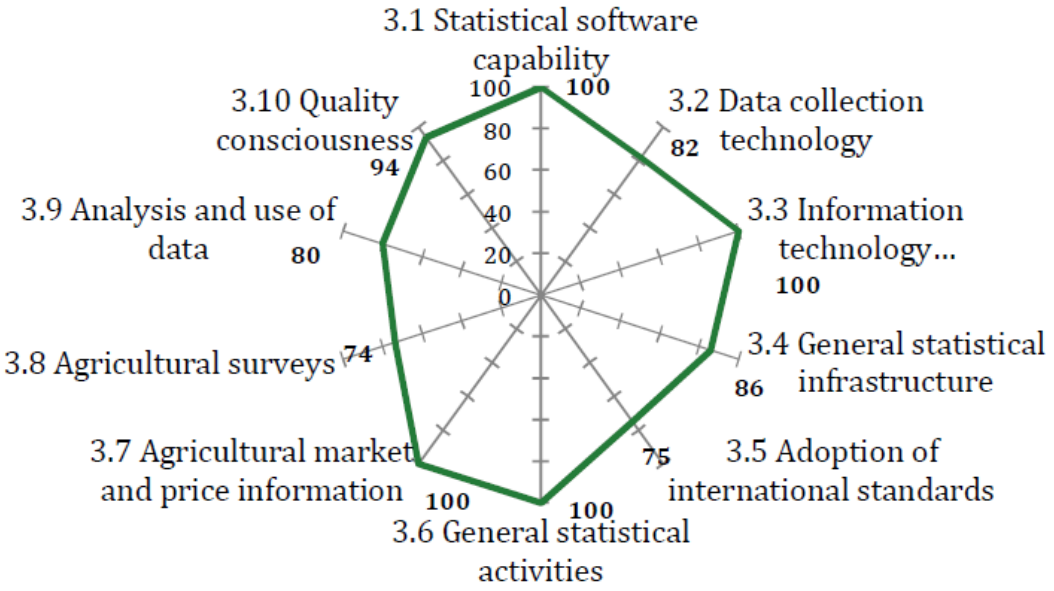

Figure 8. Ten elements of Statistical Methods and Practices in Indonesia, 2014

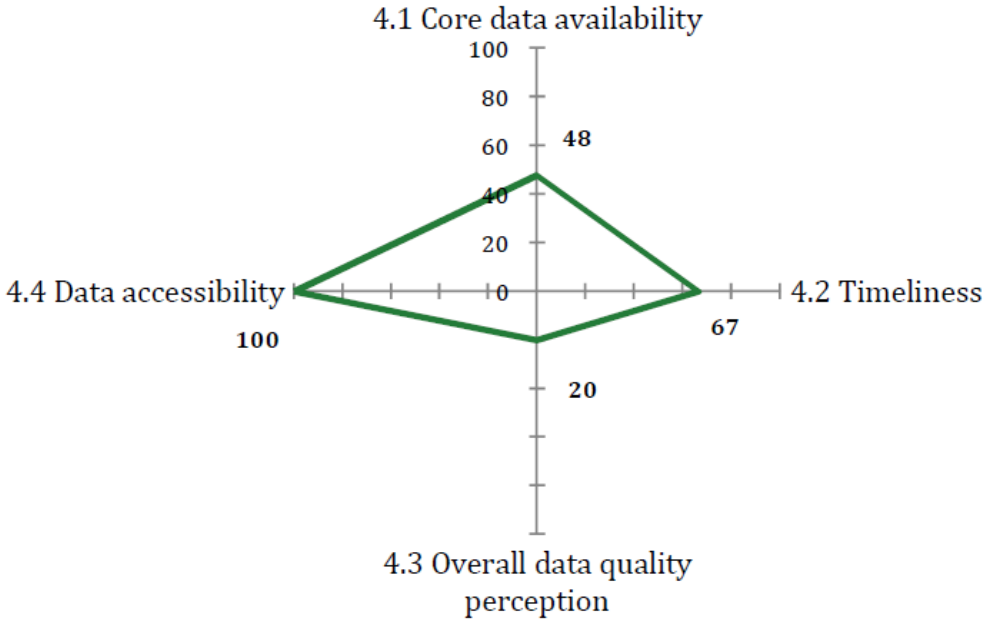

Figure 9. Four elements of Availability of Statistical Information in Indonesia, 2014

The in-depth capacity assessment also observed and identified weakness in the strategic vision and planning for agricultural statistics, where the scope of Indonesia's "2009 to 2014 National Statistics Development Strategy" omits any mention of statistical programs for fisheries and forestry. These are indeed important elements of the national statistics system. This omission has been corrected with the explicit mention in the 2015-2019 National Statistics Development Strategy page 34, "(1) provision and development of food crops, horticulture, and estate crops statistics, and (2) provision and development of livestock, fishery, and forestry statistics".

3.2 Main Findings of the Strength, Weakness, Opportunity and Threat Analysis (SWOT)

There are four key findings of the SWOT exercise regarding the initiatives to improve agriculture, fisheries and forestry data. Three are best described as threats or weaknesses and one an opportunity and strength. The threats are those from - (1) Line-Ministry requests for BPS Statistics Indonesia to publish Ministry statistics, (2) the role of Local Governments in establishing the annual Sub-Districts statistics for agriculture, fisheries and forestry, and (3) the absence of sound statistical methodology in the Ministries of Agriculture, Marine Affairs and Fisheries, and Forestry annual survey programs that result in poor quality data.

The opportunities and strengths include - (1) BPS Statistics Indonesia's 20 technically skilled and knowledgeable mathematical statisticians in its 60 - person Methodology Division and (2) the four-year training program offered the Statistical institute managed by BPS Statistics Indonesia, (3) cooperative working relationship among BPS Statistics Indonesia, the Ministries of, Agriculture, Marine and Fisheries, and Forestry, and the Local Government Authorities, and (4) a clear and unambiguous Statistics Law.

3.3 Stategic Plan

Indonesia has embarked on an ambitious effort to improve the quality of its official statistics by undertaking two major initiatives to improve data quality, and more specifically, the relevance, accuracy, timeliness, accessibility, interpretability, and coherence of the statistics. First is a five-year, $47 million World Bank STATCAP statistical capacity building project initiative. Funding is a World Bank loan. The second initiative is the Global Strategy project to improve agricultural and rural statistics specifically, agriculture, fishery, forestry, environment and rural data.

One of the main elements of the Global Strategy is integrating agriculture into the system of national accounts, and countries are encouraged to develop a specific Strategic Plan for Agricultural and Rural Statistics (SPARS) within the framework of the country's National Statistical Development Strategy (NSDS), both the Medium (RPJMN 2015-2019) and Long Term National Development Plans (RPJMN 2005-2025).

The NSDS is a strategic planning process providing a guide for the long-term improvement in data quality as measured by relevance, accuracy, timeliness, accessibility, interpretability and coherence. The SPARS is essentially the detailed improvements for agriculture fishing and forestry statistics that appear as summarized descriptions in the National Statistics Development Strategy (NSDS). The NSDS covering the period 2015-19 is being implemented. This SPARS document is for the period 2016-2020.

Seasonal crop estimates at the local or small geographic area level of detail (District and Sub-District) are a Government requirement despite the high financial cost and formidable logistics related to data collection.

3.3.1 Development Process

The National Statistical System is a cooperative effort of BPS Statistics Indonesia and the line and sector-specific Ministries that have statistical programs. The "Statistics Forum", comprised of senior Government representatives, also plays a key role in coordination and avoiding program duplication.

The development of an integrated statistical system for food crops has been identified as a high priority in BPS Statistics Indonesia's National Statistical Development Strategy and its short and long-term action plans. There are three key Directorates at BPS Statistics Indonesia collecting and compiling data on the agriculture, fishing and forestry sectors, (1) Directorate of Food Crops, Horticulture and Estate Crops Statistics, (2) Directorate of Livestock, Fisheries, and Forestry Statistics, and (3) Prices Directorate. As its name implies, the first Directorate is divided into three Divisions Food Crops, Horticulture Crops, and Estate Crops. Similarly, the second Directorate consists of Livestock Division, Fisheries Division and Forestry Division. Prices Directorate is composed of four Divisions conducting a series of monthly surveys - Producer Prices, Wholesale Prices, Consumer Prices, and Rural Prices.

BPS Statistics Indonesia has clear processes and procedures to ensure that the sector-specific data for agriculture, fishing, and forestry are made available to the National Accounts as planned and scheduled.

Indonesia has embarked on an ambitious effort to improve the quality of its official statistics by undertaking two major initiatives to improve data quality, and more specifically, the relevance, accuracy, timeliness, accessibility, interpretability, and coherence of the statistics. The first is the Global Strategy initiative to improve agricultural and rural statistics and the preparation and implementation of a sector-specific strategic plan for agriculture, fisheries, and forestry statistics. The second is the statistical capacity building project funded by a five-year, $47 million World Bank loan.

The STATCAP project (Statistical Capacity Building - Change and Reform for the Development of Statistics) has a similar overall vision as the Global Strategy – BPS Statistics Indonesia is to be the agent of trustworthy statistical data for all - but unlike the Global Strategy (that only addresses agriculture and rural statistics) STATCAP is an over-arching initiative covering all elements of Indonesian's statistical system. To achieve its goals STATCAP has four major objectives. First, improve statistical quality as well as improve user satisfaction and confidence in BPS Statistics

Indonesia products and services. Second, increase the efficiency of statistical operations through the application of information and communication technology. Third, improve human resource management and development to better support statistical operations. Fourth, strengthen BPS Statistics Indonesia's organizational structures.

Improving the quality of Indonesia's agriculture statistics was identified in the 2009 - 2014 National Statistics Development Strategy and the Global Strategy as a priority issue. Since there has been a significant amount of collaboration and cooperation between BPS Statistics Indonesia and various line-Ministries to take action to strengthen statistical methodology and procedures using demonstration projects and pilot surveys for food crops, horticulture crops and aquaculture.

3.3.2 Integration in the NSDS

The Strategic Plan for Agricultural and Rural Statistics (SPARS is a sector-specific framework for improving agriculture, fisheries and forestry data. The SPARS is the detailed extension of the NSDS planning framework, and is a road map for introducing quality assurance practices and more rigorous survey methodology to the agriculture, fisheries and forestry statistics programs.

The 2015 - 2019 NSDS identified the strategic goal for agriculture, fishing, environment and forestry statistics as *"Improvement of statistical data through a quality assurance framework*". The NSDS characterizes the associated strategic target as, "Improving data user trust in the quality of data published by BPS Statistics Indonesia" and the underlying policy objective is "Improvement in the availability of quality statistical data and information".

Indonesia's National Statistics Development Strategy (NSDS) and the proposed Strategic Plan for Agricultural and Rural Statistics (SPARS) form the framework for the annual statistical program funding requests that are prepared and submitted to the National Development Planning Board (BAPPENAS) for approval.

3.3.3 Main Elements of the SPARS Vision, Mission and Goals

The SPARS has been designed to address the statistical needs of the various sector-specific development plans. The SPARS covers the period 2016-2020 and is an elaboration of the action plan summarised in Indonesia's 2015-2019 NSDS.

Vision: Improve the quality of agriculture, fisheries, forestry, and the related environment and rural data by implementing a sustainable system for agriculture, fishery, and forestry statistics, based on a total quality assurance framework and international standards that result in relevant, integrated, harmonized and reliable statistics for evidence-based decision-making.

Mission: Publish unbiased, relevant, accurate, timely, accessible, coherent and comprehensive statistical information on agriculture, fisheries, forestry, and the related environment and rural issues.

Strategic Goals and Outputs:

Indonesia's five strategic goals and their specific outputs are:

Goal 1 - Identify the minimum set of core data to meet current and emerging demands.

Goal 2 - BPS Statistics Indonesia will work quickly to ensure that the foundations for sound statistical practices and quality assurance procedures are embedded in Indonesia's official statistics (BPS estimates) for paddy rice, food, estate and horticulture crops, livestock, fisheries and forestry statistics and the related environmental program statistics and that the resulting data are of high quality and "fit for use".

Goal 3 - Integrate the statistical programs for agriculture, fisheries and forestry with the System of National Accounts (NA), and the indicators for the World Food Summit (WFS) and Sustainable Development Goals (SDGs).

Goal 4 - Improve the dissemination and accessibility for agriculture, fisheries and forestry statistics.

Goal 5 - Strengthen the statistical capacity and the capacity building for agriculture, fisheries and forestry statistics.