COUNTRY PRESENTATION PAPER THAILAND

The 10th Session of the Technical Committee of CSAM &

Regional Workshop on Establishing a Regional Database of Agricultural Mechanization in Asia and the Pacific

> 17-19 November 2014 Siem Reap, Cambodia

Viboon Thepent



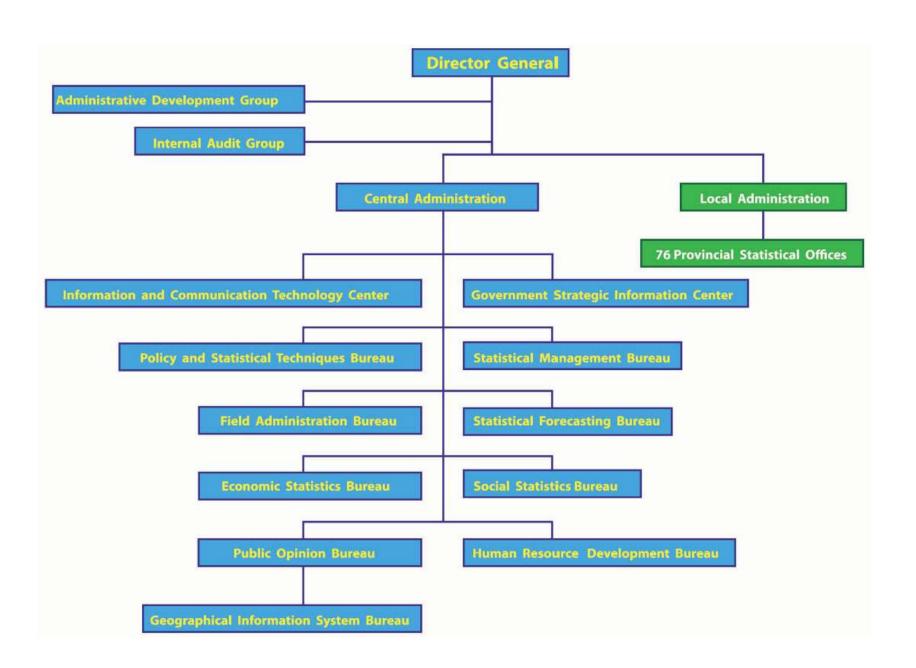
Overview of the statistics system for agricultural mechanization in Thailand

Responsible agency

I. NATIONAL STATISTICAL OFFICE, Ministry of Information and Communication Technology

The NSO is the statistical information center for the whole country while provincial offices also exist and act as information centers the provinces. Data available in the centers consist not only of data produced by the NSO but that those produced by other government agencies as well. The statistical data collection presented in the web page English version (http://web.nso.go.th/en/) is only a part of more completed data collection in Thai Version of this web site. In cases where required statistical data are not available, the NSO may consider special tabulation for the users. The NSO's major users combine the Office of the National Economic and Social Development Board, the Ministry of Labour and Social Welfare, the Ministry of Public Health, the Ministry of Agriculture and Cooperatives, the Bank of Thailand and international organizations such as World Bank, IMF, ILO, ADB, ESCAP, JICA, MITI, etc.

More information please send email to binfodsm@nso.go.th



<u>Strategy</u>

- 1. Development of integrated and standardized statistics and information management.
- 2. Conduct Census or Sample Survey or facilitate so as to obtain national database of statistical information on socio-economic and information technology and other statistical sectors.
- 3. Provide statistical information service to all users.
- 4. Organize statistical training courses.
- 5. Cooperate and coordinate with international organizations in statistical work.

1) Administration and Management of National Statistical System.

The statistical system in Thailand is regarded as the decentralized system; the National Statistical Office has played the major role in producing basic statistics, while the other government agencies can also produce statistics for their own purposes. Thus to respond the needs of users effectively and cost effective, the National Statistical Office has set up the first — ever Statistical Master Plan (2011 - 2015) for being a tool in administration and management statistical system of the country in order to produce standardized and harmonized statistics. The National Statistical Office also introduces StatXML and web service to link and exchange statistical information to be jointly used among government agencies.

2) Statistical Data Production.

Data Production is regarded as one of the major mission of the National Statistical Office, especially the production of Basic Statistics for policy and measures formulation, including monitoring and evaluation of the economic and social development of the country. There are about 20 - 25 projects of statistical surveys and census conducted each year, based on strictly statistical techniques. In addition around 10 -15 projects of special surveys on public opinion, concerning interesting issues, are conducted to seek public opinion on the Government policies, and the needs from the Government. Moreover, the National Statistical Office has done also statistical analysis with its own produced data then presented some related indicators for measuring economic and social trends.

3) Statistical Service.

There are various means in providing statistical service by the National Statistical Office, i.e. publication, CD-ROM. Databank and via internet of NSO website at http://www.nso.go.th Data provided are of both NSO production and of which other statistical agencies. The National Statistical Office also provides training courses on statistics and computer, including advisory service. The service also includes the consultation about the use of statistical data and special request of statistical tabulation. The users of both public and private sectors in and outside the country can equally access to our statistical service.

Preliminary Report 2013 Agricultural Census



Frequency : Every 10 Years

: 14.5 x 21 c.m

Language : Thai / Eng

Dimensions

Abstract Data

- Agricultural census
- Background
- · Census of census information
- Scope
- Census date
- Coverage
- Data enumeration
- Innovation of conducting agricultural census by using tablet
- Data dissemination and publication
- · Evaluation of census data
- · Preliminary Result Agriculture, Fishery

Printing Details

| Publication ID | Quarter/Month/ | Region/ Province | Format | Pages | Price (US \$) | Air Mail Postage (U.S.\$) | | |
|--------------------------|----------------|---------------------|--------|-------|------------------|---------------------------|-----------------------|---------------------------|
| | Year | | | | | Asia (For AS) | Europe (For OC-EU) | North America (For NA) |
| E1-002-P-56-00-000-000-B | 2013 | - | Book | 131 | 11 | 6 | 8 | 9 |

Latest Release

- 25-08-14 The Labor Force Survey: July 2014
- 25-08-14 The Labor Force Survey: June 2014
- 18-07-14 The 2013 Survey on Health and Welfare
- 18-07-14 The 2013 Survey on Food Consumption Behavior
- 03-07-14 The 2011 Survey on Status of Society and Culture
- 03-07-14 The 2011 Survey on Reading of Population
- 02-07-14 The 2013 Survey on Food Consumption Behavior
- 24-06-14 The Labor Force Survey: May 2014
- 24-06-14 The Labor Force Survey: April 2014
- 24-06-14 The Labor Force Survey: March 2014
- 24-06-14 The 2011 Survey on Status of Society and Culture
- 24-06-14 The 2011 Survey on Reading of Population
- 25-04-14 The 2013 Survey of E-Commerce Status in Thailand
- 25-04-14 The 2011 Survey on Smoking Behvior of the Population
- 25-04-14 The Labor Force Survey: February 2014
- 25-04-14 The Labor Force Survey: January 2014
- 25-04-14 The Labor Force Survey: December 2013

II. Office of Agricultural Economics, Ministry of Agriculture and Cooperatives is responsible for collect data of agriculture and agricultural economic. Then, analyze data and report to government and public.

OAE one of the organizations under the Ministry of Agriculture and Cooperatives (MOAC). Its origin dates back to 1952, when it was set up by the decree as a division named: the Division of Agricultural Economic and Land. The division worked under the Office of Permanent Secretary for the Ministry of Agriculture. It consisted of two sections: the Land Use Planning Section, the Statistics and Research Section. In 1954, the Division was renamed to the Agricultural Economics Division, comprising three section: the Section of Production Economic, the Section of Agricultural Statistics Compilation, and the Section of Survey

In 1972, there was the announcement by the Political Reform Party to reorganize the official units under the MOAC. Accordingly, the Project Control Section was up graded to be the Plan Division. Also, there was determination of agricultural economic zoning units to be totally 19 zones.

In 1973, the Centre for Agricultural Statistics was set up by the resolution of the Cabinet, and held the function of agricultural data collection.

In 1977, the MOAC reorganized the Division of Agricultural Economics to be composed of 4 working units as the Coordinating Section, the Policy and Plan section, the Research Section and the Centre for Agricultural Statistics.

In 24 March 1979, the Division of Agricultural Economics was upgraded by the Royal Act to be "The Office of Agricultural Economics" under the MOAC, and composed of 6 divisions as: the Office of the Secretary, the Division of Agricultural development Policy and Plan, the Division of Economics Project and Program Evaluation, the Plan Implementation Division, the Agricultural Economics Research Division, and the Centre for Agricultural Statistics.

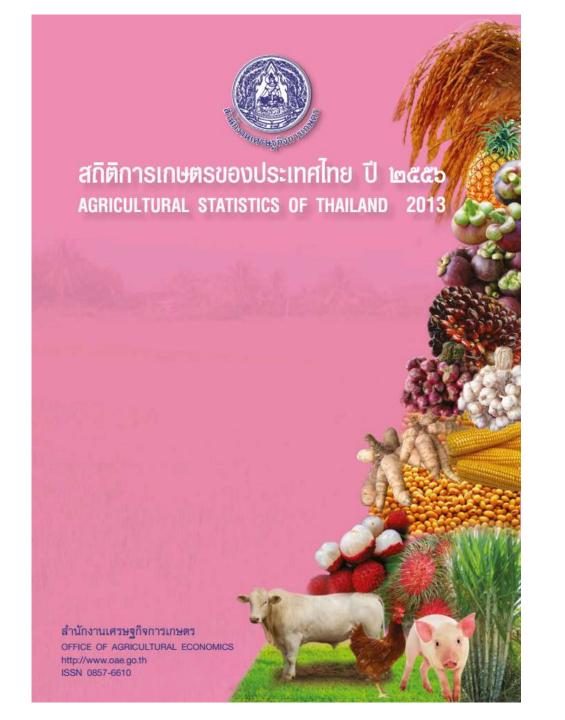
In 1987, there was a resolution by the Cabinet to divide the agricultural economics economic zones to be 24 zoning units.

In 1996, the Office of Agricultural Economics (OAE) has reorganized its working units to be composed of 2 divisions and 3 bureaus as follows:

- 1.responsible for general affairs as fallows.
- 2. Division of Economics Project and Program Evaluation.
- 3. The Agricultural Information Centre.
- 4. The Agricultural Development Policy and Plan Bureau.
- 5. The Agricultural Economics Research Bureau.

In 2002 Under the bureaucratic reform mandate, the OAE was re-structured and the present internal administrative framework now consists of

- 1. Office of the Secretary,
- 2. Bureau of Agricultural Development Policy and Planning,
- 3. Bureau of Agricultural Economic Research,
- 4. Centre for Agricultural Information,
- 5. Centre for Project and Programme Evaluation, and
- 6. Regional Offices of Agricultural Economics 1-9.



PREFACE

A griculture is the production sector having a major role in driving the Acountry's economy. It generates income not only for farm households and all business sectors along the agricultural product supply chain, but also for the country. Therefore, if all relevant sectors have been informed of the updated agricultural economics outlook, situation and trends from both domestic and foreign sources, it will be beneficial to related activities and provides positive impacts on the country's agricultural development.

The Office of Agricultural Economics, as a government organization, having an important role in guiding the country's agricultural development has published the "2013 Agricultural Statistics of Thailand" document. The publication has been updated and developed its content to be more completed in the context of a new era of agricultural economics information which includes the up-to-date and comprehensive agricultural economics outlook, situation and trends from both domestic and foreign sources. It will be advantageous to farmers, entrepreneurs and other organizations for the right planning and decision making in order to prepare them to be ready for the global change situation, especially the modernized global economics trends which will affect to Thailand's agricultural economy.

The data of this document has been collected by the Office of Agricultural Economics. Furthermore, the rest of information has been acquired from other agencies under the Ministry of Agriculture and Cooperatives, Ministry of Finance, Ministry of Defense, Ministry of Information and Communication Technology, Ministry of Natural Resources and Environment, and the Food and Agriculture Organization of the United Nations. In this connection, the Office of Agricultural Economics would like to express our gratitude to all agencies for their contributions during the data compilation process. We also welcome suggestions for future improvement with high appreciation.

Mr. Anan Lila

Secretary General Office of Agricultural Economics

March 2014

ตารางที่ 17 ปาล์มน้ำมัน : เนื้อที่ ผลผลิต ผลผลิตต่อไร่ ราคา และมูลค่าของผลผลิตตามราคาที่เกษตรกรขายได้ ปี 2547-2556 Table 17 Oil palm : Area, production, yield per rai, farm price and farm value, 2004-2013

| ð | เนื้อที่ยืนค้น (1,000 ไร่) Planted area (1,000 rais) | เนื้อที่ให้ผล (1,000 ไร่) Harvested area (1,000 rais) | ผลผลิต (1,000 ตัน) Production (1,000 tons) | ผลผลิตต่อไร่ (nn.) Yield per rai (Kgs.) | ราคา ที่เกษตรกร รายได้ (บาท/กก.) Farm price (Baht per kg.) | มูลคำของผลผลิต ตามราคาที่ เกษตรกรชายได้ (ต้านบาท) Farm value (Million baht) | Year |
|----------|---|--|---|--|---|--|----------|
| 2547 | 2,405 | 1,932 | 5,182 | 2,682 | 3.11 | 16,115 | 2004 |
| 2548 | 2,748 | 2,026 | 5.003 | 2,469 | 2.76 | 13,807 | 2005 |
| 2549 | 2,957 | 2,374 | 6,715 | 2,828 | 2.39 | 16,049 | 2006 |
| 2550 | 3,200 | 2,663 | 6,390 | 2,399 | 4.07 | 26,007 | 2007 |
| 2551 | 3,676 | 2,885 | 9,271 | 3,214 | 4.23 | 39,214 | 2008 |
| 2552 | 3,890 | 3,188 | 8,163 | 2,561 | 3.64 | 29,712 | 2009 |
| 2553 | 4,077 | 3,552 | 8,223 | 2,315 | 4.26 | 35,031 | 2010 |
| (p) 2554 | 4,098 | 3,565 | 10,760 | 3,018 | 5.34 | 57,458 | (p) 2011 |
| p) 2555 | 4,405 | 3,714 | 11,358 | 3,058 | 4.91 | 55,768 | (p) 2012 |
| (p) 2556 | 4,504 | 3,915 | 12,812 | 3,273 | 3.54 | 45,354 | (p) 2013 |

พมายเทตุ: (p) ให้แก่ เนื้อที่เพาะปลูก เนื้อที่เก็บเกี่ยว ผลผลิต และมลผลิตห์อไร่ Remark: (p) refer to planted area, harvested area, production and yield per rai

รูปที่ 17 ปาล์มน้ำมัน : เนื้อที่ ผลผลิต ผลผลิตต่อไร่ และราคาที่เกษตรกรขายได้ ปี 2547-2556 Figure 17 Oil palm : Area, production, yield per rai, and farm price, 2004-2013







Specifications of agricultural machinery commonly used

At present agricultural machinery is wildly used among Thai farmer. There are many companies research themselves and import farm machinery from overseas such as China, Japan, Korea and Europe. Farmers have tendencies to use agricultural mechanization in their works due to lack of farm labor.

Table3. Specification of agricultural machinery for rice production in Thailand Year 2008

| Items | Quantity (Unit) | Price (baht/unit) | Value (Million baht) |
|------------------------|-----------------|-------------------|----------------------|
| Tractor | 287,226 | 302,557 | 86,902.237 |
| Power Tiller | 2,644,982 | 30,256 | 80,026.575 |
| Irrigation Pump | 1,430,984 | 4,500 | 6,439.428 |
| Combine harve | ster41,143 | 1,411,932 | 58,091.118 |

Source: Office of Agricultural Economics (2008)

Table 4. Percent Regional Distribution of Farm Machineries in year 2001 Source: Office of Agricultural Economics(2001)

| | Region | | | | | | | | Whole |
|-----------------------------|---------------|----|-----------------|----|---------------|----|---------------|--------|-----------------------|
| Item | Northern | | North - eastern | | Central Plain | | Southern | | Kingdo |
| | Unit | % | Unit | % | Unit | % | Unit | % | m (Total, Unit) |
| Power tiller | 818,028 | 47 | 243,321 | 14 | 413,643 | 23 | 2,78,376 | 1 6 | 1,753,368 |
| 4 Wheel tractor | 47,471 | 26 | 20,032 | 11 | 111,278 | 60 | 4,923 | 3 | 183,704 |
| Irrigation pump | 566,129 | 25 | 355,846 | 15 | 1,281,84 9 | 55 | 113,568 | 5 | 2,317,392 |
| Engine powered sprayer | 65,316 | 15 | 25,483 | 6 | 332,888 | 77 | 9,080 | 2 | 432,767 |
| Hand operates sprayer | 4,519,79 1 | 37 | 3,330,60 | 27 | 2,794,09 9 | 22 | 1,755,69 1 | 1 4 | 12,400,18 7 |
| Thresher | 7,002 | 9 | 25,745 | 34 | 4,0497 | 53 | 3,142 | 4 | 76,386 |

The Statistics Act, B.E. 2550 (2007) Bhumibol Adulyadej, Rex. Given on the 30th day of August, B.E. 2550; Being the 62th Year of the Present Reign.

Authorized Official Translation

His Majesty King Bhumibol Adulyadej has been graciously pleased to proclaim that:

Whereas it is expedient to revise the law on statistics:

Be it, therefore, enacted by the King, by and with the advice and consent of the National Legislative Assembly, as follows:

Section 1 This act shall be called the "Statistics Act, B.E 2007"

Section 2 This act shall come into force from the day following the date of its publication in the Government Gazette.

Section 3 The Statistics Act BE 2508 shall be repealed.

Section 4 In this Act: "Statistics" mean statements or figures of collected data "Survey" means collection of existing data to obtain statistics "Census" means survey by means of enumeration from all units relevant to such information.

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"Statistics" mean statements or figures of collected data

"Survey" means collection of existing data to obtain statistics

"Census" means survey by means of enumeration from all units relevant to such information.

"Sample Survey" means survey by means of enumeration from some selected sample units relevant to such information

"Agency" means government agencies, state enterprises, public organizations, local administration organizations and other state agencies.

"Director" means the Director of the National Statistics Office.

"Competent officer" means a person appointed by the Director to carry out this Act.

Section 5 The National Statistics Office shall be the central state agency in charge of the technical statistics work.

Section 6 The National Statistics Office shall have the following authority and duties:

- Preparing the Master Plan for the implementation of the government statistical work.
 - (2) Preparing statistics standards to present to the cabinet for approval.
- (3) Promoting and developing statistical work both for the government and private sector.
- (4) Conducting census and surveys or directing the surveys on various statistics of the country.
- (5) Coordinating and consulting with agencies to prepare plans that define the responsibilities in implementing the statistical work under the Master Plan as mentioned in (1).

- (6) Providing recommendations, advice or assistance to agencies regarding the preparation of work plans and methodology for data collection as well as processing and analyzing statistical outcomes.
- (7) Coordinating with agencies to create statistical network in order to obtain important and timely statistical database of the country
 - (8) Providing statistical service to the general public.
 - (9) Disseminating statistics and organizing education and training on statistics.
- (10) Cooperating and coordinating with other countries and international organizations regarding statistical work.
 - (11)Performing other acts as prescribed by the law and as assigned by the cabinet.

Section 7 For the preparation of the Master Plan under Section 6 (1), the National Statistics Office shall coordinate with relevant agencies and prepare the plan in such a way that it is consistent with the national policy and development plan. Once it is approved by the cabinet, relevant agencies shall follow the Master Plan.

Section 8 Agencies shall prepare their statistics in accordance with the plan defining the responsibilities under section 6 (5), and shall ensure that they meet statistical standards.

In the event that any agency fails to perform according to paragraph one, the National Statistics Office shall report to the cabinet for instructions as it is deemed appropriate.

Section 9 When a census or sample survey is going to be conducted and specified that individual's duty to provide data. It should be announced in the related Ministerial Regulations. Such announcement shall have at least the following information:

- (1) Objective
- (2) Duration of survey
- (3) Area where survey will be conducted
- (4) Individuals who will provide information and the methods of providing information
 - (5) responsible agency

Section 10 When Ministerial Regulations is set under section 9, the Director announces details on the procedures in conducting a census or sample survey regarding the following;

- (1) data collecting methods
- (2) questions for the respondents or details of the questionnaire as well as instructions for filling out the questionnaire.
- (3) The period during which the competent officer shall conduct interviews or send questionnaires.
- (4) The period during which the respondents shall return the completed questionnaire to the competent officer.
 - (5) Other information that the public should know.

The notification under paragraph one shall be made in the Government Gazette and on electronic network systems or other media.

Section 11 When the notification under Section 10 is issued, the individual required to provide information under Section 9(4) shall have the duty to provide information or fill out the questionnaire as described in Section 10(2) correctly and truthfully.

Section 12 When the notification under Section 10 is made, the competent officer be authorized to enter the building or workplace of the person required to provide information or fill out questionnaire between sunrise and sunset or at any other time as notified by the said person in order to make inquiries about the information or fill out the questionnaire, or to check the accuracy of the information. To this end, the said person shall accommodate the competent official as appropriate.

In performing the duty under paragraph one, the competent officer shall present an ID card to relevant parties.

The ID card shall be in the format prescribed in the Ministerial Regulations

Section 13 In the event that the person who will provide information or fill out the questionnaire is unavailable, in accordance with the procedure, method, period of time defined in the Ministerial Regulations should be applied to obtain data.

Section 14 The agency shall coordinate with the National Statistics Office for the benefits in creating statistical network and developing important and timely statistical database of the country.

In the event that the National Statistics Office requires information from the survey or information from records, reports or any other documents that are in the possession of any agency, for conducting important and necessary statistics for country development, such agencies shall send that information to the National Statistics Office within thirty days as of the date notified by the National Statistics Office.

The information that the agency is required to submit under paragraph one or two shall not disclose the name of the person providing the information unless such person has given consent in writing or such information is already disclosed or accessible to the public.

- Section 15 Personal information obtained under this act shall be strictly considered confidential. A person who performs his or her duty hereunder or a person who has the duty of maintaining such information cannot disclose it to anyone who doesn't have a duty hereunder except in the case that:
- (1) Such disclosure is for the purpose of any investigation or legal proceedings in a case relating to an offense hereunder.
- (2) Such disclosure is for the use of agencies in the preparation, analysis or research of statistics provided that such disclosure does not cause damage to the information owner and does not identify or disclose the data owner.

Section 16 By virtue of Sections 14 and 15, anyone performing duties in an agency or the National Statistics Office shall not use the personal information provided by the owner or given in the questionnaire for any purpose other than the statistical analysis or research.

Section 17 For all the information that can be disclosed, the National Statistics Office may provide such information as a service to the general public. The cost, as appropriate as for statistical service, may be charged according to the criteria and rates prescribed by the National Statistics Office.

Section 18 Any person who fails to provide information or fill out the questionnaire in accordance with the method prescribed in the notification under Section 10, or fails to return the completed questionnaires to the competent officer or an agency within the period specified in the notification under Section 10 (4), or fails to accommodate the competent officer performing his/her duty under Section 12 shall be liable for a fine of not exceeding three thousand Baht.

Section 19 Any person with the duty to provide information under Section 11 who provides false information shall be liable for imprisonment of not exceeding three months or a fine of not exceeding five thousand Baht, or both.

Section 20 Any person who violates Section 15 or Section 16 shall be liable for imprisonment of not exceeding one year or a fine of not exceeding twenty thousand Baht, or both.

Section 21 All Ministerial Regulations, notifications or regulations issued by virtue of the Statistics Act B.E. 2508 and are in force on the date this Act is published in the Government Gazette shall continue to take effect so long as they are not in conflict with or in contrary to the provisions of this Act, until the Ministerial Regulations, notifications or regulations hereunder are issued.

Section 22 The ICT Minister shall be in charge of the enforcement of this Act and shall have the power to issue Ministerial Regulations to carry out this Act.

Such Ministerial Regulations shall come into force when published in the Government Gazette.

Countersigned General Surayud Chulanont Prime Minister

