



منظمة الأعدية
والزراعة
للأمم المتحدة

联合国
粮食及
农业组织

Food
and
Agriculture
Organization
of
the
United
Nations

Organisation
des
Nations
Unies
pour
l'alimentation
et
l'agriculture

Organización
de las
Naciones
Unidas
para la
Agricultura
y la
Alimentación

APCAS/08/8
June 2008

Agenda Item 5b

ASIA AND PACIFIC COMMISSION ON AGRICULTURAL STATISTICS
TWENTY-SECOND SESSION

Kuching, Malaysia, 9-13 June 2008

COUNTRY REPORTS

Recent Development of China Agricultural Statistics

China is a large agricultural country with more than 50% agricultural population, therefore, agricultural statistics is of a great significance for us.

Since 2006, many developments have been achieved in China agricultural statistics.

1. Conducted the second national agricultural census

The preparation work of China second national agricultural census started in the first half of 2005, enumeration started on Jan.1th of 2007 throughout the whole country. The period of the information observed is 2006.

Overall, China second agricultural census is divided into six major phases: establishment of agencies, design census questionnaire, making hold list, enumeration, data quality verification, data aggregation and evaluation.

The agencies of China second national agricultural census are distributed at five levels: the State Council Leading Group for the Agriculture Census and its related office, the same institutions in provincial, city, county, township level respectively.

This census has investigated all the rural households, urban agriculture production corporations, agricultural production corporations, village committees and township governments.

The scope of the census includes crop planting, forestry, animal husbandry, fisheries and the related services.

The coverage includes the conditions for agricultural production, agricultural production and business activities, agricultural land use, rural labor and employment, rural infrastructure, rural social services, farmers' livelihood, and situation of township and village committees and community environment, and so on.

In order to make an ideal census questionnaire, we invited a number of experts, including domestic experts and experts from international agencies such as the Department of Agriculture of United States, the Ministry of Agriculture and Forestry of South Korean, and other relevant experts, to discuss the issues.

Before conducting on-the-spot investigations, we conducted a lot of work to make sure the hold list. Throughout the work, we got the preliminary files of all households within the regions and the unit list, and filtered out the census respondents, and got some relevant information, such as population, land area, employment and so on.

We adopted complete enumeration method to investigate all the respondents of the census one by one. Census instructors and staff at all levels were nearly 7 million persons, filled in nearly 500 million questionnaires.

Enumeration covering the 31 provinces (autonomous regions and municipalities) and the Xinjiang Production and Construction Corps started on January 1 2007, and finished successfully by the end of March.

After the completion of enumeration, in accordance with international practice, the Census Office of the State Council organized three levels of data quality checks: including the Post-Enumeration Survey of household, data verification of agricultural land, and the proof for data processing.

The group for post-enumeration survey was organized by more than 100 experienced staff of the national and provincial census offices, who went to 110 counties selected samples in provinces, about 330 census districts, and more than 20,000 households. Their major work was to repeat the same enumeration on some important contents, compare the enumeration data of census with the results from sampling, and assess the integrity of scope and accuracy of the census.

In order to undertake the post-enumeration survey for agricultural land, National agricultural census office, Ministry of Land and Resources and the National Bureau of Statistics organized 13 working groups, which were dispatched to 90 counties, 900 census districts and 9000 plots of land to verify the relevant information.

Post-Enumeration Survey of quality for data processing includes two parts: First, the quality checks of photoelectric data, we proofread the data of samples taken from census areas, calculated the registration errors on the data entry phase. Second, make a survey to reflect the condition of data processing in order to analyze the data quality. The whole country is the population of the post-enumeration survey for data processing, which involved 64 counties and 123 census district related. The work was undertaken by the National Agriculture Census Office.

After aggregating the data, we conducted the evaluation of it. Data evaluation included to assess the basic data quality and aggregated data quality. The scope of the basic data assessment ranged from 6-8 counties in each province. The related coverage includes: migration and labor employment, farmers livelihood, land transfers and the planted area, inventory of livestock and the related sales. As for the aggregating data assessment, we mainly considered the integrity of the census and the data gaps between the census data and the regular data.

After the data processing, agricultural census Office of the State Council issued six consecutive statistical communiqués in February 2008, including agriculture, rural areas, the basic situation of farmers, agricultural production conditions, rural infrastructure and basic social services, rural residents living conditions, rural labor resources and employment, cultivated land and other major agricultural land utilization. All of these communiqués were disseminated in Chinese government institutions within China and the major media such as television, major websites etc.

2. Adjustment between the agricultural census results and the regular data

After Agriculture census data aggregation, one of the most important works is to adjust the data between the census data and the regular survey. Therefore, according to the "Act of National Census of Agriculture ", we have been undertaking the adjustment to some data such as planted area of crop, major agricultural products and the first industry output value and the related value added. The data adjustment is based on the feedback data of the national census.

2.1.Principle of data adjustment:

2.1.1.The total planted area and grain output is the feedback of the national census data.

2.1.2.The inventory of livestock and poultry is the results of the census, which is used to estimate the output of livestock and slaughter.

2.1.3.Based on the feedback planted area of cotton of the national census result, the cotton production is estimated according to data on yield per hectare of the regular report.

2.1.4. Adjustment of the agricultural output value and related added value is estimated basing on the relevant data having adjusted.

2.1.5.Other data is estimated and adjusted both basing on the feedback of national census result and the local situation.

2.2.Adjustment results:

At present, only the data of 2006 and 2007 has been adjusted, in the near future, we will adjust the related historical data.

Planted area of grain is close to the regular survey data, but the structural data varies. Of these, planted area of wheat, corn, soybean is larger than the regular report data, rice keeps the same and other grain areas from agricultural census is less than annual report; the planted area of cotton is close to the regular data, but its production has been adjusted from 6.75 million tons to 7.53 million tons. Data from census of oil-bearing crops, sugar and planted area of other crops is less than the annual report data; data of animal husbandry from the census is much more less than that of the annual report.

The exact data has not been released to public until now.

3. The implementation of livestock and poultry monitoring

Livestock production is an important part of agricultural production in China. In order to reflect the development of animal production accurately and timely, provide reference for the Government making the related policy. Early in 2008, the National Bureau of Statistics of China began to conduct major livestock and poultry monitoring survey.

The scope the monitoring surveys covers all the farmers and livestock production units in 31 provinces, autonomous regions and municipalities. The respondents include all livestock and poultry production corporations, all the farmers with scale raising and all the farmers having been selected.

The coverage includes the inventory, production and sale prices of major livestock and poultry such as hog, cattle, sheep, poultry, and so on.

Survey data is reported quarterly, data of the main producing province of hogs and hog output counties will be reported monthly in special time.

4. The reform of rural household survey

For a long time, China urban and rural household survey carried out independently, whether the sample or the indicators are different. So, the Government of Canada has been helping China undertake a pilot to make an integration survey both for urban and rural households. The pilot has been started from April of this year. canvass

The scope of the pilot survey covers four provinces, 3,000 urban and rural households. The coverage includes the basic information of the household members, labor force, household income and expenditure, and so on.

The pilot will last to July 2009 .

5. Recent focus

5.1. sample rotation

According to the requirements of "rural area sample rotation cycling system under selected county ", we will launch a new round of sample rotation this year, in which designing and improving the existing sample method is our key task.

This round of sample rotation will be based on the existing national survey counties, the sample within the counties will be rotated. We hope that the rotation will improve representation in the national level and province level, and ensure the accuracy and quality of the estimation.

The scope of this rotation includes rural household survey, crop production survey (yield and the planted area), animal husbandry, agricultural production price and input survey, farmers' fixed assets survey.

5.2. Reform of the rural survey system

5.2.1.To establish livestock monitoring survey questionnaire, using the second national agricultural census results to build more comprehensive sampling frame for provincial survey.

5.2.2.Integrated the system of crop surveys.

5.2.3.To revise rural household survey questionnaire, further adjust the related indicators, improve the estimation methods.

5.2.4.To improve the regional economic survey, adjust reporting frequency, perfect the system of indicators.

5.2.5.To improve cotton sample survey, expand related samples and improve the methodology.

5.2.6.To amend ad-hoc survey questionnaire, revise indicator system to meet the need of new anti-poverty policies; adjust and improve forest (grassland) rehabilitation monitoring survey questionnaire according to the rule of releasing the investigation load.

5.3. The implementation of ground based sample survey

Data of crop planting, growing and harvesting is vital for Chinese food security. At present, the producing, consumption and situation of domestic and foreign markets for main agricultural production is facing more and more complex situation. But the survey system of china, established in the 1960s and rebuilt in the early of 1980s, focuses on the major crop and bases on the rural household survey. The weakness of the system has arisen in terms of method and mechanism, which results in that the need from government and other users can not be met. So our major work in the near future is to carry out ground based sample survey.

Its coverage will be: planted area and yield of wheat, corn, cotton, paddy, and other major crops.

The survey will be conducted in all the selected plots. The survey methodology: mainly use Ground-based survey, supplemented by remote sensing, combining with ground and space.

Country Update Report INDIA

1. Current and Planned Collection of Agricultural Statistics

1.1 Major data sources for agricultural statistics are the censuses and survey. Following are the major agricultural censuses and surveys in India:

- (i). Agricultural Census
- (ii). Livestock Census
- (iii). Marine Fisheries Census
- (iv). Input Survey
- (v). Land Use Survey
- (vi). Land Use Survey of National Remote Sensing Agency
- (vii). General Crop Estimation Survey
- (viii). Integrated Sample Survey of Major Livestock Products

1.2 Agricultural Census: Agricultural census in India is conducted as a part of the World Census of Agriculture (WCA). Though the WCA is conducted once in 10 years, in India the agricultural census is conducted once in 5 years. The objective of agriculture census is to generate basic agriculture statistics on operational holdings by gender, social group and size classes. The data collected in the agricultural censuses pertain to number and area under operational holdings by various size-classes, sex and social groups, data on tenancy, crop and land use pattern, irrigation status etc. Input Survey is a part of the agricultural census.

The first agricultural census was conducted with reference year 1970-71. Seven agricultural censuses have been completed so far. The results of the seventh agricultural census (2000-01) are available on the website www.agcensus.nic.in. The eighth agricultural census with reference year 2005-06 has been launched in the country and the field work is going on.

1.3 Livestock Census: The objective of livestock census is to collect detailed information on livestock population category-wise along with age and sex. It also provides disaggregated information on poultry, agricultural implements & machinery and fishery statistics. The main items of data covered are availability of various species of livestock along with their breeds, infrastructure related to livestock sector, agriculture equipment and implements.

The first census of cattle was organized during the year 1919-1920 to be followed quinquennially thereafter. Seventeen livestock censuses have been completed so far. The results of the seventeenth livestock census (2003) are available on the website www.dahd.nic.in. Field work pertaining to the eighteenth livestock census (2007) has been completed in October 2007 and data processing is on.

1.4 Land Use Survey: Statistics on land use in India is based on 9-fold classification. The reported area on land is classified into nine categories: (i) Forests, (ii) Area under non-agricultural uses, (iii) Barren and uncultivable land, (iv) Permanent Pastures & Other Grazing Land, (v) Land under miscellaneous Tree Crops, (vi) Culturable Waste Land, (vii) Follow land other than current Fallows, (viii) Current Fallows, and (ix) Net Area sown. The survey is conducted annually. The latest available report is for the year 2005-06. It can be accessed on the website www.dacnet.nic.in/eands.

1.5 General Crop Estimation Survey: Conducted annually, objective of this survey is to obtain reliable estimates of average yield of principal food and non-food crops for estimation of crop production. The latest available reports pertain to 2007-08.

1.6 Integrated Sample Survey of Major Livestock Products: The objective of this survey is to estimate data on major livestock products such as milk, wool and eggs in the country. Conducted annually, the latest available report “Basic Animal Husbandry Statistics” is for the year 2006. The report is available on the website www.dahd.nic.in.

1.7 Land Use Survey of National Remote Sensing Agency and Marine Fisheries Census were one-time activities conducted in 1988-89 and 2005 respectively. The National Remote Sensing Agency of India conducted a land use survey using remote sensing technique in which the land use was classified by visual interpretation technique and digital techniques into 22-fold. The marine fisheries census covered 3 potential classes of water bodies with a view to provide reliable and statistically sound database on inland fishery.

2. Legal Framework

2.1 There is no specific legal Act in India for periodic enumeration of crops and compilation of land use statistics or agricultural census. Acts exist for population census and the collection of industrial statistics. In India, the Collection of Statistics Act 1953 is in place to facilitate the collection of statistics of certain kinds relating to industries, trade and commerce. Under the provision of the Act, statistics are collected for any matter relating to any industry or class of industries of any commercial or industrial concern and in particular relating to factories. The Act also mentions that the statistics are to be collected on matters like prices of commodities, employee attendance, their living conditions including housing, water, sanitation, indebtedness, rents of dwelling houses, wages and other earnings, provident and other funds provided for labour, benefits and amenities provided for labour, hours of work, man days employed and unemployed, industrial and labour dispute, labour turn over. If any person is found guilty of not providing any information or refuses to answer or gives false answers to any questions for obtaining any information required to be furnished under the Act, he is liable to punishment with fine. The Act does not specifically cover agricultural activities as such. However, some of the items like prices of (agricultural) commodities, indebtedness etc. pertain to the domain of agricultural statistics.

3. Availability of Statistics on Farmers’ Income

3.1 A comprehensive survey was carried out by the National Sample Survey Organisation in 2003 (NSS 59th Round) to assess the well-being of farmer households, study their access to various resources and judge the impact of technological change on Indian farming. This survey was called Situation Assessment Survey (SAS) of Farmers. Results of SAS were brought in five reports: (i) Indebtedness of Farmer Households (ii) Access to Modern Technology for Farming (iii) Some Aspects of Farming (iv) Consumption Expenditure of Farmer Households, and (v) Income, Expenditure and Productive Assets of Farmer Households.

3.2 The survey collected detailed information on productive assets of farmer households, their income from and expenditure incurred in, both farm and non-farm business. Information was also collected in brief on farmer households' income from other sources, including, income from wages. These findings are presented in the report "Income, Expenditure and Productive Assets of Farmer Households" in three major parts: (i) Productive assets possessed by farmer households (ii) Income of farmer households from different sources, and (iii) Expenditure incurred by farmer households in production and household consumption.

3.3 A stratified multi-stage design was adopted for the survey. The first stage units were the population census villages in the rural sector. The ultimate stage units were households. The survey covered rural areas of practically the whole of the Indian Union. A randomly drawn sample of 51770 farmer households spread over 6638 sample villages across the country was surveyed. To reduce recall error, data were collected through two separate visits to each sample household. In this survey, a farmer was defined as a person who possessed some land and was engaged in agricultural activities on any part of that land during the last 365 days. A household which contained at least one farmer member was considered as a farmer household.

All the five reports of the Situation Assessment Survey are available on the website http://www.mospi.gov.in/mospi_nsso_rept_pubn.htm.

4. Emerging Issues

4.1 The broad areas which have engaged the attention of the statistical community are:

1. Forecasting agricultural output using space, agro-meteorology and land-based observations
2. Small area estimation for bringing out sub-district level crop production estimates
3. Sound statistical techniques for estimating horticulture production

UPDATE REPORT OF INDONESIA

Current and planned collection of agricultural statistics

1.1 Current collection

In Indonesia, collection of agricultural statistics has been a high priority in terms of statistical development. The priority is due to a significant contribution of agricultural sector to Indonesian economy. In 2007, agricultural sector contributed as much as 13.83% to the GDP (at current price) and it is considered as the big three after the sectors manufacturing industry and trade-hotel-and-restaurant. Another important fact is, in several provinces, agriculture is still the most dominant sector in regional GDP (GRDP). It means agricultural sector is very important in either national or regional economy. In addition, agricultural sector could create the highest job opportunities. National Labour Survey 2007 reveals that around 41.24 percent (41.20 million people) of the total 15 years of age and over who worked (99.93 million people) in 2007, worked in agricultural sector.

In order to provide up to date and accurate data on agricultural statistics, BPS-Statistics Indonesia has been collecting some essential agricultural indicators through its agricultural surveys and censuses. Indicators covered in the surveys and censuses are ranged from number of people and enterprises involve in agricultural activities, production, consumption, trade, cost structures, socio-economic and farmer welfare, land utilization, prices, and so forth. The agricultural surveys and censuses cover data collection on food crop, estate crop, livestock, forestry, and fishery statistics. Some are summarized bellows:

Statistics/ Indicators	Coverage/ Scope	Periodicity of Data Collection	Available Time Series
Volume of Food Crops Production	National	Quarterly	1998 to 2006
Volume of Vegetables and Fruit Crops Production	National	Monthly for seasonal vegetables and fruits; Quarterly for annual vegetables and fruits	1998 to 2005
Volume of Medicinal and Ornamental Plants Production	15 Province	Quarterly	1998 to 2006
Volume of Estate Crops Production	National	Monthly	1998 to 2007
Stock of Estate Crops Production	National	Monthly	1998 to 2007
Volume of Fishery Production	National	Quarterly	1989 to 2006
Value of Animal Slaughtered Production	National	Quarterly	1989 to 2006
Number of Animal Slaughtered and Meat Production	National	Quarterly	1989 to 2006
Number of Livestock	National	Annually	1989 to 2006
Number of Agricultural Machinery	National	Annually	1990 to 2002
Land Use: Area of Wetland; Area of Dry land	National	Annually	1998 to 2005

1.2 Planned Collection

Addressing the demand, three surveys will be conducted: first, Paddy Production Cost Structure Survey 2008; second, National Livestock Household Survey 2008, in collaboration with Directorate General of Livestock, the Department of Agriculture; third, the fishery survey for the preparation of producing Fishery Terms of Trade Index, in collaboration with Department of Marine and Fishery.

a. Paddy Production Cost Structure Survey 2008

The survey that is conducted by May 2008 is designed to collect some essential information on the latest cost structure of paddy production. The result will be important information for the government to produce paddy-pricing policy. The survey will be followed by Maize Production Cost Structure Survey 2009 to collect similar data for maize production.

b. National Livestock Household Survey 2008

This survey is conducted to collect some statistics on livestock production by household characteristics such as productivity, structure, and livestock composition either by sex or age that can be used to estimate production and population. This survey is the sequel of similar survey in 2006 and 2007.

The survey will be done in all provinces and almost all regencies/municipalities. The survey will cover 40,000 census blocks.

c. Fishery Survey 2008

This survey is design to gain some information on the latest cost structure, production, and price of fish production. The survey will be conducted in 250 fish auction places in potential region. The result will be important information for the government to produce fishery policy. As a marine country, Indonesia has to benefit all marine and fishery indicators. The survey aimed to address the issue.

Legal Frame and Statistical Advisory Bodies

2.1. Before 2008

The national statistical system in Indonesia is centralized, but accommodate the Socio-economic indicators needed in the decentralization era. Under the system, BPS (Badan Pusat Statistik)-Statistics Indonesia, hereafter called as BPS, has been appointed as the main agency to compile statistics in a very wide area of interests, such as agriculture, social, economics and culture, to meet the need of the government and public. The Director General of BPS is directly under and responsible to the President. The legal basis of BPS activities, including for conducting agricultural censuses and surveys, was stated in:

Law No. 16 (1997) – covers the activities of statistics.

Government Regulation No. 51 (1999) – deals with the implementation of statistics.

President Decree No. 3 (2002) jo President Decree No. 103 (2003) – about position task, function and organization of Non-Departmental Government Institutions.

2.2 Reorganization of BPS-Statistics Indonesia (2008)

Since March 2008, BPS-Statistics Indonesia has been reorganized. In the new organization structure, Deputy Directorate General for Economic Statistics is divided into two deputies. Deputy Directorate General for Distribution Statistics and Deputy Directorate General for Production Statistics. Mainly, agricultural statistics, especially production statistics, are conducted under the Deputy Directorate General for Production Statistics. Directorate of Agricultural statistics is split into two directorates as well; Directorate of Food Crops, Horticulture, and Estate Crops Statistics and Directorate of Livestock, Fishery, and Forestry Statistics. Furthermore, the Directorate of Food Crops, Horticulture, and Estate Crops Statistics is divided into three sub directorates as follows:

- a. Sub Directorate of Food Crops Statistics
- b. Sub Directorate of Horticulture Statistics
- c. Sub Directorate of Estate Crops Statistics.

Whilst the Directorate of Livestock, Fishery, and Forestry Statistics is divided into three sub directorates as follows:

- a. Sub Directorate of Livestock Statistics
- b. Sub Directorate of Fishery Statistics
- c. Sub Directorate of Forestry Statistics.

Contact person for each directorates and sub directorates are listed below:

- Directorate of Food Crops, Horticulture, and Estate Crops Statistics

Ardief Achmad (e-mail: ardief@mailhost.bps.go.id)

- Sub Directorate of Food Crops Statistics:

Jainun Lumban Gaol (e-mail: jainun@mailhost.bps.go.id)

- Sub Directorate of Horticulture Statistics:

Sri Sayekti (e-mail: sayekti@mailhost.bps.go.id)

- Sub Directorate of Estate Crops Statistics:

Rita Setiyawati (e-mail: rita@mailhost.bps.go.id)

- Directorate of Livestock-Fishery-Forestry Statistics

Bambang Heru (e-mail: bambangh@mailhost.bps.go.id)

- Sub Directorate of Livestock Statistics:

Hasnizar Nasution (e-mail: lay@mailhost.bps.go.id)

- Sub Directorate of Fishery Statistics:

Sigit Purnomo (e-mail: sigit@mailhost.bps.go.id)

- Sub Directorate of Forestry Statistics:

Sri Wiyadi (e-mail: sriwi@mailhost.bps.go.id)

3 Availability Statistics on Farmer's Income

Farmer welfare improvement has been a priority in economic development in the country. One key in improving farmer quality of life is optimal price at farmer level that provides an optimal profit either to farmer as the producers and the whole people in the country as the consumers. In order to develop appropriate and effective plan in farmer welfare improvement, reliable and up to date information on social economic condition of farm household and production cost structure are very important. Complete information on cost structures provides reliable foundation in determining the optimum price. In order to fulfil

the requirement, BPS-Statistics Indonesia has conducted a farm income survey in 2004 (SPP04), as part of Agricultural Census 2003.

The Farm Income Survey was conducted in order to gain accurate and up to date information on the agricultural household income as well as the income structure by sub sector. The data is urgent and essential to evaluate the development progress that has been planned and implemented by the government. Finally, the evaluation result will be used in further development planning especially the development of agricultural household welfare.

Farmer income survey (SPP04) was implemented with some goals as follows

- a. Acquisition of agricultural household income as well as the income structure by sub sector.
- b. Acquisition of data of land occupation, utilization, conversion, and mutation.
- c. Acquisition of data of socio-economic condition of agricultural households.

Farmer Income Survey 2004 was conducted in June 2004 in all provinces in Indonesia. Nationally, the total sample was 357,770 agricultural households or around 1.42 percent of the total agricultural households. The survey produced some core indicators such as demography, farmer's level of education, main income source, socio-economic, capital, and constraints.

4 Emerging Issues

In one hand, as shown in the Indonesia's GDP, the contribution on value-added of agricultural sector is expected still to be significant high. However, the labour occupation in this sector still relatively higher than that, or the productivity is low. On another hand, the opposite trend is showed in secondary and tertiary sectors. As a result, more agricultural statistic indicators should be created to fulfil adequate analysis. The National Survey of Livestock and Marine/Fishery Terms of Trade are aimed to address the issue.

5 Structure of the Statistical System, Institution, and Responsibilities

As mention in 2, BPS is a Non-Departmental Government Institution under the directives of and directly responsible to the President. Under the head-office in Jakarta, there are 33 BPS Provinces, and there are some Regional/Municipalities in each province. Up to May 2008, there are 33 provincial offices and 441 Regency/Municipalities offices. On the other hand, in line with decentralization era, the number of regency/municipality government grew has been growing rapidly. Officially, there are 471 regency/municipalities government.

6 Funding Source of the Different Institution Dealing With Agricultural Statistics

6.1 National

Main source of fund to support agricultural statistics is supplied by central government budget via *APBN (Anggaran Pendapatan dan Belanja Negara)* that can be divided into two kinds. First, budget from APBN straight come to BPS budget, and the budget from APBN via other government institutions. In this case, other government institution, as

users, asks a statistical indicator or data and BPS does surveys in account of those institution budgets.

6.2 External

Sometime there is budget from international organization, but not significant in terms of amount and frequency.

7 Availability of Agricultural Statistics Database

The availability of agricultural statistics database may be more than to produce the publication as shown at table above. However, some of them still spread in the database at other government institutions. That is why, some collaboration among government institutions are needed through budget sharing.

8 Adoptions of Information Technology and Internet Access

BPS has started to expand of applying some features of information technology in terms of statistical activities. However, some constraints remain exist. As an archipelago country, needed a huge investment for information technology investment, and this is need continuously development. The number of provincial and regency offices make the network of technological information cannot be developed instantly.

9 Current Disseminations Strategies of Agricultural Statistics

Current dissemination of agricultural statistics still applying the combination strategies, traditionally and via BPS website. Traditionally strategies are dissemination direct to the user, government institution and public using hard-copy publication (some of them also using media CD = compact disk). Periodically, BPS also make press conference for several statistics, including agricultural statistics. Finally, BPS also disseminates the statistical data via website: <http://www.bps.go.id>

Update Report of Statistics on Agriculture, Forestry and Fisheries in Japan (2006 – 2008)

1 Current and planned collection of agricultural statistics (survey, census)

Statistical surveys on agriculture, forestry and fisheries including the Census of Agriculture, Forestry and Fisheries are implemented by the Statistics Department (SD) of Ministry of Agriculture, Forestry and Fisheries (MAFF), which is in charge of all of the surveys from designing to publication.

The Overview of Statistics on Agriculture, Forestry and Fisheries in Japan is shown in Annex.

(1) History of the Census of Agriculture and Forestry in Japan

In accordance with the FAO's Program for the World Census of Agriculture and Forestry, Japan has been participating in the World Census of Agriculture and Forestry every 10 years since 1950. Additionally, Japan also has conducted the Census of Agriculture and Forestry on its own terms every middle year of the World Census. Consequently, the Census of Agriculture and Forestry is implemented every five years in Japan.

(2) The 2010 Census of Agriculture and Forestry in Japan

i. Outline of the 2010 Census of Agriculture and Forestry in Japan

- 2007 Review and improvement
- 2008 Experimental Census
- 2009 Preparation of Census
- 2010 Implementation of Census

ii. Improvement from the 2005 Census

- Efficiency of survey forms for saving labor
- Survey items corresponding to the new needs
- Enhancement of the Census database system

iii. Implementation system

SD MAFF – Prefectures – Municipalities – Supervisors – Enumerators

SD MAFF – Regional Agricultural Administration Offices

– District Agriculture Offices – Statistics and Information Centers – Enumerators

(3) History of the Census of Fisheries in Japan

The Census of Fisheries in Japan has been conducted every five years since 1958. The last one was implemented in 2003.

(4) Outline of the 2008 Census of Fisheries in Japan

- 2006 Review and improvement
- 2007 Experimental Census
- 2008 Implementation of Census (November)

2 Legal framework under which agricultural statistical activities operate (Statistical Law, Master Plan, etc.)

In Japan, the Statistics Act was enacted for the systematic and efficient development of official statistics and ensuring of their usability. In May 2007, the existing Statistics Act enacted at 60 years ago, was revised in order to reply to the changes of industrial structure and various needs from public appropriately.

SD MAFF is systematically reviewing the statistics of agriculture, forestry and fisheries based on the revised Statistics Act.

3 Availability of statistics on farmers' income.

SD MAFF has been implementing the Statistical Survey on farm management and economy, in order to prepare the basic materials for agricultural administration by identifying the actual condition of management and cash flow, production costs of agricultural and livestock products regarding farm households and agricultural organizations.

Since 2006, SD MAFF has been improving the statistics on management of large-scale farming and community farming to meet the needs of policy planning departments.

4 Emerging issues

SD MAFF has been tackling the radical reformation of statistics on Agriculture, Forestry and Fisheries in conformity to present state around agriculture, forestry and fisheries and new administrative measures, and in order to implement more efficient and effective statistical surveys.

(1) Corresponding to new administrative measures

Improvement of statistics needed for new important administrative measures, such as stabilization of food production and farm management

(2) Review of statistical surveys

Reduction of surveys, survey forms and survey items regarding the statistics to which the needs have reduced

(3) Efficient implementation of statistical surveys by using Information Technology and Outsourcing

Shifting to the method by enumerator survey, mail or online survey, from by government official survey

(4) Effective Dissemination

Improvement of the Website and Utilization of mass communication media

(Annex) Overview of Statistics on Agriculture, Forestry and Fisheries in Japan

1 History

The present modern statistical surveys on agriculture, forestry and fisheries have been implemented since the establishment of the statistics and information organization of the Ministry of Agriculture and Forestry (predecessor of the MAFF) in 1947. At that time, the reporting surveys through prefecture were dramatically converted into the statistical surveys based on the sampling theory. Since then, various surveys have been mainly conducted using the sample method that is based on the result of Census of Agriculture, Forestry and Fisheries, and Agricultural cadastres.

The items of the surveys have been reviewed according to reforms of agricultural policies.

2 Present condition of Agricultural Statistics in Japan

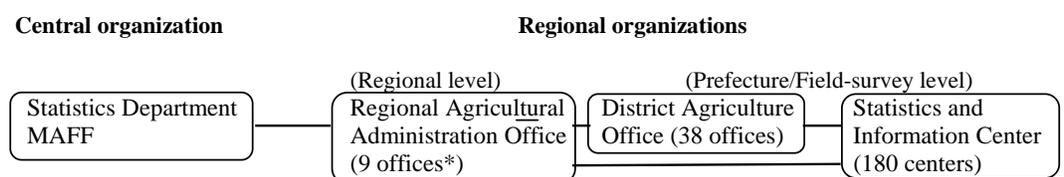
(1) Summary of organization and statistical surveys

In Japan, statistical activities are conducted under each related ministry individually undertakes statistical surveys in the areas for which they are responsible. (Decentralized system)

Statistical surveys on agriculture, forestry and fisheries including the Census of Agriculture, Forestry and Fisheries are implemented by the Statistics Department (SD) of Ministry of Agriculture, Forestry and Fisheries (MAFF), which is in charge of all of the surveys from designing to publication.

SD is comprised of central and local organizations. The structure can be shown the following Figure.

(Figure 1) Organization of Statistics Department (As of April, 2008)



* Including Okinawa General Bureau and Hokkaido District Agriculture Office

SD is comprised of central and local organizations. The structure can be shown the following Figure. Principal functions at each organization stage as follows;

- 1) Statistics Department, which is a central organization, implements planning and designing of various statistical surveys on agriculture, forestry and fisheries (ex. determining number of each prefecture sample), and officially announces the results after the compilation.
- 2) The Regional Agricultural Administration Office, which is a sub-national level organization for statistical surveys, gives instructions to the District Agriculture Offices and the Statistics and Information Centers under their jurisdiction and arranges regional results.

- 3) The Statistics and Information Center implements various surveys at farm households and agricultural sites under their jurisdiction and reports these results to the District Agriculture Office. The District Agriculture Office gives instructions to the Statistics and Information Centers in this prefecture, and arranges prefectural results, after that reports these results to the Statistics Department and the Regional Agricultural Administration Offices.

(2) Scope of statistical surveys

In Japan, statistical surveys on agriculture are classified into following major four categories and implement systematically.

1) The first category is designed to clarify the actual condition of the basic structure on agriculture.

- Census of Agriculture, Forestry and Fisheries, Annual sample survey on the movement of agricultural structure, etc.

2) The second category is designed to clarify the actual condition of economic activities by farmers.

- Economic survey for the purpose of understanding actual management.
- Production cost survey to grasp production cost of major crops and livestock products, Price survey on agricultural products and related goods, etc.

3) The third category is designed to clarify the actual condition of agricultural area and production.

- Area survey on cultivated land and planted fields that are based of agricultural production
- Production survey on agricultural products, Production forecasting survey on some agricultural products and damage survey, etc.

Many natural disasters occur in Japan every year such as typhoon and earthquake. The Statistics Department of MAFF implements “Emergency Damage Surveys” and the results of the surveys are shown as soon as after causing damages.

4) The fourth category designed to clarify the actual condition of distribution of agricultural products from the production to the consumption.

- Food distribution structure survey for understanding food supplying system systematically
- Price survey on major foods at various distribution stages
- Food loss survey for understanding quantity of food abolition at various consumption types.
- Wholesale market survey for understanding market price, etc.

Surveys on forestry and fisheries are also implemented in the same manner as agriculture.

(3) Utilization, dissemination means of statistical survey results

In all, there are approximately 30 kinds of statistical surveys on agriculture, forestry and fisheries in Japan.

Officially publicized statistics are utilized effectively as basic data for promoting and evaluating various policies, which are aimed to ensure stable food supplies, to develop

agriculture, forestry and fisheries and rural communities, and to improve management skills in those industries.

In addition, they are also widely used by people engaged in the production, distribution and processing of agricultural, forestry and fishery products, and by specialists of education and research, and also by general consumers.

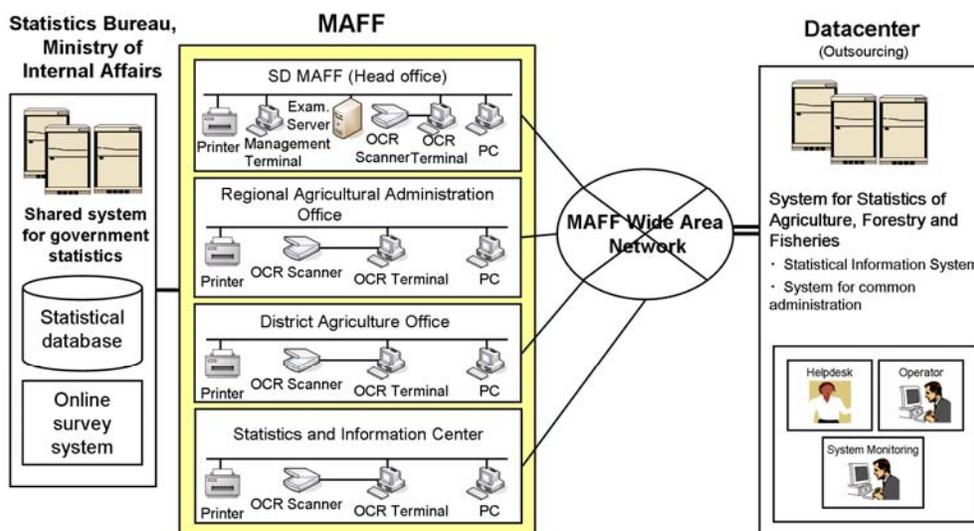
We supply the results in the printed form, magnetic media (such as FD and CD-ROM) and Internet website. MAFF's URL is <http://www.maff.go.jp>

3 Systematization of statistical data processing by computer network

For the purpose of contribution to the prompt of effective data checking/processing and advanced data utilization for analysis through utilizing information technologies, Statistics Department of MAFF established a statistics network system in 1987. The system was designed from standpoint of decentralized processing system and each stage of regional organizations was connected with network system.

This statistical data processing system has been upgraded every five years replying to increase the function of these equipment and software.

(Figure 2) MAFF's statistical data processing system



Statistical data is processed at each organizational stage as follows:

- 1) Statistics and Information Centers (SIC) are responsible for entering original data to system after conducting field surveys, checking of entered data and summarized in some sheets, etc.
- 2) District Agriculture Offices are responsible for aggregating the data from SIC within their jurisdiction for estimating the results and summarizing in the sheets. The offices are also in charge of management of sample selection, etc.
- 3) Regional offices are responsible for regional aggregating, estimating and summarizing the result in the sheets within their jurisdiction.
- 4) The head office (Statistics Department, MAFF) processes statistical data, aggregating and estimating of the nationwide results and summarizing the result in the sheets.

(Appendix) Statistical survey on agriculture, forestry and fisheries by four major categories

Statistical surveys on agriculture

- 1 To understand the basic agriculture structure
 - Census of agriculture and forestry
 - Survey of new farmers joining the agricultural corporations
 - Survey on movement of agricultural structure
 - Survey on agricultural resources
 - Status survey on community farming
- 2 To understand the actual state of economic activities of farmers
 - Statistical survey on farmer management and economy
 - Statistical survey on agricultural product prices
- 3 To understand the actual use of resources and production
 - Statistical survey on crop
 - Statistical survey on minor crop
 - Statistical survey on livestock
- 4 To understand food distribution from processing to consumption
 - Statistical survey on food waste
 - Statistical Survey on milk and dairy products
 - Survey on distribution structure of food
 - Survey on trend of price and sales of perishable food
 - Survey on food prices at various stage of distribution
 - Survey on vegetables and fruits wholesale markets
 - Survey on flowers wholesale markets
 - Statistical survey on food marketing
 - Survey on trends in the food industry

Statistical surveys related to forestry

- 1 To understand the basic forestry structure
 - Census of agriculture and forestry
- 2 To understand actual state of economic activities of forestry
 - Statistical survey on forestry household economy
- 3, 4 To understand the actual state of production and distribution
 - Statistical survey on lumber
 - Survey on distribution structure of lumber

Statistical surveys related to fisheries

- 1 To understand the basic fisheries structure
 - Census of fisheries
 - Survey on persons engaged in fishery
- 2 To understand the actual state of economic activities of fisheries
 - Survey on Fisheries economic
- 3 To understand the actual state of fisheries production
 - Statistical survey on marine fisheries production
 - Statistical survey on inland fisheries production
- 4 To understand the actual state of fisheries product distribution
 - Survey on marketing of fisheries products

Lao PDR Country Report

Savanh Hanephom ¹

1. Current and planned collection of Agricultural statistics (survey, census)

The Ministry of Agriculture and Forestry (MAF) has already started its improvement actions. In July 2007, MAF reorganized the Division of Statistics, Department of Planning to be the “Center for Agricultural and Forestry Statistics and Information” (CASI). The new CASI is the core agency of activities for the statistical improvement for MAF.

Regular data collection is conducted through administrative reporting system. DAFO visits villages and interviews village committees and heads of household. The data are summarized and reported to PAFO. The latter summarizes the result for the whole province and reports it to MAF and the Provincial Governor.

Realizing the importance of international cooperation in this field, the Government of Japan has focused in extending assistance by dispatching number of JICA experts to work in this field in Lao PDR.

Since 2007 MAF attempts has been made to introduce modern methods of surveys based on interview with farmers, measurement of area planted and crop cutting.

We are strongly emphasized the importance of the result of the First Census of Agriculture and Livestock to provide structural data on the agriculture and livestock sector; And MAF urgent needed to conduct the next census of agriculture as basis for development of a medium term program for strengthening national agricultural statistics service in Lao PDR. We will intend to conduct in the beginning of 2010 (Under the seeking fund).

2. Legal framework under which agricultural statistical activities operate (Statistical Law, Master Plan, etc.)

In Lao PDR, there is no single law like a Statistical Act in the country. and Agricultural Statistics System is not independence organization. In August 2002, the Prime Minister’s Office of GOL published a “Decree on Organization and Activities of National Statistics System”, which covers all statistics activities undertaken by NSC, line Ministries, local government bodies, etc. It is intended to establish “management of statistical activities in order to make it become a national statistical system that has a unity format and good quality for the whole country” (Article 1).

“Data collected by a statistical organization are confidential and Disciplinary Actions Against those who breach the National Statistical System” (Article 12 and 13 respectively). There is no legal organization like an Agricultural Statistics Advisory Committee. At the central level, the agricultural and forestry statistics information system is a decentralized system with a minimum of co-ordination and with 6 main divisions under 2 ministries (MAF and Department of Statistics (DOS) under the Ministry of Planning and Investment MPI)

3. Availability of statistics on farmers’ income.

The Statistics on farmers’ income is available from Lao Expenditure and Consumption Survey 3 and 4 (LECS 3, 2002/03 and LECS 4, 2007/2008)

LECS 3 has captured economic activities within the households, and can provide estimates on household production by activity. If an activity entirely takes place within the

¹ Deputy Director-General, Department of Planning, MAF

households, LECS 3 gives a total estimate of the production of that activity. Households do most of the agriculture production, although some important cash crops such as tobacco and coffee are produced by other institutional units. The figures presented here are thus not the entire agricultural production, but production confined to the household sector.

In the time use module of the LECS, there are a number of income-generating activities that household members take part in.

Household income is the sum of all income sources household members have. It contains wages and social benefits, pensions, dividend and royalties received, transfers from abroad in cash or kind, entrepreneurial income from household businesses and agriculture, fishery and forestry.

4. Emerging issues

In the Lao PDR there is an essential and urgent need to strengthen skills and techniques of data collection and processing for both of central and local government staff as well as set up the data forwarding system from local to the central levels in order to improve quality of the agricultural statistics in terms of accuracy, quickness, and transparency.

5. Structure of the statistical system (centralized or decentralized), institutions and responsibilities.

The government of Lao PDR adopts a decentralized system for statistics. Ministry of Agriculture and Forestry (MAF) and Department of Statistics(DOS) are recognized as the main organizations in charge of official national statistics of agricultural Census was implemented in 1999 under the cooperation of MAF and DOS.

1. Department of Statistics (DOS) under the Ministry of Planning and Investment (MPI) is responsible for population census and other survey not conducted by other agencies.
2. Center for Statistics and Information under Department of Planning of the Ministry of Agriculture and Forestry has been assigned the collection and compilation of data relating to agriculture and livestock from various sources to prepare and distribute an annual yearbook on agriculture and forestry statistics. It is also responsible for the cooperation and coordination with other relevant agencies for specific survey activities for example: Rice survey, livestock survey, Crop cutting survey, Agriculture Census....

6. Funding sources of the different institutions dealing with agricultural statistics (national, external).

The budget for all statistics activities (Including Agricultural activities) for the latest year.

- Year: 2007/2008 Currency: Kips (1 USDollar = 8,600 kips
- Annual budget from national sources: 80,000,000 kips or 9,300 US\$
- Additional external funding from JICA: 1,000,000 US Dollars

7. Availability of agricultural statistics databases.

Production Statistics are available in databases (Data in MS-Excel, Access)

8. Adoption of information technology and internet access.

Presently, MAF and Provincial Agriculture and Forestry Offices (PAFO) are not linked together by a computer network. However, DOP desires to develop such a linkage for receiving statistical data from the provinces as well as for sending the national total data back to them. It will help PAFO process data reported from district office through computers and speed up data processing and reporting. It will also help MAF to standardize data formats from all provinces. We try to build a network system in MAF and some of provinces. Later, the model will be expanded nation-wide.

9. Current disseminations strategies of agricultural statistics (publications, web).

(Developing Information Network)

Statistical data are officially reported through an annual publication “ Agricultural Statistics “. MAF and its departments and institutions internally use most of other data. There is a plan to disseminate the data through Internet Web Pages.

We are now happy to participate in the development of an ASEAN-wide information network. MAF has already to open the Lao Web Page for agricultural statistics within the framework of a joint project by ASEAN and FAO for information network system. We uploaded Agricultural Statistics on the Web Page in March 2004.

Address Website: <http://www.faorap-apcas.org>; <http://afsis.oae.go.th>

(Conclusion)

Given the present situation of agricultural statistics in Lao PDR and its resource constraints, our development efforts for statistics and information have to be undertaken with a long-term perspective. In order to support our efforts, it is hoped that international Organization... will continue their assistance over a long time, perhaps beyond the planned 5-year period.

Agriculture Statistics in Myanmar

The important role played by agriculture for our national economic development needs no elaboration so that achieving a rapid and sustainable development of agriculture can be conceived as analogous to rapid and sustainable development of our national economy. In this respect, comprehensive and reliable agricultural statistics, among other things, is regarded as crucial for policy and planning purposes.

Agriculture Census

Myanmar Census of Agriculture 2003 for Union level was prepared based on the results acquired from the conducted of Myanmar Census of Agriculture 2003 under the guideline of the World Census of Agriculture 2000 arranged by UNFAO, Myanmar has experienced in conducting Agricultural Census for two times. The first census was carried out -1952 and the second was in 1993. Multistage Sampling Method was applied in the first census and Systematic Sampling Method had been used in the conduct of latter one.

In order to get the complete information of the agriculture activities of Myanmar, Complete Enumeration Method based on the complete listing of all holding in Union of Myanmar was conducted by the field staff of SLRD from March to August 2003.

Summary of findings precedes the presentation of the four major topics in the report such as Introduction, Census Methodology, Census Organization, and Highlights of Census Results. FAO provided assistance under project TCP/ MYA/ 2801.

A consultative workshop was organized by the project to consult with both data producers and data users of agriculture statistics. Based on this consultation the questional consultants and local consultants commission by FAO in work with the Technical Census Committee. The plan for the conduct of the MCA 2003 was completed in mid 2003.

It is believed that this report may be able to satisfy the agriculture data needs of policy and decision makers concerning the development of agriculture to attain food security for the Union of Myanmar.

Legal Framework

Statistical law is Central Statistical Authority Act No.34 of 1962. Agricultural Census was same as the Population Census Statistical System is decentralized one.

For Agriculture Statistics, Ministry of Agriculture and Irrigation is the responsible ministry. Under this Ministry, there are (12) department for the own tasks.

**Main Functions of Departments and Enterprises
(Under the Ministry of Agriculture and Irrigation)
Minister's Office**

Administrative Tasks

Department of Agricultural Planning

1. Assistance in adopting agriculture policies
2. Formulation of various agricultural plan
3. Relations with international organizations and governments
4. Strengthening cooperation and coordination among inter-agencies
5. Agricultural trade and business management
6. Reporting and compilation of agricultural statistics
7. Conducting surveys
8. Recommendation for further development of agriculture sector
9. Issuance of technicians through State Agricultural Institutes

Myanmar Agriculture service

1. Transfer of appropriate technology
2. Department of pest control
3. Department of land utilization
4. Cooperation and coordination with Department of Agricultural Research in research and development activities
5. Distribution of quality seeds

Irrigation Department

1. Surveying, designing and constructing new irrigation projects
2. Construction of sluice gates and weirs
3. Maintaining constructed dams/ weirs

Agricultural Mechanization Department

1. Land reclamation and land development works
2. Development of farm mechanization in the process of land preparation harvesting and threshing
3. Production and distribution of farm machineries
4. Research and development of farm implements
5. Dissemination to local farmers on technology know-how for the use of farm machinery

Settlement and Land records Department

1. Updating of maps and registers
2. Land surveys and map productions
3. Collection and compilation of timely and reliable crop statistics
4. Collection and compilation of land use statistics
5. Land administration and decision on agricultural land disputes
6. Conducting agricultural socio-economic surveys

Water Resources Utilization Department

1. To supply irrigation water by pumping from river and streams and also ground water from feasible potential areas to increase the agriculture production in Myanmar
2. To promote the socio-economic status of rural population by supplying potable water from tube wells and piped water reticulation systems
3. To supply crop water and drinking water from natural spring sources by gravity flow systems in the hilly region of the border area and remote areas
4. To disseminate the knowledge and practice of efficient usage of drip irrigation

Myanmar Agricultural Development Bank

1. Lending seasonal, short, medium and long term loans to farmers
2. Collecting repayment of bank loans
3. Encouraging farmers to open deposit and saving accounts at MDBA

Department of Agricultural Research

1. Development of high yielding crop varieties
2. Generation of agricultural techniques for maximization of production benefits and sustainable use of natural resources and conservation and utilization of crop genetic resources
3. Dissemination of improved crop varieties and agronomic technologies to farmers
4. Development of human resources in agricultural research

Survey Department

1. Set-up the plan for surveying, mapping and map reproduction
2. Cooperation and coordination with international survey organizations
3. Submission of plans and reports to the authorities concerned
4. Procurement of necessary materials and requirements
5. Deputation on the internal and international training
6. Publishing of maps

Yezin Agricultural University

Myanmar Industrial Crops Development Enterprise

- Perennial Crops and Farms Department
- Sugarcane Department
- Jute and Fibre Department
- Cotton and Sericulture Department

Agricultural Short Term Plans

1988-89 to 1991-93	Annual Plans
1992-93 to 1995-96	First Four Year Short Term Plan
1996-97 to 2000-01	Second Five Year Short Term Plan
2001-02 to 2005-06	Third Five Year Short Term Plan
2006-07 to 2010-11	Fourth Five Year Short Term Plan

Availability of Statistics or farmers' income

For the A.....i, it is need to conduct the adhoc survey.

Structure of the Statistics System

The Statistical System is decentralized one. Every Ministry has their own statistics division for their own tasks. Myanmar Agriculture Service (MAS) is one of this Statistics Division under the Ministry of Agriculture and Irrigation. Settlement and Land Record Office were at the Township level and they collect all the statistics of agriculture. Fisheries Statistics were collected and compiled by the Ministry of Livestock and Breeding Forestry Statistics were collected and compiled by the Ministry of Forestry.

Finding sources of the different institutions dealing with agriculture statistics.

For the Agriculture Census the external sources are FAO, and for the technical training, UN, FAO, Japan, China, Korea and Asia countries are the main sources.

Availability of Agricultural Statistics database

For retries the Agriculture Statistics for database, only between the Departments under the Ministry are connection with LAN Server. For the township level they combined and storage by Electronic Media (CD, Stick) and they sent to the Central Level.

The internet Access was adopted only at the Central Level.

The publication of Agriculture Statistics was published by book form.

PAKISTAN COUNTRY REPORT

1. NAME OF THE PARTICIPANT:

Liaqat Ali Shah **Hamdani**

STATUS:

Agricultural Census Commissioner, Agricultural Census Organization, Lahore.

2. ROLE OF APPLICANT AND ITS ORGANIZATION

a) FUNCTION OF AGRICULTURAL CENSUS ORGANIZATION (ACO)

The Agricultural Census Organization is responsible for planning, execution and publication of data relating to the following censuses: -

- I) Agricultural Census (Decennial).
- II) Livestock Census (Decennial).
- III) Village-wise Census (Quinquennial).
- IV) Agricultural Machinery Census (Decennial).
- V) Rural Credit Survey (Adhoc).
- VI) Other Ad-hoc surveys on demand of the government.

b) RESPONSIBILITIES OF CENSUS COMMISSIONER

Agricultural Census Commissioner is the chief executive of the Organization. He is assisted by Additional Census Commissioner, Joint Census Commissioners, Deputy & Assistant Census Commissioners, Statisticians, Agricultural Economist and Livestock Specialist. The office of Agricultural Census Organization manages the functions of liaison and supervision of field operations in the entire country, analysis of data, preparation & publication of reports, dissemination of data.

3. LEGAL FRAMEWORK

The Agricultural Census Organization works under the Agricultural Census Act. 1958 promulgated by Government of Pakistan.

4. CURRENT AND PLANNED COLLECTION of agriculture statistics (survey, census).

The need for taking a census of agriculture in the whole of Pakistan was first felt in 1948 when the State of Pakistan was just a year old, but the pressure of the work of rehabilitation of refugees did not permit a number of major enterprises of that magnitude to be included in the Government programmes. The proposal, however, remained under consideration and in 1952 an F.A.O. expert was invited to study this proposal. He submitted a report on the feasibility and methodology of taking a Census but it could not be implemented due to financial stringency. After 4 years, however, in 1957, the Government of Pakistan decided to take up the scheme and to hold the first census of agriculture in 1960. Consequently, the department of Agricultural Census was established in order to implement the Census Project.

I) OBJECTIVES

The objectives of the Census were defined as follows: -

- i) To develop basic information on the structure of agriculture in Pakistan;
- ii) To provide detailed basic information about the national resources of agriculture and their state of use, for the sake of development planning; and
- iii) To provide benchmarks for the improvement of current agricultural statistics.

II) CENSUS METHODOLOGY

The first Agricultural Census was conducted in 1960. The information in this Census was partly collected from the Revenue record and partly by direct interview with the farmers and livestock holders. The decision to use the Revenue records as a source of information regarding the number and area of farms, fragmentation, tenure, land use and cropping, was based on the consideration that such elaborate records, maintained regularly by the Revenue Department, would yield more reliable information than the one to be obtained by direct interviews. The Census questionnaire was, therefore, divided into two parts, Part 'A' consisted of items for which information was to be obtained from the records. Part 'B' consisted of items for which information was to be obtained by direct interviews with the farmers and livestock holders.

In the course of execution of this method a number of difficulties arose mainly on account of the following two reasons :

- i) The recording of the name of the operator as distinct from the name of owner of each piece of land was not always accurate and in many cases the entries, quite valid from the revenue point of view were misleading for agricultural census purposes.
- ii) The entry in the revenue records regarding the residential status of the operator was generally out-dated and sometimes not helpful at all.

The pretests for the second census also concluded that reasonably accurate results could be obtained by employing the interview method. Accordingly, direct interview method was adopted for the second census of agriculture which was also repeated in 1980, 1990 and 2000 Censuses.

Government of Pakistan has already conducted five Agricultural Census in 1960, 1972, 1980, 1990 & 2000. The number of items included in the census questionnaires conducted in 2000 are under: -

- | | |
|--|----------------------------|
| a) Number, area and tenure of farms. | b) Fragmentation. |
| c) Land Utilization. | d) Irrigation. |
| e) Land use and cropping intensities. | f) Crops & Livestock. |
| g) Use of manures, fertilizers and insecticides. | h) Agricultural Machinery. |
| i) Hired labour and family workers. | j) Land ownership. |
| k) Indebtedness and investment in agricultural. | l) Education & Income. |

III) IMPLEMENTATION SYSTEM

Agricultural Census Organization does not possess its field staff for carrying out enumeration during the census operations. Therefore, the employees of the Provincial

Revenue Department are borrowed for carrying out enumeration and supervision of the census operations.

IV) LIVESTOCK CENSUS

Agricultural Census Organization had conducted four Livestock Censuses in 1976, 1986, 1996 and 2006 to meet out the following objectives:-

- a) To provide current estimates of the commercially important livestock and domestic poultry birds by age, breed and sex distribution.
- b) To develop information base on livestock composition.
- c) To ascertain the number of livestock units reporting animals and poultry birds.
- d) To estimate milk production and the number of animals slaughtered.

V) AGRICULTURAL MACHINERY CENSUS

Use of Agricultural Machinery has gained considerable importance in Pakistan. Government had continuously adopted measures to popularize the use of agricultural machinery for agricultural production. A few assembly plants have been set up in the country for tractors and a fairly large number of manufacturing units are engaged in the production of various kinds / types of farm implements and tubewells / lift pumps, etc. So far five Censuses of Agricultural Machinery had been conducted in 1968, 1975, 1984, 1994 and 2004.

VI) MOUZA (VILLAGE) CENSUS

ACO is currently engaged in the field operation of Mouza Census 2008. This exercise has quinquennial sequence. The first such census was conducted in 1971 while planning for the 1972 Census of Agriculture. Subsequently, seven more Village Censuses were carried out in 1979, 1983, 1988, 1993, 1998 and 2003 respectively. Through this census, the list of localities is updated for use as sampling frame for next census. It contains data on various socio-economic indicators like availability of electricity, sources of irrigation & drinking water, sewerage system and bricked streets. Similarly, the information on distance of various facilities from mouzas / villages such as hospitals, population welfare centers, schools / colleges, post offices, PCO, diesel / petrol pumps etc. have also been ascertained. A complete enumeration census.

VII) AGRICULTURAL CENSUS – SAMPLING PLAN

Different sample designs were evolved for different parts of the country depending upon local conditions and quantum of relevant information available for selecting a sample. Consequently, in major parts of the country comprising rural settled areas of NWFP, Punjab and Sindh Provinces, a three stage weighted and stratified sample was used whereas a single stage weighted sample was used in rural settled areas of Balochistan. In rest of the country comprising entire urban areas and unsettled rural and tribal areas, a single stage systematic sample was used.

VIII) SURVEY FOR ESTIMATION OF AREAS AND PRODUCTION OF MAJOR CROPS.

The Village Master Sample of Punjab province has been developed for estimating area & production of major crops. The details of sample design adopted are given in the sequel.

- a) SAMPLING FRAME
District wise village lists along with the area sown under wheat crop for the year 1975/76 has been used as sampling frame.
- b) STRATIFICATION PLAN
Each of the districts constitute an independent stratum so as to get independent estimates of area and production at district level.
- c) SAMPLE SIZE
Keeping in view the available resources and variability of the characteristics to be measured, the overall sample size of 1010 villages for the entire province was considered sufficient for estimation of area and yield of major crops. The allocation of sample villages to the districts has been done in proportion to the wheat area sown in 1975/76 in each of the districts.
- d) SAMPLE SELECTION PROCEDURES
The allocated sample villages have been selected in each of the districts by the methods of probability proportional to the wheat area of each village sown in 1975/76 by random / systematic method of selection.
- e) ESTIMATION PROCEDURE
In each of the selected villages area sown to a particular crop is collected through crop girdawari (assessment) and the district wise estimates are arrived at by using Ratio Method procedure.
- f) SELECTION AND ESTIMATION PROCEDURE FOR YIELD
Village wise yield is arrived at on the basis of crop cuttings from experimental plots of selected sample fields from the sample villages. For estimating yield, three fields of a particular crop are selected by the method of simple random sampling after undertaking the girdawari of a sample village after the crop is sown but before the crop is harvested. From each field two plots of 15' X 20' are demarcated randomly for undertaking crop cutting experiments.

5. ADOPTION OF INFORMATION TECHNOLOGY and internet access.

The usage of computer for estimation of areas and production of various agriculture crops is common particularly for sample selection, data processing, tabulation and publication of the reports. The Agricultural Census Organization is equipped with good number of Personal Computers for undertaking day to day business whereas the data processing activities relating to Agriculture Census, Livestock Census, Agricultural Machinery Census and Village Statistics are undertaken with the help of mainframe computer of Federal Bureau of Statistics.

6. CURRENT DISSEMINATION STRATEGIES of agricultural statistics (publications, web)

Annual Year Book of Agricultural Statistics is published by Ministry of Food, Agriculture and Livestock, Government of Pakistan under the title “Agricultural Statistics of Pakistan”. The last such report was published in June-2005.

Data on the following items is published in the Year Book.

- | | |
|---|---------------------|
| 1. Area, production and yield of important crops. | 2. Land Utilization |
| 3. Land use and area irrigated by sources. | 4. Input. |
| 5. Credit. | 6. Mechanization. |
| 7. Livestock. | 8. Fisheries. |
| 9. Forestry. | 10. Trade. |
| 11. Prices. | |

In addition to this, the Agricultural Census Organization has published a series of reports pertaining to Agriculture, Livestock, Agricultural Machinery and Mouza Censuses.

Home Web Page of the Statistics Division, Government of Pakistan, Islamabad is operated under web page www.statpak.gov.pk. The Director, Data Processing Center, Islamabad is the key person to develop and operate the website of the Statistics Division. A complete report of Livestock Census 2006 is available on the website.

7. FUNDING SOURCES OF THE DIFFERENT INSTITUTIONS dealing with agricultural statistics (national, external)

Government of Pakistan had been seeking technical cooperation and assistance from various donor agencies for developments of agricultural statistics in Pakistan

The detail of some of such projects funded by US AID are given as under: -

1. Development of census methodology for conducting 1960 and 1972 Agricultural Censuses.
2. Analysis of 1972 Agricultural Census data.
3. Development of Area Sampling Frame.
4. Estimation of area and production of major crops in Punjab.
5. Evaluation of wheat crop estimate - 1976.

8. EMERGING ISSUES.

a) ORGANIZATIONAL STRUCTURE

Collection, compilation, tabulation and dissemination of current agricultural statistics in Pakistan need considerable development because Pakistan do not possess proper institutional set-up to look after this subject in the provinces of Sindh, NWFP & Balochistan. However, Punjab province has suitable organizational arrangement for estimations of area and production of major crops through objective methods.

To improve current agricultural statistics in Pakistan, it is strongly felt that suitable statistical organizations / offices should be established in all the provinces.

b) SURVEY TECHNIQUE AND METHODOLOGY

A lot of work is required to be done in the provinces of Sindh, NWFP, Balochistan for developing adequate methodology for introduction of sample surveys for estimation of area and production of major crops in these provinces.

c) EQUIPMENT AND MATERIAL

In Pakistan, provincial governments are responsible for collection, compilation, analysis and dissemination of current agricultural statistics. These governments are not in a position to allocate sufficient funds for maintaining vehicles, equipment and other survey tools.

It is felt that a considerable investment is required to provide adequate supply of equipment and material for improving the estimation of area and production of agricultural crops in Pakistan, particularly in the provinces of Sindh, NWFP and Balochistan.

d) HUMAN RESOURCE DEVELOPMENT AND TRAINING

It is observed that the technical cooperation and assistance from the donors is not coming up for development of human resource in Pakistan since the last 10-15 years. A good number of qualified statisticians working with the statistical organizations had already retired. Therefore, the existing lot of statisticians needs to be properly trained to meet the challenges of 21 century in the field of agricultural statistics.

9. AVAILABILITY OF STATISTICS ON FARMERS INCOME

Agricultural Price Commission was established in 1981 to advise Government on price policy of major commodities in order to safe guard the interest of growers’.

The Commission conducts field surveys to collect the input prices and hiring rates of collateral operations and information on marketing of crop and submits detailed commodity specify reports providing background analysis and recommendations in the support prices. In addition to provide recommendations on the level of support prices, these reports also include proposals to increase the efficiency of the production and marketing systems of the respective crops. Beside these details on delivering support price policies, the commission also prepares non-price measures for improving productivity and marketing of respective commodities to increase farmers income in the long run.

Agricultural Statistics System in the Philippines² (2008 Updates)

Romeo S. Recide³

Introduction

The Bureau of Agricultural Statistics (BAS) is a staff bureau of the Department of Agriculture (DA) which is mandated (i) to collect, compile, and release official agricultural statistics; (ii) to exercise technical supervision over data collection centers; and (iii) to coordinate all agricultural statistics and economic activities of all bureaus, corporations and offices under the DA.

It is headed by a Director and has 1087 authorized positions to meet its function of generating statistics on crops, livestock and poultry, and fishery production, prices and marketing of agricultural commodities, farm income and expenditure, farming systems, agricultural finance, and socio-economic profiles of farm households. The BAS Director is supported by an Assistant Director, a Planning and Management Staff, an Administrative and Finance Division, and eight technical divisions. As a staff bureau of the DA, the BAS field operations are undertaken by its Operations Centers, which are present in all provinces of the country.

1. Current and Planned Collection of Agricultural Statistics

The BAS currently implements the following surveys.

- a. The Quarterly Palay and Corn Production Survey (PCPS) covers farming households in sample barangays in all provinces. The objective of the survey is to generate estimates and forecasts on palay and corn areas, production and yield.

The survey contains, among others, (i) area planted/harvested and production by ecosystem/crop type; (ii) monthly distribution of production and area harvested; (iii) farm household disposition/consumption of production; (iv) area with standing crop as basis of forecast of production for the current quarter; (v) planting intentions of farmers as indicator of production forecast for the following quarter; and (vi) use of seeds, yield-enhancing and yield-protecting inputs.

- b. The Monthly Palay and Corn Households Stocks Survey (PCSS) generate estimate of the current stocks of rice, palay, corn and corn grits held by farm and non-farm households.
- c. The Production Survey on Crops (Other than Palay and Corn) generate basic production statistics for crops other than cereals at the national and sub-national levels.

² Report delivered in the 22nd Session of the Asia Pacific Commission on Agricultural Statistics, Kuching, Sarawak, Malaysia, 9-13 June 2008.

³ Director, Bureau of Agricultural Statistics, Department of Agriculture, Philippines

- d. The Livestock and Poultry Production Surveys include the Quarterly Backyard Livestock and Poultry Survey (BLPS), the Quarterly Commercial Livestock and Poultry Survey (CLPS), the Semestral Survey of Dairy Enterprises, the Monitoring of Animals Slaughtered in Abattoirs and Dressing Plants (MASA), and the Semestral Survey of Dairy Enterprises . The BLPS and CLPS produce primary data on inventories, supply and disposition of animals from backyard farms (small holder raisers) and commercial farms. The Monitoring of Animals Slaughtered in Abattoirs and Dressing Plants (MASA) complements the BLPS and CLPS. It generates data on animals slaughtered and birds dressed in an accredited slaughter/dressing facility or structure. The Semestral Survey of Dairy Enterprises generates data on inventory of dairy animals by type and by age, inventory of milking dams, milk production and disposition of milk.
- e. The Quarterly Fisheries Production Surveys consist of the Survey of Commercial Fish Catch and Prices, the Survey of Municipal Fish Catch and Prices, the Aquaculture Farm Surveys, and the Fish Catch Survey of Inland Municipal Fishing Households. The surveys generate volume and value of fish catch/aquaculture production and value by aquafarm type, by species, by quarter at the national, regional and provincial levels.
- f. The monthly Farm Prices Survey (FPS) is a national survey that collects farmgate or producers' prices for a basket of commodities.
- g. The Agricultural Labor Survey (ALS) is a national survey that generates estimates of average wage rates of agricultural farm workers, specifically for the four major crops: paddy rice, corn, coconut and sugarcane.
- h. The Integrated Agricultural Marketing Information System/ Agricultural Marketing News Service (AGMARIS-AMNEWSS) monitors wholesale and retail prices of agricultural commodities in provinces and cities of the country.
- i. The conduct of Costs and Returns Surveys (CRS) is generally intended to provide information on the production costs and returns of agricultural commodities.
- j. Ad hoc activities such as the Survey on Hunger in the Philippines (SHIP), Avian Population Survey (APS) and Barangay Agricultural Profiling Surveys (BAPS) are conducted when extrabudgetary resources are made available.

2. Legal Framework under which the agricultural statistics system operates

The basic legal framework of the agricultural statistics system in the Philippines is Executive Order Number 116 (EO 116) which was signed by the President of the Republic of the Philippines January 1987. The EO 116 which created the Bureau of Agricultural Statistics (BAS), out of the then Bureau of Agricultural Economics (BAEcon), mandates the BAS to do the following: 1) collect, compile, and release official agricultural statistics; 2) exercise technical supervision over data collection centers; and 3) coordinate all agricultural statistics and economic research activities of all bureaus, corporations and offices under the Department of Agriculture.

The Philippine Republic Act No. 8435, otherwise known as the Agriculture and Fisheries Modernization Act (AFMA) further mandates the BAS to 1) serve as central information source and server of the National Information Network of the DA; and 2) provide technical assistance to end-users in accessing and analyzing product and market information and technology.

The BAS Strategic Plan for 2006-2010 identifies three main strategic directions: (i) delivery of quality products and services that satisfy its clients; (ii) attracting, developing and maintaining a competent workforce; and (iii) adopting a strategic management approach towards achieving its mission.

In support of the first strategic direction to deliver quality products and services, the BAS commits to undertake the following strategic actions:

- conduct of regular national surveys and other statistical activities for generating statistics on agriculture and fisheries;
- formulation and implementation of statistical Research and Development Program;
- enhancing the use of statistical frameworks for improving the BAS statistical products and services;
- enhancement of the review process to improve the BAS data system;
- optimum and rational adoption of ICT-based strategies;
- development and maintenance of an efficient and effective information service system of the BAS; and
- enhancing the capacity of farmers and fisherfolk in accessing and analyzing agricultural information.

To move along the second strategic direction of attracting, developing and maintaining a competent workforce, the BAS takes on the following strategic actions:

- advocacy for more effective implementation of the following: Personnel Selection Plan, the Personnel Rewards and Incentives for Service Excellence, and the Grievance Machinery;
- transforming the Bureau into a learning organization;
- developing and implementing a career development program for BAS personnel;
- rationalizing deployment of BAS personnel;
- mainstreaming activities that enhance personnel welfare; and
- enhancing the Bureau's physical working environment.

In pursuing its third strategic direction of adopting a strategic management approach towards achieving its mission, the BAS focuses on the following strategic actions:

- formulating and advocating for the implementation of a long-term Agricultural Statistical Development Program (ASDP);
- institutionalizing a systematic and formal strategic planning;
- sustaining a review system for the BAS mandates, organizational structure, strategy and culture;
- strengthening the BAS linkages and working relationships with all stakeholders;
- institutionalizing an effective governance principles and practices across all operations; and

- mainstreaming of the plan for marketing and promotion of the Bureau's products and services.

3. Availability of Statistics on Farmers' Income

From the various statistical activities of the Bureau, specifically the Integrated Farm Household survey and the Costs and Returns Survey, statistics on farmers' income are made available to the BAS clients. Moreover, the Agricultural Indicators System (AIS) provides a module on farmers' income and is updated yearly using established parameters.

Data on Farmers' Income

In the BAS, data on farmers' income (interpreted as income of the farm household) are generated through the Integrated Farm Household Survey (IFHS), an ad hoc activity that is conducted whenever external resources are available. It generates data that describe the farm households, with income received by farm households as the central characteristic.

The BAS conducts, also on an ad hoc basis, the Costs and Returns Survey (CRS) which focus on the operations of the farm enterprises of the farm households. As such, it generates data that measure the profitability and productivity of the production enterprises of the farm households. The general plan for the CRS is to do it every five (5) years for each commodity. The survey results shall stand as the benchmarks which can be used in the annual updating of the costs and returns data. In general terms, the CRS provides data on farm income, by type of enterprise or commodity.

Admittedly, the data available at present fall short of the requirements of some data users. Among the issues that data producers and users have to confront are concepts and definitions, coverage/adequacy, levels of disaggregation, frequency/ reference period, and accuracy. This suggests a need to revisit the design and methodology of the existing regular surveys on production, prices and agricultural labor to explore opportunities for incorporating data items that can allow generation of statistics on farmers' income on a more regular basis.

4. Emerging Issues

In response to emerging issues and concerns in the agricultural sector, the BAS plans to conduct the following surveys:

- a. Food Consumption Survey (FCS) - Despite the continuous increase in domestic production, a tightening of basic food items (rice, corn, pork) was observed in recent months that prompted to the sharp increases in their prices. Thus the need for updated information on the current consumption patterns of Filipinos.

The general objective of the survey is to determine the Filipinos' current and emerging consumption patterns and habits with regard to staple commodities such as rice, corn and other basic food items.

The FCS will cover all the provinces of the Philippines including the National Capital Region. It will be conducted in four rounds or one round of survey every quarter to capture seasonal variations in food consumption patterns. The survey will take off in August 2008.

b. Capital Formation Survey (CFS)

The general objective of the proposed survey is to generate updated information on the level and structure of capital formation in the agriculture sector of the Philippines.

The CFS is a one-shot survey covering all provinces of the Philippines. The results of the capital formation survey will serve as benchmark estimates on capital assets and stocks in the farming sector.

c. Mid- Month Palay Household Stock Survey - The tight rice situation in the world market that is affecting the country prompted for the conduct of a special monitoring for mid-May 2008. The survey covers Metro Manila and all provinces.

5. Structure of the statistical system, institutions and responsibilities

In 2007, the National Statistical Coordination Board created a Special Committee to review the Philippine Statistical System (PSS) and recommend actions to address weaknesses. The PSS Review has noted the structural limitations and resources constraints in the current set-up of the PSS as well as the increasing pressure on the System to generate more data. In view of these findings, the Committee recommended the reorganization of the PSS. An important feature of this reorganization is the consolidation of all primary data collection activities in one agency, which is proposed to be named Statistics Philippines (StatPhil).

The ultimate impact of this recommendation on the Department of Agriculture (DA) is that the data collection function of the Bureau of Agricultural Statistics (BAS) shall be assumed by the proposed StatPhil while the BAS mandate shall be reoriented towards analysis of primary data. This will leave the DA with a lean agency that is rid of primary data collection but focused on economic analyses in support to agricultural policy studies.

The changes contemplated in the Committee's recommendation will take some time to get implemented. These changes will have to pass through legislative action.

6. Funding sources for the various activities of the BAS

The BAS supports its operations with regular (government) funds. Whenever necessary, it taps other agencies and programs within the Department of Agriculture for funds to support the conduct of special projects. The BAS has collaborative work with the Philippine Rice Research Institute, the National Food Authority, the Bureau of Animal Industry and the Bureau of Fisheries and Aquatic Resources, among others. The Rice, Corn, High Value Crops, and Livestock Programs of the Department of Agriculture provide substantial resources to the BAS.

In the last few years, the Indonesia and Philippines Data Collection Project (IPDCP) by the Preparatory Conference for the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific has provided support to improve the monitoring of tuna catch information.

7. Availability of agricultural statistics databases

The BAS has established and made available to data users statistical databases on agriculture and fisheries. Such databases can be found in three (3) major information/database systems subscribed to by the Bureau, namely the ASEAN Food Security Information System (AFSIS), Regional Data Exchange System (RDES), and the CountrySTAT Philippines. All the other databases developed in the BAS are already incorporated in these databases. These are outlined below:

ASEAN Food Security Information System (AFSIS)	Regional Data Exchange System (RDES)	CountrySTAT Philippines
Production, area and yield of covered commodities Economic indicators (labor force, GDP, GVA) Population (by sex, urban/rural population) Wholesale and retail prices Labor force in agriculture Trade volume and value for covered commodities Food balance Cost of production	Production, area and yield of crops Livestock population Other food security data such as land area, population, prices, trade, consumption, GDP, and food balance	Production of various commodities Prices Trade Food consumption Agricultural machinery Fertilizer Pesticides Land use Labor and employment Others (farm household income, agricultural credit)

8. Adoption of information technology and internet access

In 1998, the BAS adopted its initial website <http://www.bas.da.gov.ph> (Version 1) through the assistance of an outside internet service provider. The current website being used is <http://www.bas.gov.ph> wherein the BAS publications and other AGSTAT information are distributed electronically. Since 2003, the Bureau has been electronically linked with the AFSIS and RDES websites. In 2006, the CountrySTAT website was put up. It is now widely used by data users.

9. Current dissemination strategies of agricultural statistics

The BAS possesses a wealth of agricultural and fisheries statistical information and these are provided free to its stakeholders, usually in published forms (e.g., bulletin or monograph series) or through the BAS website <http://www.bas.gov.ph>. The users can view or download important reports on the more recent AGSTAT information such as the Report on the Performance of Agriculture, the Rice and Corn Situation Report, etc. A Local Area Network has been in placed allowing data sharing from the various technical divisions.

The Public Assistance Counter (PAC) managed by the IDSS helped in the dissemination of the statistical information. As a standard operating procedure, walk-in researchers are required to register at the PAC where they are attended to regarding their specific data needs. Sometimes, researchers can obtain copies of statistical data or publication at the PAC. They are referred to the technical divisions for data which are not yet shared thru LAN at the IDSS.

Data clients can also avail of the BAS Library Service which offers a collection of books, periodicals and publications containing information on agriculture and other relevant fields.

Data search in the Library is facilitated by the title cards kept in book pockets or through the use of Online Public Access Catalogue which can also be accessed through the Bureau's website. A BAS Centralized Database System is currently being developed wherein data users can access statistical information dynamically and where they can essentially manipulate fields or data of the outputs they wish to have.

KOREA

1. Current and planned collection of agricultural statistics (survey, census)

Institution	Title	Periodicity	Source
KNSO	Agricultural Census	Every 5 years	Census
	Cultivated Land Census	Every 10 years	Census
	Basic Agricultural Statistics	yearly	Survey
	Farm Household Economy Survey	yearly	Survey
	Agricultural Production Cost Survey	yearly	Survey
	Food Grain Consumption Survey	yearly	Survey
	Agriculture Establishment Survey	yearly	Survey
	Agricultural Land Survey	yearly	Survey
	Livestock Survey	quarterly	Survey
	Crop Production Survey	yearly	Survey
	Livestock Production Cost Survey	yearly	Survey
	Fruit Status Survey	Every 5 years	Survey
	The Survey on the Actual Condition of Welfare, Education & Regional Development	Every 5 years	Survey
	Agricultural Land Lease Survey	yearly	Survey
	The Survey on the Quality-of-Life Index of Rural Residents	yearly	Survey
MIFAFF	Agricultural and Forestry Production Indexes	yearly	Estimation
	Status of agricultural exchange between south and north Korea	yearly	Estimation
	Dairy Statistics	monthly	Admin.record
	Inspection of Livestock Slaughter	monthly	Admin.record
	Production of Assorted Feed	monthly	Admin.record
	Production of Mushrooms	Every 6 months	Admin.record
	Statistics of livestock improvement	yearly	Admin.record
	Status of loans advanced by NACF and Government funds	yearly	Admin.record
	Status of crop casualty insurance	yearly	Admin.record
	Status of urban and rural exchange	yearly	Admin.record
	Status of Livestock epidemics	yearly	Admin.record
	Status of direct payment system	yearly	Admin.record
	Safety Inspection of Agricultural Products	yearly	Admin.record
	Facilities and Production Situation for Protected Culture	yearly	Admin.record
	Fruits Products Processing Situation	yearly	Admin.record
	Farm household Rearing Silkworm and their Mulberry Field by Size	yearly	Admin.record
	Agricultural Machinery Holding Survey	yearly	Admin.record
Culture Status of Flowering Plant	yearly	Admin.record	
Vegetables Product Processing Situation	yearly	Admin.record	

* KNSO : Korea National Statistical Office

* MIFAFF : Ministry for Food, Agriculture, Forestry and Fisheries

Main National Food and Agricultural surveys and Census

Agricultural Census

The Census measures the size and distribution of farming households and population as well as the structure and characteristics of agricultural management.

And it provides the population for the improvement of various agricultural statistics and provide data for agricultural research, produces minor regional data required for the era of

localization, contributes to the reinforcement of national competitiveness in the agricultural sector through international exchange and analyses of data

Farm Household Economy Survey

The survey provides basic data for the establishment of agricultural policies and improvement of agricultural management by grasping trends in farm household economy and status of farm management in accordance with changes in economic society.

Crop Production Survey

The survey on Crop production is used to provide data on supply and demand of agricultural products, comparison of profits from different crops, research on dietary patterns, and international statistics and academic research.

Livestock Survey

The survey is utilized as materials for policy making of government and relevant organizations related to the supply and demand of livestock, the basic data for academic research, and comparative data for livestock farms to enhance productivity.

Livestock Production Cost Survey

The survey is utilized as materials for government's policy making related to livestock. It is also used as the basic data for improving management, such as the decision on the appropriate level of livestock farming, and the data for academic research.

Agricultural Land Lease

The survey on farmland lease is utilized as the basic data for making policies related to crop planted land as the number of farmers who lent land for farming is on the dramatic rise as a result of aging and migration of rural population

2. Legal framework under which agricultural statistical activities operate

Statistical Survey of agricultural field is conducted on the basis of the national statistical Law and the regulation of agricultural statistical survey.

3. Availability of statistics on farmers' income.

Farm Household Economy Survey which has been conducted by KNSO covers farm household income, regular income, farm house net income, agriculture income, gross farm receipts, farm expenses, non-farm income, non-farm business income, non-business income, transfer income, irregular income, disposable farm house income, overall expenditure for maintenance of farm households, surplus(or deficit)

4. Emerging issues - Remote Sensing Technology

Recently, remote sensing technology, utilizing satellite imaging data in all kinds of agricultural statistics, is actively investigate and applied in the developed nations like the Unites States, EU, and Japan. It is now consummated as a core technology for complement production of agricultural statistics and preexisting statistical methods. However, researches about the related fields are very unsatisfactory in Korea.

The research project, as a first stage of related study, was operated in 2005. By working on this project, problems of current agricultural statistics, remote sensing technology application in Korea, remote sensing technology application in agricultural field worldwide

were thoroughly investigated. Based on the results, we found ways to utilize remote sensing in Korean agricultural statistics.

The next project, which is on going, focus on conducting pilot research to introduce remote sensing into Korean agricultural statistics. Several results will be produced from the integration of KOMPSAT-2 data into the agricultural area and rice paddy area estimation.

According to the long-term program of Space Development of Korea, KOMPSAT-2 (Korean MultiPurpose SATellite) has been successfully launched the 28 July 2006. KOMPSAT-2 acquires imagery in black and white (Pan) at a resolution of 1m and in color (MS) across 4 bands in the visible (red, green, blue) and near-infrared at a resolution of 4m.

The results of project will show the comparison of conventional survey and satellite based estimates, proper methodology for using high resolution image, the possibility of substitution between image interpretation and field measure and so on.

5. Structure of the statistical system (centralized or decentralized), institutions and responsibilities.

The Korean statistical system may be considered to be decentralized: each ministry or non-government agency has the responsibility to compile various statistics related to its own field. Such ministries and agencies include the Ministry for Food, Agriculture, Forestry and Fisheries, the Ministry of Labor, the Ministry for health, welfare and Family Affairs, etc. Each unit is in charge of the compilation of statistics and the production of statistics for its own policy purposes.

The statistical department of the Bank of Korea is also one of the major agencies compiling official statistics.

Recently, all of statistical survey of agricultural field such as Livestock survey, Crop production survey, etc, which had been conducted by the Ministry of Agricultural was transferred to the KNSO since 5 Mar. 2008.

KNSO(Korea National Statistical Office) is in charge of following missions

- Coordination of Statistical Activities
- Establishment of Statistical Standards and Classifications
- Compilation and Analysis of the Fundamental Official Statistics
- Management and Dissemination of Statistical Data
- Statistical Training
- International Statistical Cooperation

6. Funding sources of the different institutions (national, external)

There is only national budget.

7. Availability of agricultural statistics databases.

All user can access to the internet site of KOSIS and get statistical information and collect needed data freely through the databases.

KOSIS(Korean Statistical Information System)

KOSIS provides 30 years of time-series statistical data from KNSO, other domestic agencies, and foreign and international agencies, making it the world, largest statistical database.

KOSIS allows users to search rapidly and easily for information by subject, agency, statistical name, and consolidated function, as well as major indices, statistical columns, and statistical class services.

8. Adoption of information technology and internet access.

All user can get the result of most agricultural statistics at the KNSO website.

MicroData Service System(MDSS)

All user may Access to microdata through the Internet.

The MDSS, web-based remote access system, allows users to access to anonymized microdata through the Internet in order to download data after selecting and processing information items.

MDSS is a user-friendly system which enables users to use micro data quickly and conveniently

9. Current disseminations strategies of agricultural statistics (publications, web)

The survey results of most agricultural statistics are published and distributed to the related agencies and clients.

As soon as statistics is produced, the results is available at the KNSO website.

We are also working on establishing internet services for providing e-books for agricultural survey results.

SMS(Short Message Services) is provided as soon as statistical data are released

Major statistical data, upon being announced, are delivered to users via short message services, allowing them to know the facts at any place and any time.

How to use the service

- Join as a member at the KNSO website
- When joining membership, just select service items

Benefits for users

- Users can receive key statistical information - as soon as data are announced - via short message services, thereby knowing it in real time.
- Upon receiving the information, users can access the website to find out the details.
- Users can receive the service only by applying for it.

Statistical information is available at private portal sites

Since February 2006, the KNSO has provided statistical information through Naver's knowledge reference (kref.naver.com) under an arrangement wIth the search portal site of NHN Co. This enables users to gain easy access to an abundance of statistical information. The KNSO will further expand the private portal site linkage service.

Benefits for users

- Users can search directly from popular private portal sites : Users can access statistical information directly from popular private portal sites such as Naver without going to the KNSO's relevant sites
- Searching statistics on papers, academic data, research reports, etc, together with statistics : Users can search and access by subject the professional data created by government agencies, universities, and research institutes, together with relevant statistical data at Naver's Knowledge Reference.

COUNTRY UPDATE REPORT – SRI LANKA

The Meta data for the national agriculture statistics in Sri Lanka is published in 2006 and there after some improvements and modifications have been made in the area of data collection.

Data Collection Procedure of Agriculture Statistics

The Department of Census and Statistics (DCS), as the National Statistical Office in Sri Lanka mainly responsible for collection, compilation and dissemination of statistical data requirements of the government, initiated to hold provincial level workshops annually for the purpose of building close liaison with the staff attached to 25 districts statistical offices located in the District Secretariats and streamline the data collection procedures.

Based on a proposal received in the workshop held in 2006, a Hand Book was introduced to Primary Reporters for the purpose of collection of data with regard to highland crops and livestock statistics. Earlier, Primary Reporters were used a separate forms to report data and it created problems in comparability. This exercise would be very useful to streamline the processes to cater with the current trends and visualize the future needs.

In addition to that simplified software also created in order to transmit data electronically from field office to head office

Availability of statistics farmers' income

At present, data related to farmers' income is not being collected exclusively and annually. However, the Income and Expenditure Survey conducted by the Department once in four years provide information on income for sectors namely: urban, rural and estates. Predominantly farmers are based in the rural sector and estate sector from which we can determine the range of income of those farmers income lies.

Adoption of information technology and internet access

Presently, mostly needed data related to agriculture are being disseminated with website of the DCS as well as in RDES site. The page on Agriculture Statistics in the Department web site has now arranged in a user-friendly manner enabling users to capture information they required.

Emerging Issues

The main problem of collection data is accuracy and timeliness. The procedure leads to process data with a short period and also to disseminate them to the policy makers.

Deleted: ASIS AND PACIFIC COMMISSION ON AGRICULTURAL STATISTICS Twenty –second Sessions

Formatted: Font: Times New Roman, 14 pt, Complex Script Font: 14 pt

Deleted: ¶

Formatted: Font: Times New Roman, 12 pt, Complex Script Font: 12 pt

Formatted: Line spacing: single

Formatted: Line spacing: single

Formatted: Font: Times New Roman, 12 pt, Complex Script Font: 12 pt

Formatted: Font: Times New Roman, 12 pt, Complex Script Font: 12 pt

Formatted: Font: Times New Roman, 12 pt, Complex Script Font: 12 pt

The rate of adoption to new technologies is low in some remote areas.

The primary reporters (Enumerators) who collect many information at grass root level related to some of the surveys are not belonged to the DSC, and they have been entrusted many functions other than collection of data. As such monitoring them and obtaining information in time has become a emerging issue. Due to budgetary problems DSC is not in a position to increase its cadre to employ enumerators exclusively for data collection purpose.

THAILAND COUNTRY UPDATE REPORT^{1/}

1. Introduction

The population in Thailand was estimated at 63 millions. The total area is approximately 514,000 square kilometers. Forty-one percent of the total land area is used for agricultural purposes, 32% is forest land and 28% is unclassified land. Thailand is predominantly an agricultural country. Approximately two-thirds of the population is engaged in agriculture. About 10 percent of the gross domestic product is derived from agricultural sector. Agricultural products in Thailand have not been produced for their own consumption but also being a major source of income from exporting. Although agricultural export value to total export has been decreasing in recent years, the value of agricultural exports is increasing every year and still a major source of export earning. Currently agricultural exports constitute about 25 percent of the total export value. Thai government is attempting to enhance agricultural productivity. By increasing productivity, it is essential to raise incomes and improves the living standard of the people. So Thai farmer and the related agencies should have up to date and accurate agricultural statistics and information, to plan and make a policy and decide on a strategy for increased productivity. Recently, fisheries products and livestock products become more and more important source of export earning.

2. Current and planned collection of agricultural statistics (survey, census)

Present Situation on Agricultural Statistics in general, the agricultural statistical system in Thailand is decentralized by law. The National Statistical Office (NSO) is a government agency with a departmental status under the Ministry of Information and Communication Technology. It plays the leading role in producing basic statistics at national and regional level and serving as the coordinating body for all statistical activities of government agencies. In practice, there are many government agencies, which are responsible for collecting statistical data. Each agency has its own statistical unit but different in size and status.

Under the provision of Agricultural Economics Act. B.E. 2522(A.D.1979), the Office of Agricultural Economics (OAE) have the power and duty to deal with statistics agricultural economics and agriculture development.

Agricultural statistics in Thailand are composed of agricultural census and agricultural survey as follows:

2.1 Agricultural Census

Agricultural census is conducted by the National Statistical Office to obtain basic information such as number and area of holding, land use, land tenure, planted area of crop, number of livestock, use of fertilizer and pesticide, machinery, etc. The Agricultural Census of Thailand was conducted in 1950, 1963, 1978, 1993 and 2003. Moreover, NSO and the Department of Fisheries jointly conducted Marine fishery Census in 1967, 1985 and 1995. Thailand's fishery has developed rapidly in recent years and it is essential to obtain timely statistics for policy formulating and development planning of marine fishery.

2.2 The 2008 Intercensal Survey of Agriculture

^{1/} “Asia and Pacific Commission on Agricultural Statistics” 22nd Session 9 – 13 June 2008, Kuching, Sarawak, Malaysia

The Agricultural Census is planned to conduct every ten – year period as recommended by FAO, however, the interval of census is so long that some data on agricultural structure might have changed. In order to capture the changes of agricultural structure and obtain data on agricultural statistics, the National Statistical Office has decided to conduct the Intercensal Survey of Agriculture every 5 years, starting in 1983, 1988 and the present one in 2008. This Intercensal covers the total sample of about 45,000 holdings throughout the whole country. The one month period of interviewing the sample holdings is scheduled in May, 2008. Data items collected are 1) legal status of holder, 2) land tenure, land use and irrigation, 3) Rice, 4) field crops, 5) vegetable crops, flower and ornamental plant, 6) permanent crops, 7) para rubber, 8) livestock, 9) fertilizer and pesticide, 10) machinery and equipment, animal utilization and transport equipment for agriculture, 11) employment on the holding, 12) members of the holder's household and activity status, 13) education and main activity status of holder, 14) income and indebtedness of holder's household.

2.3 Agricultural Survey

2.3.1 Crop Production Survey. Office of Agricultural Economics(OAE) annually conducted several surveys for major crops, namely Rice, Maize, Cassava, Sugarcane, Soybean, Mung Bean, Groundnut, Sorghum, Kenaf, Cotton, Pineapple, Garlic, Shallot, Onion, Potato, Pepper, Coffee, Oil Palm, Para Rubber and other fruit crops such as Rambutan, Durian, Guava, Lime, Tangarine, Longan, Mangosteen, and Lichee. The data collected for each crop comprise of planted and harvested areas and production. The data collected for each fruit crops and tree comprise of existing tree crop area, crop removal area, crop productive area and production. Beside, each crop is undertaken separately in accordance with the following factors: variety, quantity of seeds, planting method, irrigation supply, crop characteristics, business type and fertilization.

2.3.2 Livestock Production Survey. The livestock and poultry are currently divided into two types of farms: commercial farms(big operators) and non-commercial farms(backyard farms). The types of livestock are cattle, buffalo, swine, duck, chicken and dairy cow. The data collected comprise of inventory and production..

2.3.3 Fisheries Production Survey. And Office of agricultural economics also collected some fisheries production in the annually fisheries production survey. The types of these fisheries are Jumbo Tiger Prawn, Penaeus Vanamei, Walking Catfish, Striped Snakehead, Nile Tilapia and Thai Red Tilapia(or Ruby tilapia). The data collected comprise of production.

2.3.4 Cost of Production Survey. This survey is carried out annually by the OAE. The sample farmers for this survey are mostly the sub-sample of the each crop production survey. The information collected is divided into two major items-variable costs and fixed cost. For each item, it is also break down into cash cost and imputed cost. The commodities covered in this survey varied from year by year depending on the need for updating of physical coefficients in computing the cost.

2.3.5 Price Report. Weekly farm-gate price and Daily price of agricultural commodities are collected and reported to Center for Agricultural Information, OAE. by the regional office. The weekly bulletin report of commodities situation of production, marketing and farm-gate prices is published and distributed to the general public every Monday.

2.3.6 Crop Forecasting. Thailand is an agricultural exporting country for which the exporting policy has to be formulated, if possible, well in advance before actual harvest of each crop. Therefore, 20 commodities included in the quarterly forecast is another alternative to get this information at the early stage. The main item of this forecasting are planted area,

production and yield which have detail in provincial level. For mid year outlook there are 65 commodities included in the national aggregate model. The data from the forecasted model are adjusted according to field observation and other exogenous information such as government policy.

2.3.7 Remote Sensing and GIS. This technique satellite data is used for producing agricultural statistics and agricultural resources maps. Besides, Geographic Information System or GIS is also used for agricultural development planning. In order to reliability in data collection, OAE has introduced the Geo-information Technology to estimate planted area and production of various crops. The area frame survey technique combines mapping approach and statistical method. Base on the observation of sample points by using satellite imageries and aerial photograph, the specific areas under investigation can be computed. The statistical methods for yield estimation such as crop cutting technique are used in this approach for the calculation of a certain crop production.

2.3.8 Agricultural farm household Socio-economic Survey. The Agricultural farm household Socio-economic Survey is a multi-purpose survey. The content of information to be collected in the survey generally covers land holding and land utilization, characteristics of farm household, income and expenditure both in farm and off-farm, credit and indebtedness situation of farm household, and farm assets.

3. Legal framework under which agricultural statistical activities operate (Statistical Law, Master Plan, etc.)

The present legal framework is the “Statistical Act of B.E. 2550 (2007)”. Under section 5 of the 2007 Statistical Act the National Statistical Office shall be the central state agency in charge of the technical statistics work. Section 6 The national Statistical Office shall have the following authorities and duties; **1)** 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 statistical 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.

4. Availability of statistics on farmers’ income

The Office of Agricultural Economics (OAE) organizes the Socio-economic Survey. The result of the Socio-economic Survey in 2004/05 and revealed that in Thailand about 40 percent of total population is farmers. The number of farm household is 5.79 million household and the average farm-size is about 4.05 people/household. It also revealed the income and expenditure data both in-farm and off-farm. In the year 2004/05 each household has in-farm cash income about 98,905 Baht and off-farm cash income 57,080 Baht. The in-farm cash expenditure is 50,183 Baht and off-farm cash expenditure is 79,550 Baht. The household net cash income is 105,802 Baht which the net cash income from agriculture is 48,722 Baht.

5. Emerging issues

At present agricultural production and agricultural economics are facing to many issues. Some important issues are as follow:

1) **Concentration of production in some period** cause over or lack of production and it also lead to the crisis in the price of production. Government try to decentralize production in many ways such as improving the market distribution management by making contract with supermarket(such as BIG C etc.) and the exporter(such as Richfield Fresh Fruit Co., Ltd, Thai-Hong Fruit Co., Ltd. etc.), finding new market by organize the road show for promote agricultural product in abroad etc.

2) **The climate change by the Global Warming Effect** is projected to have significant impacts on conditions affecting agriculture in Thailand such as increased frequency of weather extremes(storms/floods/droughts), loss of biodiversity in fragile environments/tropical forests, loss of fertile coastal lands caused by rising sea levels, increase in incidence of pests and vectorborne diseases, more unpredictable farming conditions in tropical areas and dramatic changes in distribution and quantities of fish and sea foods. These conditions determine the [carrying capacity](#) of the [biosphere](#) to produce enough [food](#) for the human population and domesticated animals.

3) **Farmers' Poverty** , Ministry of Agriculture and Cooperatives takes responsibilities in three problems to Alleviate the Farmers' Poverty such as Land Occupation Problem, Occupation Extension and Employment Problem, and Individual Debt Problem. Expected outcome of the plan is the increasing of farmers' ability and potential on helping themselves. In addition, the plan would also increase the production capability and competitiveness. Farmers can raise their incomes leading to sustaining of landlord status, conserving and developing their agricultural occupation where the poverty may not be resumed.

6. Funding sources of the different institutions dealing with agricultural statistics (national, external).

The Statistics and Information Department (SID), Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan is the donor through ASEAN Trust Funds in order to organized ASEAN Food Security Information System (AFSIS) project which is an ASEAN and Japan initiative with participation open to China and Korea. The main objectives of the Project include facilitating food security planning and implementation in member countries through the systematic collection, analysis and dissemination of food security information. The important activities include the setting up of the Early Warning System for natural and economic disasters including necessary implementation plans.

7. Availability of agricultural statistics database

OAE has set up various agricultural statistics database system by using national and external fund. These agricultural statistics database system include of the agricultural commodities, the agricultural economics, the price of production, the import-export, the socio economics, the early warning system, and the executive information system.

8. Adoption of information technology and internet access.

OAE has set up network system for information exchanges among its various office sites and connection to public. The network system of OAE can be described as follows:

1) Internal Network System which connects all OAE's offices both in Bangkok and in regional areas by using "IPVPN" (Internet Protocol Virtual Private Network) through this intranet, the central and regional Offices can exchange information in forms of voice and data

including the transmission of application software. The office buildings in Bangkok are also equipped with “Lan and Wireless Lan” for more convenience in connecting to the system.

2) External Network System is connected to internet network through the Remote Access Server of OAE. OAE’s staff can access to external websites in internet for worldwide information exchanges. In addition, the central office is also connected to some other agencies in the Ministry of Agriculture and cooperatives through leased line. These agencies are, for example, the Department of Agricultural Extension, Department of Agricultural and Department of Fisheries.

9. Current dissemination strategies of agricultural statistics (publication, web)

The current dissemination of agricultural statistics and agricultural economics statistics are provided in the report and also through website are as follows:

Reports on censuses and survey by NSO include of Statistics journals, Annual statistics books, Provincial statistics reports, and Regional statistics reports. It is also accessed via www.nso.go.th

Reports on survey by OAE comprise of Annual agricultural statistics of Thailand, Annual Thailand foreign agricultural trade statistics, Agricultural survey reports from Crops survey, Cost survey and Livestock survey such as Rice survey report etc., Seasonal forecasts of agricultural production, Farm registration data, Geographical information by remote sensing. It also show through www.oae.go.th

Fisheries statistics from the fisheries censuses and survey by DOF reveal in the Fisheries Statistics Journals, Annual fisheries statistics books and through www.fisheries.go.th.