

I. Brief Summary

Agricultural, forestry, fishery, and husbandry census is one of national basic censuses, which the government should carry on regularly, according to the Regulation of Statistics. This census is designed to collect the current basic data concerning the spread of resources of the above-mentioned industries, their structures of production, labor character, the utilization of farm, and the reality of management. Data compiled are used as a major reference for the formulation of national policies and implement of agricultural development plans. Since the first census of 1956, the once-for-five-year custom was later on established. So by custom, in 2005, it was supposed to be the 11th census.

It is the first one census after our government joining the World Trade Organization (WTO). The agricultural policy will be adjusted in some way. At the present time, we had the 11th agricultural, forestry, fishery, and husbandry census to collect the information about the households of agriculture, forestry, fishery, and husbandry. According to the new and accurate census information, we can evaluate our past policy of the agriculture and analyze the real situation of the agricultural and fishery management. Also it can reveal how to substantiate the agricultural and fishery construction, the improvement of management. Thus the purposes of this census is great, and with deep influence.

II. Census Planning

In order to carry out the census, the DGBAS has invited scholars and experts of agricultural, statistical and social studies to participate in the discussion and formulation of the census plan, collected census documents and the experiences of worldwide countries. Preparatory census centers had been set up to demarcation of census district, working staff allocation and the training of electrical administrative operation system. The brief as the accessory tool of seminars was made to improve the training programs. For it could unify explanations of census works, reduce misunderstanding, and enhance the accuracy of the census data. In the census advertisement, we not only increase promotion but also set up the enumerators' confirmative system and hold lottery.

Pretest investigation had been performed twice at June 2004 and April 2005 respectively to examine the feasibility and cost-effectiveness of alternative enumeration procedures, questionnaire contents and data processing. The Pretest investigation covered six and fifteen counties of Taiwan Area. The census form and operational plans have been finally implemented on April 2005.

III. Census Operation and Contents

1.The Census standard time : The census standard date is December 31, 2005, the census standard period is from January 1 to December 31 in 2005.

2.Enumeration period : From March 1 to April 15, 2006. But for the farm, forest farm, and fishing company were ended on April 25, 2006

3.Scope of area : The Census covers cities and counties of Taiwan area (including Taipei City, Kaohsiung City which including Tung-sha and Nan-sha Archipelago), Kingmen Hsien and Lienkiang Hsien of Fukien area.

4.Scope of industries : according to the criterion in the “R.O.C. Standard Classification of Industries”, including Agriculture and Husbandry, Forestry, Fishery.

5.Coverage :

(1) Agriculture and Husbandry: including farm households, farm and agricultural service units.

A. Farm household: Ordinary family engaged in production such as crops growing, domestic animal and poultry raising, bees and silkworms keeping, recreation, and provided with one of the following conditions:

a. At the end of 2005, it managed (including on lease or be consigned) a cultivated land over 0.05 hectare.

b. At the end of 2005, it raised at least one big-sized animal (e.g. dairy cattle, beef cattle, breeding cattle, deer etc.).

c. At the end of 2005, it raised at least 3 medium-sized animals (e.g. pig, sheep etc.).

d. At the end of 2005, it raised at least 100 small-sized animals (e.g. chicken, duck, goose, rabbit etc.).

e. In the year of 2005, it sold or consumed its home made production which valued over N.T.\$20,000.

B. Farm: The agriculture production units except farm household. There were corporation, partnership, sole proprietor, folk group, government organization and school experimental farm etc.. They managed as an enterprise or an experiment to engage in production such as crops growing, domestic animal and poultry raising, bee and silkworm keeping, recreation, and provided with one of the conditions listed above.

C. Agricultural service: Family or none family charged by each service or by a contract, offering service to grow crops, raise animals and poultry, keep bees and

silkworms. During the period of census, they made an annual income over N.T.\$20,000.

(2) Forestry: Family and none family engaged in wood and bamboo growing, nursing, managing, and provide people leisure and entertainment, it managed an area of woods over 0.1 hectare at the end of 2005.

(3) Fishery: Fishery household and fishery enterprise engaged in catching or culturing aquatic production, and provided with one of the following conditions:

a. At the end of 2005, it had the right to use the powered boat, sampan, fishing raft etc..

b. At the end of 2005, it managed a aqua culture area over 0.05 hectare.

c. In 2005, the collecting or culturing aquatic living things valued over N.T.\$20,000.

6.Census unit :

(1) Family engaged in agriculture and husbandry, agricultural service, forestry, fishery.

(2) The production units except family household, e.g. farm, forestry farm, fishing company, engaged in agriculture and husbandry, agricultural service, forestry, fishery etc..

7.Enumeration method : This census was completely carried out to the proprietors of agriculture, forestry, fishery, and husbandry; “personal interview investigation” was made to the family-type agriculture, forestry, fishery, and husbandry households mainly, and “self filling-out investigation” was made to enterprises mainly.

8.Questionnaire items :

(1) Farm household :

a. General information

(a) Population of farm household.

(b) Part-time or full-time.

(c) Management type and main industry.

(d) Agricultural products revenue of the whole year.

(e) Providing recreation and recreation service revenue.

(f) Operating food processing and food processing revenue.

b. Property and occupation of farm household population, 15 years old and over.

(a) Title.

(b) Sex.

(c) Age of the end of the year.

(d) Education.

- (e) Breadwinner.
- (f) Farm position.
- (g) Number of man-days engaged in own farm work.
- (h) The sideline industry.
- (i) Main working situation.
- c. Utilization of farm
 - (a) Total cultivated land area.
 - (b) Cultivated land area, ownership, facilitation, applying chemical fertilizer or pesticides, source of irrigation water, main utilization, and classification of main crop.
 - (c) Non- cultivated land area, ownership, facilitation, applying chemical fertilizer or pesticides, source of irrigation water, main utilization, and classification of main crop.
- d. The planted situation of crops.
- e. Livestock and poultry raising.

(2) Farm:

- a. General information
 - (a) Type of organization.
 - (b) The year of establishment.
 - (c) The property of the manager.
 - (d) Number of employees of the end of the year.
 - (e) Main industry.
 - (f) Agricultural products revenue of the whole year.
 - (g) Providing recreation and recreation service revenue.
 - (h) Operating food processing and food processing revenue.
 - (i) The sideline industry.
- b. Utilization of farm
 - (a) Total cultivated land area.
 - (b) Cultivated land area, ownership, facilitation, applying chemical fertilizer or pesticides, source of irrigation water, main utilization, and classification of main crop.
 - (c) Non- cultivated land area, ownership, facilitation, applying chemical fertilizer or pesticides, source of irrigation water, main utilization, and classification of

main crop.

- c. The planted situation of crops.
- d. Livestock and poultry raising.

(3) Agricultural service :

- a. General information
 - (a) Type of organization.
 - (b) The year of establishment.
 - (c) The property of the manager.
 - (d) Number of employees of the end of the year.
 - (e) Total revenue of agricultural service.
 - (f) The sideline industry.
- b. The operation situation of agricultural service.
- c. Main industry.
- d. Number of agricultural machine at the end of the year.

(4) Forestry section:

- a. General information
 - (a) Type of organization.
 - (b) The population at the end of year.
 - (c) The property of the manager.
 - (d) Number of employees of the end of the year.
 - (e) Main industry.
 - (f) The sideline industry.
- b. Utilization of forest land
 - (a) Total forest land area, area of ownership, categories of forest species, function and purpose.
 - (b) Affiliated forest land area.
- c. The operation of forest.
- d. The revenue of forestry.

(5) Fishery household:

- a. General information
 - (a) Population of fishery household.
 - (b) Part-time or full-time.
 - (c) Management type and main industry.

- (d) Fishery products revenue of the whole year.
- (e) Providing recreation and recreation service revenue.
- (f) Operating food processing and food processing revenue.
- b. Property and occupation of fishery household population, 15 years old and over.
 - (a) Title.
 - (b) Sex.
 - (c) Age of the end of the year.
 - (d) Education.
 - (e) Breadwinner.
 - (f) Fishery position.
 - (g) Number of man-days engaged in own fishery work.
 - (h) The sideline industry.
 - (i) Main working situation.
- c. Number of employees at the end of the year.
- d. The operation situation of marine fishery.
- e. The situation of aquaculture.

(6) Fishery enterprise:

- a. General information
 - (a) Type of organization.
 - (b) The year of establishment.
 - (c) The property of the manager.
 - (d) Main industry.
 - (e) Fishery products revenue of the whole year.
 - (f) Providing recreation and recreation service revenue.
 - (g) Operating food processing and food processing revenue.
 - (h) The sideline industry.
- b. The fishery working situation of employees at the end of the year.
- c. The operation situation of marine fishery.
- d. The situation of aquaculture.

9. Demarcation of census districts :

(1) Enumeration and administrative district : In principle, enumeration district was demarcated with 120 households within the same village. However, the size of one enumeration district could be enlarged or reduced depending on its local geographical situation. In average, 10~12 adjacent enumeration districts of the same town/township were demarcated into one administrative district. However, the size of one

administrative district could be enlarged or reduced depending on its local geographical situation.

(2)Supervisory district : In principle, one area of supervision is for one county/city.

10.Scope of Specific Group Survey :

- (1) Farm of school.
- (2) Farm of Ministry of Justice.
- (3) Farm of Veterans Affairs Commission, Executive Yuan, R.O.C..
- (4) Farm of Economic Affairs, R.O.C..
- (5) Farm of Council of Agriculture, Executive Yuan, R.O.C..
- (6) Farm of Ministry of Finance, R.O.C..
- (7) Farm of others of government.

IV. Preparatory Operation

1.Demarcation of census district : To reduce the omission or overlapping of the coverage and enhance the accuracy of the data, city/county governments were responsible for the promulgation and supervision of the demarcation of census districts, town/township/city/district offices were responsible for the conduction of the demarcation which started early from December 1, 2005 to January 31, 2006. The result would provide not only as a reference for the compilation of the prelist address and enumeration rosters but for staff allocation as well.

2.Promulgation of electrical administrative operation system : To release heavy paper or clerical workloads and meet the timely requirement of the Census, the DGBAS has developed electrical administrative operation system which installed with the function of staff allocation, budget control and performance evaluation. City/county government's administrative staff training was initiated on November 2 and 3, 2005 by the DGBAS..

3.Establishment of temporary census organizations :

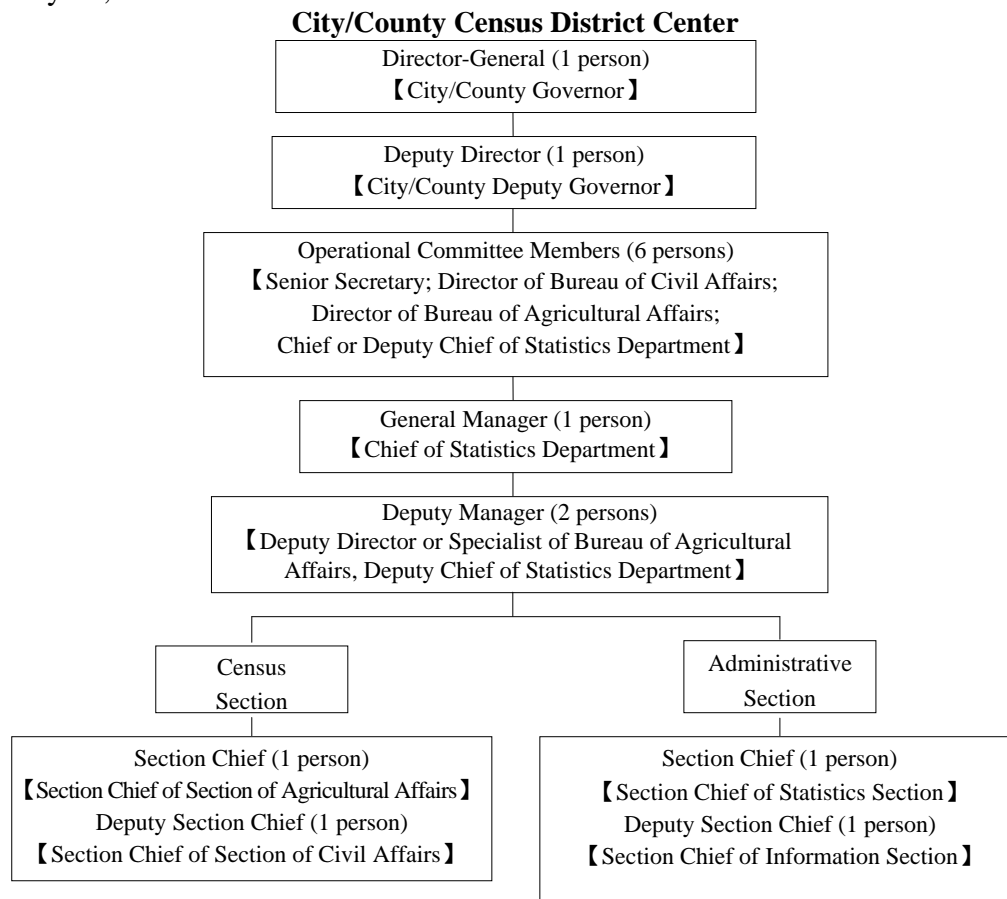
(1)Specific Group Survey organizations : The organizations undertook the specific group survey recruited supervisors to carry out the Census from January 1, 2006 to June 15, 2006.

(2)City/county organizations :

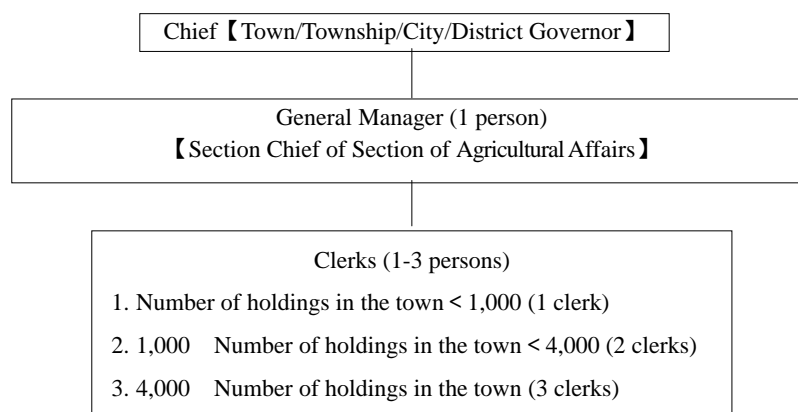
- a. Local governments set up "Agricultural, Forestry, Fishery, and Husbandry Census preparatory centers" from November 1 to December 31, 2005, responsible for the census beforehand work.
- b. Local governments set up "Agricultural, Forestry, Fishery, and Husbandry Census district centers" from January 1 to June 15, 2006, including Taipei City, Kaohsiung City, cities and counties of Taiwan Area, Kingmen Hsien and Lienkiang Hsien of

Fukien Area. Each district center controlled by DGBAS was composed of agricultural affairs and statistical staffs, and was responsible for the census works.

(3)Town/township/city/district organizations : Town/township/city/district offices set up “Agricultural, Forestry, Fishery, and Husbandry Census district offices” from January 6 to May 31, 2006.



Town/Township/City/District Census District Office



4. Recruitment of census workers : To facilitate the field operation and successfully accomplish the census mission, local census organizations have assigned supervisors, inspectors, administrators and enumerators to carry out personal interviews from March to May of 2006.

(1) Enumerators : One enumeration district was assigned to one enumerator. Enumerators were recruited either from government staffs of agriculture, statistics, etc. or from civil labor force.

(2) Administrators : One administrative district was assigned to one administrator. Administrators were recruited from chiefs of villages and those who qualified for census works by administrators of Census Section of Town/Township/City/District Census District Office.

(3) Inspectors : One administrative district were assigned to one inspector. Inspectors were recruited from government staffs of agriculture or statistics,

(4) Supervisors : One supervisory district was assigned to one supervisor. Supervisors were recruited from those who possessed with abundant experiences on censuses, surveys or statistics.

5. Compilation of enumeration rosters : To reduce the omission and enhance the full coverage of interviewees, not only the 2000 agricultural, forestry, fishery and husbandry census enumeration rosters were taken into consideration, but the new rosters of the authorities concerned were collected to make a consolidated file for census use.

6. Training of Census workers : To improve the quality of the data and unify the enumeration procedures, it is imperative let census workers fully understand the implications and significance of the Census, such as operation rules and regulations, ways of reporting census questionnaire, interview skills, etc. The training program was carried out as follows :

(1) Census promulgation meeting : The half-day meeting was held by the DGBAS on October 20, 2005. The chiefs and directors of statistics departments and agricultural affairs in each city/county were invited to the meeting.

(2) Electronic administration operation system seminar : The two-day meeting was held by the DGBAS on November 2 and 3, 2005. The clerks in each city/county were invited to the meeting.

(3) Working seminar : The meeting was held on demand by each City/County Census District Center in January of 2006. Directors, operational committee members, deputy

directors, operational committee members, general managers, deputy managers, section chiefs or deputy chiefs were all invited to participate in the meeting.

(4)Lecturers and supervisors training : The training was held in January, 2006. The training included lecturers, supervisors and relative personnel.

(5)Investigators training : The training was jointly held by city/county census district centers and town/township/city/district census district office in February, 2006. There were administrative staffs, inspectors, administrators and enumerators attended the training.

(6)Specific Group Survey training : In principle, the administrators joined the investigators training which held by County Census District Center at the nearest convenient place.

7.Lecturers and training materials : Either lecturers or training materials was ordered and made by DGBAS.

8.Census promotion : To make the public fully aware of the purposes and implications of the Census, City/county Census District Centers started local promotion programs that best fit their own demands as soon as set up. The promotion should be highly concentrated a week before Personal interview started, and finished at the end of interview.

V. Census Operation

1.Personal interview : Personal interview started from March 1 to April 15, 2006. Enumerators are supposed to wear identification card and bring census forms to visit the census holdings during this period. They were required to overview the completed forms, keep the forms from damage or lost, and not to disclose the collected information to any other organizations, groups or persons.

2.Administration of field work : Administrators are required to assist enumerators on personal interview and problem solving, review for content and coverage error before April 20, 2006 and keep the field works on schedule.

3.Inspection of completed forms : To improve the accuracy of the data, inspectors are required to conduct an in-depth review of the completed forms for content and coverage error in accordance with the criteria set in the Census Guide before May 10, 2006. Any incidental omissions or contradictions found were returned to enumerators to check again.

4.Supervision of census operation : To facilitate the census operation, the DGBAS has

assigned supervisory districts. Supervisors are responsible for consulting of practical operations, monitoring the progress of field works and reviewing of the data.

5. Delivery of census documents : Local census organizations are required to collect and deliver the completed census forms to the DGBAS before May 10, 2006.

VI. Data Processing

The completed census forms were sent to the DGBAS for data processing. The DGBAS adopted the Optical Character Recognition (OCR) technology to scan the census forms, recognize and edit the data on line, and save the data in an image format. The compilation of census data and statistical tables were processed by Electronic Data Processing Center, DGBAS.

VII. Compilation of Census Report

The Census compiled two types of report: preliminary report and final report. The contents of the former were the number of agricultural, forestry, fishery, and husbandry, household population and structures of production, and was edited and published before the end of January 2007. The latter includes general report, Agricultural report, Farm household report, Farm report, Agricultural services report, Forestry report, Fishery report, etc.. There are 7 volumes of them all. The general report was scheduled to be published during November of 2007. The statistical report (including electrical book) will be disseminated for public use.

VIII. Reformation on Census Operation

To enhance the quality of the census operation, the DGBAS has made reformation on the following aspects :

- 1. Establishment of new enumeration rosters :** The DGBAS collected and compiled from authorities concerned and established the new enumeration rosters to make a basis of other investigations.
- 2. Screening on the holdings :** For entering WTO, the census cycle was shortened. The enumerators screened the holdings of agriculture, forestry, fishery to hold the whole census coverage.
- 3. Fullness of questionnaire forms :** The DGBAS recruited the questionnaire items, like the items of recreation, food processing, labor, and utility of land, to enhance application of the census data.
- 4. Making the brief of training programs :** The brief as the accessory tool of seminars was made to improve the training programs. For it could unify explanations of census

works, reduce misunderstanding, and enhance the accuracy of the census data.

5.Developed specialized information area of census on internet : To release clerical workloads and meet the timely requirement of the census, the DGBAS has developed specialized information area of census on web of DGBAS which uploaded the working principal points and rules.

6.Enhance census promotion program : To make the census coverage fully aware of the purposes and implications of the Census, the DGBAS has designed several promotion programs nationwide to motivate the census coverage for cooperation. Local census organizations were also allocated budgets to design local promotion programs that best fit their own demands. DGBAS also set up the enumerators' confirmative system and hold lottery.

7.Automation of data processing : To save labor and cost and to enhance the quality of the data, the Census has adopted Optical Character Recognition (OCR) technology to conduct data processing.