

# **Survey on Household Income and Work Force in Rural China**

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Statistics on household income and work force in rural China is a major component part of China national statistics system. It plays a decisive role in making national macro policy decisions. About 70% of the population in China live in rural areas. Rural household income is about one third of that of urban household. It is a priority and a fundamental goal of our government to increase rural household income, to raise living standards of rural households, and to narrow income gap of rural and urban household .

Agriculture and rural economy in China has embarked on a new stage of development, which is characterized by fundamental change in supply of agricultural produce, a change from longstanding shortage to overall balance, with a surplus in years of bumper harvest, or a change from seller's market to buyer's market. This is a fundamental change in agriculture and rural economy in China, which provides more sources for rural household income and more job opportunities for rural work force . Agricultural production remain the basic source of income, while non-agricultural occupation and jobs in metropolitans has become a major source of income. Rural households used to relying mainly on increase in agriculture output and rise in price for increase in income. Now, they rely mainly on high efficiency of agriculture production and on getting more job opportunities for rural work force. How to create more job opportunities for rural work force is a major concern of our government in policy making at present stage.

## **I, Development in survey on household income and work force employment in rural China**

Household survey is used in collection of data on household income and work force employment in rural China. Requirements of government departments on statistics in this regard are increasingly extensive due to great government concern on increase in household income and work force employment in rural China. To meet the ever-changing requirement, National Bureau of Statistics has made great efforts in recent years in promoting reform and development of survey and statistics on household income and work force employment in rural China.

Household survey in rural China commenced in 1954, and was twice suspended in 1958 through 1961, and in 1966 through 1976, due to political movement and other reasons. It has been rapidly progressing with opening up and social and economic development. Reform and development in survey and statistics on household income and work force employment in rural China has been further promoted in the last few years in order to keep pace with

change in sources of rural household income and change in statistics data requirement, as indicators become more precise and wider in coverage. More and more statistics indicators that can reveal new development, new issues and effect of new policies have been designed. Up-to-date information technology are applied in survey, making data transmission and data processing more applicable and faster,

In 2001, National Bureau of Statistics made the survey on basic information of rural household members into survey on employment of rural work force. Work force as an input in agricultural production was also made a theme topic of survey, so as to gear survey efforts to government and public concerns on employment of rural work force.

## **II, Survey on rural household income and employment of work force**

### **1, Survey on rural household income**

#### **1.1, Application of statistics on rural household income**

Focus of the survey is on income sources of rural households and spending on getting income, with aims to reveal the level of rural household income and increase in household income, to evaluate government policy of income distribution and income growth in rural China, to reveal changes in income of rural poor households, to monitor poverty alleviation in rural China and changes in living standards, to monitor progress in building moderate prosperous society in rural China

### **2, Method of survey on rural household income**

#### **2.1, Organization of the survey**

Survey on rural household income is the responsibility of Organization of Rural Social-Economic Surveys (or National Rural Survey Team for short). It is a professional survey organization of the National Bureau of Statistics, with delegated organizations in every province and 857 counties (about one third of all counties in China). Responsibility of Rural Social-Economic Survey Teams at Provincial and County level is to effectively organize and make surveys in line with survey planning formulated by National Rural Survey Team.

Each Provincial Rural Social-Economic Survey Team has 30 to 50 staff, and each County Rural Social-Economic Survey Team has 6 to 10 staff. Currently there are more than 8,000 professional statistical surveyor in China. Furthermore, for purpose of doing a better job in each household under survey, an assistance surveyor is assigned to each village. About 10,000 assistant surveyors are engaged nation-wide

National Rural Survey Team puts forward uniform survey planning and form of household journal, and conducts training of staff for provincial survey teams. Provincial survey teams should in turn prepare teaching material, print journal, and conduct training of staff for county survey teams. Country survey teams are responsible for engaging assistant surveyors and conducting training of assistant surveyors and households under survey. Assistant surveyors to be

engaged should meet the requirements of a holder of education record of junior middle school and higher, of integrity and a having great sense of responsibility, and are highly trusted by households.

## **2.2, Sampling**

Samples should meet requirement of each province in term of representativeness. Sampling error should not be over  $\pm 3\%$  based on a probability of 95%. Sampling is done under uniform organization and control of National Rural Survey Team of National Bureau of Statistics with uniform sampling planning by National Rural Survey Team. Each provincial rural survey team should work out detailed application rules based on planning by National Rural Survey Team, organize and do sampling in its own province. Samples selected by each province should be examined and approved by National Bureau of Statistics. Any change and update in samples must also be examined and approved by National Bureau of Statistics.

Samples are selected by comprehensive use of sampling methods, simple sampling, stratified random sampling, systematic clustering based on certain symbols, multi stratification sampling, and multi-phase sampling. Sampling frame is based on data of agricultural census. 68,000 rural household samples are chosen in 31 provinces (and autonomous regions and municipalities directly under the State Council) and 857 counties, on which the survey on rural household income is based.

Samples of survey on rural household income are updated in an interval of five years. Sampling for another five-year period shall be done next year. Sampling method shall be further improved and MPPS shall be used.

## **2.3, Data collection and reporting**

Data of rural household income are collected through journals kept by rural households. National Bureau of Statistics made design of uniform journal, which are of two types. One is designed for entry of cash revenue and spending, and another for entry of kind, received and dispensed. Households under survey are required to use uniform journal, and keep accounts as provided. In keep journal of cash entry, households under survey are required to make entry of every revenue and spending occurred in every day. In keeping journal of kind, it is required to make entry once a month, on the last day of each month with the help of an assistance surveyor

During survey period, surveyors at county rural survey team are required to make interviews with rural households under survey at least one a month, communicate with assistant surveyors on a regular basis, and solve their problems timely. Assistant surveyors are required to make interviews with rural households under survey once each week, urge and help those having difficulties to complete account keeping, trying not to leave out any entry.

Report on cash accounts should be submitted quarterly, and report on kind accounts submitted annually.

#### **2.4, Data processing**

Data loading are done by county rural survey teams. A program developed by National Bureau of Statistics is used for data processing. County rural survey teams collect journals from rural households under survey each month, load data kept on all the journals into computers, and check and verify data. Data verification are done in two steps: Step one, entries in journals are checked and verified by assistant surveyors and county rural survey teams before they are loaded into computers; Step two, data are loaded into computers and verified with uniform computer program.

In line with the schedule provided in survey planning, data loaded and verified by county rural survey teams shall be transmitted to National Rural Survey Team and provincial rural survey team by Internet. They will do a more precise verification on the data. If problems found, the data shall be sent back to county rural survey team concerned. Further interviews with households concerned shall be made for data verification. The data shall be again transmitted to National Rural Survey Team and provincial rural survey team after corrections are made.

#### **2.5, Data pooling**

Data pooling are done by National Rural Survey Team. Provincial rural survey teams submit primary data to National Rural Survey Team. National Rural Survey Team will subsequently pool data submitted by each province separately and feed the data back to each province for application

#### **2.6, Evaluation of data quality**

Evaluation on data of rural household income has just started in the middle 90s of last century. Before that what we did on such survey data was just technical check up and verification. We are short of technical personnel and experience in data evaluation. Currently, our focus is check-up on non-sampling errors and biases, in addition to check-up on sampling errors. If a great defect found on an estimated value of an indicator, for instance, a value completely deviated from reality, an adjustment shall be made on the estimated value.

#### **2.7, Dissemination of survey products**

Dissemination of survey products are done mainly through 3 channels: 1), By media of TV, radio, and newspaper. Regular release is institutionalized. National Bureau of Statistics publishes survey products by way of news release at times as provided. Schedule of release is worked out at the beginning of each year and posted on NBS website; 2), By computer network. A statistics databank is developed at NBS website. Data concerning rural household income, major survey data over the years, and precise information are all loaded in the databank. Users can visit NBS website for information; 3), By publications. < Rural Household Survey Yearbook > is published each year, in both Chinese and English. It is available in bookshops and NBS press.

#### **2.8, Ways of data saving**

Uniformly developed databank and hierarchical saving is a way for data saving. National Rural Survey Team is responsible for development of databanks to save primary data collected through sampling survey nationwide. Provincial

rural survey teams are responsible for saving data collected in their own province by databank uniformly developed by National Rural Survey Team, and county rural survey teams are responsible for saving data collected in their own county by databank uniformly developed by National Rural Survey Team, in addition to keep up journals completed by rural households.

### **3, Survey on employment of rural work force**

#### **3.1, Source of employment data**

Data on employment of rural work force is mainly from three sources: rural household survey, population census, and records of administration. This paper is focused on how to collect employment data of rural work force in rural household survey. It is a topic developed in recent years. Work force plays a dual role in process of economic development . It is an input in production and also a source of income. For this reason, two major topics are designed for survey on employment of rural work force in the survey planning: One is work force as an input in production, another is work force as a source of income

#### **3.2, Application of employment data of work force.**

In survey on employment of rural work force as an input in production, focus is on collection of data that work force is an input in production. That data can be used in agricultural production efficiency accounting. In this sense the data play a role of monitoring economic operation in agriculture, revealing changes in relation to other factors of input and output and structure of work force, analyzing impact of work force on economic growth in agriculture and product mix, and studying impact of population, economy and other factors on the size and mix of work force.

In survey on employment of rural work force as a source of income, focus is on collection of data that work force is a source of income, collection of data on employment in terms of gender, age, record of education, region, and line of business, collection of data on employment in places other than place of living. It is designed, with such data, to make evaluation on government employment policy, specifically on policies that could have an impact on income of rural households, and on their basic demand, to make explanations on impact of employment on level of income and distribution, impact analysis of employment on bank savings and consumption, on technical competence of work force in different regions. It is all for providing government with basis for making policy decisions.

#### **3.3, Method of survey on employment of work force**

Method of survey on employment of work force is the same as that of survey on rural household income in terms of survey organization, sampling, interval of data reporting, data pooling, dissemination of survey products, data analysis, data saving, and data evaluation. However, they are different in the number of selected samples and method of data collection

In terms of sample numbers, survey on work force as a source of income and survey on rural household income are in common, both are done on all samples related to survey topic of income. Survey on work force as an input in production is also done on samples related to survey topic of income. However, such samples are only one third of that used for survey on rural household income.

In terms of data collection, what is used by survey on employment of work force is interview with households. Interviews with households are made once each quarter in survey on employment of work force as a source of income, which is the responsibility of surveyors in county rural survey teams. While interviews for survey topic of work force as an input in production is made once each month, which is also the responsibility of surveyors in county rural survey teams.

### **III, Current state of rural household income and employment of rural work force**

In 2003, per capita income in rural area is Yuan 2622 (RMB). Out of which, Yuan 2135 are cash income, accounting for 81.4%; Yuan 487 are income in kind, accounting for 18.6%. In terms of source of income of rural household, Yuan 1195 are from agricultural production, accounting for 45.6%; Yuan 345 are from source of non-agricultural production, accounting for 13.2%. Per capita remunerations (wage income) are Yuan 919, accounting for 35%; Per capita income in form of property is Yuan 66, accounting for 2.5%; Per capita income from transfer is Yuan 97, accounting for 3.7%. Ratio of urban household income to rural household income is 3.2: 1.

Our rural work force were 490 million in 2003. Of which 170 million were employed in non-agricultural occupation, accounting for 35%, and 320 million (including those not fully employed and surplus labor) in agricultural production. In 2003, migrant rural workers were 110 million. Of which, 50% were inter-province migrant workers, 60% were migrated into metropolitans, 70% were engaged in the developed east coastal area.

### **IV, Challenges confronting efforts of survey on household income and employment of work force in rural China**

**Challenge 1: Households samples growing obsolete and people increasingly tired of journal keeping.** Samples of survey on household income and employment of work force is to be updated in an interval of five years. With time passing by, part of the household samples appear obsolete and people are increasingly losing interest. They are tired of routine journal keeping. Though it is not so serious as to impair data quality, it is a great issue especially in economically developed areas, and will be a grave challenge soon.

**Challenge 1I: Shortage of survey resources.** It is a two-fold issue: One is

short of skilled human resources. We are short of personnel who have survey skills and experience of on-site surveys, and are unable to provide for large scale survey in that regard. Work force in rural China are general low in quality, 70% of them with only a education record of junior middle school and lower. It is a hard to engage or to train a great number of people to meet requirement of survey and on-site interview. Another is short of funds.

**Challenge 1II: Low efficiency of survey data application.** Each surveyor is entrusted with many responsibilities: working out survey methods, providing guidance, doing on-site survey, doing data processing and data evaluation, preparing report on data analysis. They do not have enough time for further development and application as far survey data is concerned. Data application efficiency is low, and consequently resulting in waste of survey resources.

To name just a few challenges we are confronting. National Bureau of Statistics is making effort to work out ways to meet the challenge. Some ways have been put in test run. We sincerely hope to have the counsel and assistance of specialists and scholars the world over.