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Cambodia Socio-Economic Survey 1997

Technical Report on Survey Design and Implementation

**National Institute of Statistics
Ministry of Planning
Phnom Penh, Cambodia**

Sponsored by
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SURVEY DESIGN AND IMPLEMENTATION

1. Introduction

Cambodia Socio-Economic Survey, 1997 (CSES-1997) was conducted by the National Institute of Statistics (NIS) of the Ministry of Planning. CSES 1997 is the first of two national surveys sponsored by the Capacity Development for Socio-Economic Surveys and Planning Project CMB/96/019 of the Royal Government of Cambodia. The Project is funded by UNDP and the Swedish International Development Agency and executed by the World Bank. The Ministry of Planning (MOP) is the government project implementation agency and NIS is responsible for the survey programme. The project expert staff in collaboration with the staff of NIS undertook the planning and designing of the survey. CSES 1997 is the first multi-subject household survey conducted in Cambodia, and it was designed as a multi-objective integrated survey, to obtain primarily, information for poverty monitoring and analysis.

Poverty reduction and eventual eradication has been one of the major goals of the Royal Government of Cambodia and poverty reduction has been accepted as the central theme of the First Socio-Economic Development Plan 1996-2000. The Plan also refers to the fact that poverty and deprivation is widespread and takes many forms. Poverty monitoring and analysis require current, reliable and geographically disaggregatable data. The wide range of characteristics on which information is required demands the establishment of a data base much more detailed and timely than what the national statistics office could deliver without external support. Existing capacity for the collection and analysis of data on living standards is weak. During the past 4 years important groundwork has been laid by the conduct of two large-scale household surveys.

Current information on living standards and poverty is based on ad hoc specialized surveys which were conducted to meet urgent, specific statistical data needs such as the detailed consumer expenditure data required to derive weights to establish consumer price indices or establish base line socio-economic indicators required by different sectoral data users. These data sources were of insufficient detail both in subject matter coverage and geographical disaggregation to serve as a current database for measurement of living standards and poverty. They were inadequate to explore analytically important relationships concerning the incidence, magnitude, nature and causes of poverty.

The survey programme sponsored through the Project aims at collecting information on various facets of levels of living of the Cambodian people. CSES-1997 is the first household survey conducted in Cambodia which has used an integrated set of questionnaires to canvass data on a wide range of socio economic topics for measuring living standards, monitoring poverty and to also elicit data on sectoral and sub-sectoral subjects and topics. The survey was designed to adopt the core and module questionnaire approach. The purposes of the core questionnaire were to support monitoring of changes in key indicators over time and identification of priority areas for geographic targeting of development programmes. To serve these needs the subject matter coverage in the core

questionnaire was fixed on a small number of key welfare indicators including per capita consumption expenditure, education enrollment, health care utilization rates, and basic demographic characteristics, housing characteristics and household assets. The core would be implemented without many modifications annually and a rotating sector module will supplement it. The purpose of the modules would be to support in-depth analysis of sectoral issues and policies. The module could be canvassed on a sub-sample of the sample selected for the core but in the CSES 1997 it was decided to admit it to all the sample households considering the spread of items included in the social sector module. CSES 1997 social sector module focussed on education and schooling including education expenditure, and health and morbidity and amounts spent on health care. In addition to the collection of data from sample households, canvassing of a village questionnaire from sample villages was a new feature introduced with the survey. The village questionnaire was designed to collect data on variables which affect all households in the community such as public and private provision of economic infrastructure including roads, land, irrigation, markets and social services including the facilities of education and health and associated problems and on retail prices and wages prevailing in the sample villages.

The work on the survey formally started when the Project became operational at the beginning of April 1997. Some preliminary work relating to the development of draft questionnaires, sampling strategy of the survey was initiated earlier. The Project was scheduled to commence in January 1997, and despite project start up delays, very rapid progress was made in planning, designing and implementing the survey after mid April 1997. The draft questionnaires were reviewed and amended and translated into Khmer and instruction manuals for enumerators and supervisors were finalized. Consultation with the Government, donors and NGO's were held at the beginning of May 1997 followed by pretests and accordingly, survey instruments were further improved on the basis of these observations and findings. Training of enumerators and supervisors commenced in the third week of May and continued up to the first week of June 1997. Field work was begun at the end of May and concluded at the end of June 1997. Manual coding and editing was started at the beginning of August and computer processing began in September 1997.

Through this survey, several new procedures and international standard practices were introduced into the NIS household survey data collection and data processing operations including extensive documentation, use of core and module questionnaires in a fully integrated survey, village questionnaire for community information, checking error print out's after consistency edits, and computerized survey data processing in a network environment.

This report describes the methodology and implementation of CSES 1997. The survey sampled a total of 6010 sample households distributed in 474 villages. The survey provides statistically reliable estimates for the three domains Phnom Penh, other urban and rural areas. The survey design provides for the extraction of estimates for the four geographic zones viz. Plains, Tonle Sap Lake, Coastal and Plateau and Mountain regions of the country. In addition to the estimates based on the truncated frame used in the survey, a computation procedure for deriving extrapolated estimates for Cambodia as a whole including the areas omitted from the frame was prepared and extrapolated estimates for selected items were computed.

2. Objectives of CSES 1997

The immediate objective of the Project is the development of institutional capacity of the National Institute of Statistics (NIS) of the Ministry of Planning (MOP) to implement a demand driven multi-purpose living standards household survey based data collection system which produces regular, timely and relevant feed back to government policy makers. The project has provided technical assistance for the conduct of two large scale multi-objective national household surveys, the first one in 1997 and the second to be conducted in 1998/99. The primary objective of Cambodia Socio-Economic Survey (CSES) 1997 was to obtain data for the measurement of living standards in geographic stratification and different segments of the Cambodian society. The other objectives were to provide information needed by a variety of users such as government institutions, donor agencies, non-government organizations; to assist NIS to train its staff in planning, designing and conducting a household based survey system and institutionalize survey taking capability. The expansion of the scope of the survey to meet the data needs of a wide variety of users and thus minimize the duplication of household surveys and promote the acceptance of CSES as the national household survey programme was also an important objective.

Specifically the survey had the following objectives:

- i) To provide data required for the measurement of living standards through a single source of data for a comprehensive and detailed analysis of living standards and poverty in Cambodia.
- ii) To provide information on school facilities, schooling and enrollments, cost of education and related information.
- iii) To provide information on health issues, utilization of health facilities and costs incurred in treating illnesses.
- iv) To provide information on demographic and economic characteristics of the population such as age-sex distribution, marital status, fertility, mortality, literacy, employment incomes.
- v) To derive information on socio-economic conditions of villages including infrastructure and access to education and health facilities.
- vi) To establish survey taking capability within NIS for the Institute to conduct multi-objective large scale household-based survey programmes.

3. Scope and coverage of the Survey

The survey objectives described earlier have by and large determined the scope of the survey. In order to effectively meet the primary and secondary objectives, the survey had to be nation wide and provide statistically reliable estimates for the principal characteristics included in the survey for investigation. The multi-objective survey, which was specifically designed to collect information required for measuring living standards and monitoring

poverty, was extensive in both subject matter terms and level of detail. The respondent burden which would result in a lowering of the quality of data and the skills background of the field enumerators and supervisors to admit a set of long and detailed questionnaires were the main considerations that determined the eventual content of the topics canvassed in the CSES 1997.

The survey used four questionnaires, a house listing form, a village questionnaire, a core questionnaire and a social sector module. The questionnaires were prepared after extensive consultations with the users. The draft questionnaires were prepared in January and February 1997 and they were reviewed in March - May and pre-tested. The core questionnaire and the social sector module were canvassed with all of the sampled households and in that sense the CSES1997 is a fully "integrated" multi-objective survey. A novel feature of the survey was the canvassing of a village questionnaire for the 474 sample villages. Information on the economy and infrastructure of the villages, on the facilities of education and health care and associated problems and on prevailing retail prices and wages were topics canvassed through the village questionnaire.

The main or core questionnaire was designed to collect information on demographic characteristics of households, disabilities of members, their economic activities, education and health care, housing conditions, assets and liabilities, household consumption, and some aspects of fertility and child care. The social sector module collected further information on availability and utilization of education and health services, including costs of schooling and health care, and on dropouts in education, on mortality rates, on free collection of water, firewood and fodder and on breast-feeding, child immunization and nutrition.

The scope of the survey in terms of population groups was restricted to all private households including one person households. The practical problems involved in surveying persons living in collective living quarters such as military installations, hospitals, prisons, hostels, religious institutions required the exclusion of such institutional populations.

The need to extend the geographical scope of the survey to cover rural and urban areas and all the regions of the country to increase the usefulness of a survey canvassing data on consumption and expenditure, economic characteristics of villages and households and on health, education and nutrition was understood. However practical considerations made it essential to use a truncated frame that excluded areas that were considered not safe to undertake field work for security reasons. As a result Preah Vihar and Oddar Meanchey provinces and some communes from 15 other provinces were excluded from the frame and a truncated frame was used in the survey. Phnom Penh, which was treated as a separate domain, had 615 villages and they were entirely covered in the truncated frame. The other urban areas had 834 villages and of them 73 villages had to be excised and the coverage had to be restricted to 91.3 % of the villages. In the rural sector 86.3 % of the villages were covered in the truncated frame used in the survey. Details relating to villages excluded from the survey are shown in Table 1.

Table 1
Number of Villages Excluded from Survey Coverage

No.	Prov. Code	Name of Province	Other Urban	Rural	Total
1	01	Banteay Meanchey	18	105	123
2	02	Battambang	-	100	100
3	03	Kampong Cham	-	130	130
4	04	Kampong Chhnang	-	92	92
5	05	Kampong Speu	-	429	429
6	06	Kampong Thom	-	99	99
7	07	Kampot	-	58	58
8	08	Kandal	-	7	7
9	09	Koh Kong	-	21	21
10	10	Kratie	3	26	29
11	13	Prea Vihear *	27	170	197
12	15	Pursat	4	118	122
13	17	Siem Reap	-	90	90
14	19	Stung Treng	-	3	3
15	20	Svay Rieng	-	27	27
16	21	Takeo	-	29	29
17	22	Oddar Meanchey *	21	67	88
		Total	73	1571	1644

* Completely excluded from the frame.

4. Topics

The scope of the survey with respect to items of information collected at village level and household level are as follows

I. Village level information

1. Demographic Information

- a. Total number of households
- b. Population by broad age groups
- c. Ethnic composition
- d. Migration

2. Economy and Infra-structure

- a. Income earning activities in order of importance
- b. Total area and irrigated area of agricultural lands and paddy lands
- c. Village amenities (roads, electricity, piped water supply etc.)
- d. Availability of economic services (market, bank, agricultural services etc.)

e. On going development projects

3. **Education**

- a. Information on primary, lower and upper secondary schools
- b. Major problems with primary, lower and upper secondary schools

4. **Health and Immunization**

- a. Type of health services
- b. Major health problems
- c. Maternity services
- d. Immunization services
- e. Community health

5. **Retail Prices and Wages**

- a. Food prices
- b. Non food prices
- c. Medicine prices
- d. Wage rates of agricultural and non-agricultural labor

6. **Natural Disasters**

- a. Number and type

II. **Household Information**

1. **Demographic Characteristics**

- a. Relationship to household head
- b. Sex
- c. Age
- d. Marital status
- e. Disability
- f. Internal migration
- g. Ethnicity
- h. Language fluency

2. **Education**

- a. Literacy
- b. Educational attainment
- c. Current school attendance
- d. Dropouts and reasons for dropping out
- e. Costs of schooling
- f. Distance to school

3. **Economic Characteristics**

- a. Usual activity in the past 12 months
- b. Current activity
- c. Occupation
- d. Industry

- e. Employment status
 - f. Number of hours worked – past 7 days
 - g. Primary and secondary occupations
 - h. Employment Income
4. **Health**
- a. Incidence of illness and symptoms
 - b. Consultation with health provider
 - c. Hospitalization
 - d. Impact of illness on a person's work
 - e. Expenses related to treatment
5. **Housing and Environment**
- a. Area of housing unit/dwelling
 - b. Year of construction
 - c. Type of construction materials used (wall, floor, roof)
 - d. Source of lighting
 - e. Distance to and source of drinking water
 - f. Toilet facilities
 - g. Fuel used for cooking
6. **Household Consumption Expenditure**
(Purchased, own produce, perquisites, gifts etc.)
- a. Food beverages and tobacco
 - b. Clothing and foot wear
 - c. Housing and utilities
 - d. House furnishing and household operation
 - e. Medical care
 - f. Transport and communication
 - g. Recreation and entertainment
 - h. Education
 - i. Personal care and effects
 - j. Miscellaneous
 - k. Change in household consumption expenditure
7. **Household Assets and Liabilities**
- a. Area and value of residential lands/buildings by occupancy status.
 - b. Area and value of farm lands by occupancy status.
 - c. Livestock owned
 - d. Consumer durables
 - e. Capital items owned by households
 - f. Outstanding loans
8. **Fertility, Mortality and Child care**
- a. Age at marriage
 - b. Number of children ever born
 - c. Death by sex and cause

- d. Breast-feeding practices
- e. Infant-foods and other supplementary foods
- f. Immunization

9. Household's access to water, firewood, and fodder

- a. Distance to source of water and firewood
- b. Time taken to collect water and firewood
- c. Source of fodder

5. Survey Design

5.1 Sampling Frame

The sampling frame used in the Cambodia Socio-Economic Survey 1997 was based on the frame developed for the Socio-Economic Survey of Cambodia 1996. The household surveys conducted by NIS had used the nationwide population data file compiled by the United Nations Transitional Authority in Cambodia (UNTAC) prior to holding the general elections in 1993. The initial list contained data on the total number of households, estimated total population, and population 18 years and over broken down by sex together with information on facilities and amenities in each village. This list was updated incorporating data gathered by several agencies including the Municipality of Phnom Penh, reports obtained from the Ministry of Interior, data collected by the Population Census Project of NIS and information obtained from the UNHCR on re-settlement of refugees. Despite these efforts at updating the frame, it must be recorded that the frame would require substantial revision to make it complete. The lack of data from a recent population census or population registers; frequent revision of village level boundaries; and population mobility as a result of unsettled conditions have all contributed to weaknesses in the current village-based data on household population. The conduct of the national population census scheduled for March 1998 will make it possible to compile a reliable frame at least in respect of the areas in which field enumeration can be undertaken and reduce the degree of incompleteness in the frame. Until then there is no alternative but to use the available list of villages together with the reported number of households compiled from earlier mentioned sources as the sampling frame, which was in fact the frame that was used in three large scale household surveys conducted during the past 5 years.

5.2 Sampling Design

The sampling design for the CSES 1997 considered several factors including the precision of data required by the users, the capacity of the national statistics office to conduct the survey, and most importantly the time constraint imposed to complete survey field work before the end of July 1997. Taking into account these factors, and specially the experience gained from the two socio-economic surveys conducted in 1993/94 and 1996, including estimates of feasible work loads, a sample of 6000 households to be selected from 474 villages was considered to be sufficient and manageable.

The design also took into consideration the need for separate analyses of three geographical domains, namely Phnom Penh, other urban areas aggregated together, and the rural area. In deciding the sample allocation to the three domains, it was decided that a size of around 1000 households would be adequate for the first two domains and the rest should be allocated to Domain 3 – Rural area, since it was envisaged that more detailed analysis of the poverty groups in this domain would be undertaken. The final allocation of sample is shown in Table 2 .

The design had provided for sampling 10 households from each village in urban villages and 15 households from rural villages. Logistical considerations made it necessary to increase.

Table 2
Sample Allocation

Domain	Villages	Households
Phnom Penh	120	1,200
Other Urban	100	1,000
Rural	254	3,810
Cambodia	474	6,010

the cluster size to 15 for rural villages, in order to reduce the number of survey teams sent to the rural areas where travel was more difficult.

The stratification adopted would lead to a reduction of sampling errors. In the design both explicit geographical stratification in the form of the three domains and implicit stratification in the form of ordering the villages by region, province, district and commune before systematic sampling are used.

6. Concepts and Definitions

In order to ensure comparability of data, most of the basic concepts and definitions that were developed for the two socio-economic surveys conducted by the National Institute of Statistics in 1993 and 1996 were used in the CSES 1997 to the extent feasible. These surveys had adopted international standard definitions and concepts as recommended by the United Nations with appropriate modifications to suit local conditions.

A detailed explanation of the terms used in the CSES 1997 can be found in the Manual of Instructions for Field Operation. Only selected concepts and definitions are included in the report.

Housing Unit

A housing unit is a structurally separated and independent place of abode. It may have been constructed, built, converted or arranged for human habitation, such as commercial, industrial, and agricultural buildings, or natural and man-made shelters such as caves, boats, abandoned trucks, culverts and similar structures which are used as living quarters.

Household

The household is the basic unit of enumeration and analysis. For the purpose of this survey a household is a social unit consisting of either

- a) one person who makes provision for his or her own food or other essentials for living without combining with any other person; or
- b) a group of persons living together who make common provision for food or other essentials for living. The persons in a group may pool their incomes and have a common budget to a greater or lesser extent. They may be related or unrelated persons or a combination of both.

Head of Household

The head of household is the adult member of the household who is accepted and recognized by the other household members as head.

Disability

A restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being is defined as disability. It describes functional limitation or activity restriction caused by an impairment. The survey ascertained information by inquiring whether the person had any major problem with his/her body, mind or behavior that limited the persons ability to participate in work, school, or ordinary social life, which is a permanent or long-term condition but not temporary illness.

Illness

For the purpose of this survey, any short-term or long-term health problem such as a sickness, injury, or a pregnancy related problem was defined as illness.

Literacy

Literacy is the ability to read and write a simple message. A person is considered literate if he or she can both read and write a simple message in any language or dialect. A person capable of reading only his own name or numbers, or can read but not writes and vice versa, is not considered literate.

Work

Work is defined as an economic activity that a person does for pay, in cash or in kind, in any establishment, office, farm, private house, or for profit or without pay on a household operated farm or enterprise.

Labor Force or Economically Active Population

The labor force or economically active population refers to persons who contribute or are available to contribute to the production of goods and services in the country. They are either employed or unemployed.

Employed

Employed persons are those who are in the labor force who were reported to be either at work or with a job or business although not at work during the reference week.

Persons at work are those who did some work at all, even for an hour, during the reference period (past week). Persons are also considered employed if they are with a job or business even though not at work during the reference period because of temporary illness/injury, vacation or other leave of absence, bad weather, strike/labor disputes or other reason.

Unemployed

Unemployed persons are persons in the labor force who did not work or had no job or business during the reference week but were reported available and actively looking for work. Also, considered as unemployed are persons without job or business who were reported as available for work but were not looking for work because of their belief that no work was available or because of temporary illness/disability, bad weather, pending job application or waiting for job interview.

Occupation

Occupation refers to the type of work, trade or profession performed by the individual during the reference period. If the person is not at work but with a job, occupation refers to the kind of work that the person will be doing when he reports for work.

Principal Occupation

If a person has more than one occupation, the one in which the person spends most of his working time is considered as the principal occupation. If the person is engaged in only one occupation, then that will be his/her principal occupation.

Secondary Occupation

Secondary occupation is any kind of work or job that a person does for pay, profit or family gain in addition to the principal occupation.

Industry or Kind of Economic Activity

Industry or kind of economic activity refers to the nature of work done (the goods and services produced) by the institution or the workplace or enterprise where the person works.

Household Expenditure

Household Expenditure refers to the expenses or disbursements made by the household purely for personal consumption. Durable furniture and equipment (e.g. tables and chairs, cars, motor cycles, and appliances) purchased during the reference period mainly for household use is treated as household consumption. It excludes expenses in relation to farm or business operations, investment ventures, purchase of real property and other disbursements that do not involve personal consumption.

Household Consumption

Household Consumption consists of the following:

- a) Household expenditure;
- b) Value of goods and services received as gifts;

- c) Value of goods and services consumed from the output of agricultural and non-agricultural activities of the household;
- d) Imputed value of owned/rent free house;
- e) Imputed value of goods/services received as fringe benefits from the employer or part of the salaries and wages of employed household members during the reference period which were also consumed during the reference period.

Consumer Durables

Any household items which last for more than a year such as television, radio, refrigerator, bicycle, motor bicycles, car etc. and which are mainly for household use and not for business or other production purposes are defined as consumer durables.

Household assets

Any consumer durables or capital items, which usually last for more than a year, owned by a household and used either for household consumption or business purpose including land and buildings are defined as household assets.

Schooling

The term schooling includes attendance at a kindergarten, primary, lower or upper secondary school, technical or professional school, college or university.

Wages

Wages include remuneration received as cash wages, tips, commissions, piece rate earnings, overtime payments, and imputed value of benefits in kind, such as meals or accommodation provided by the employer.

7. Survey Organization

At the commencement of the Project in April 1997, considering the extremely tight time schedule within which the survey programme will have to be designed and implemented and the importance of the survey data from national planning perspectives, Minister of Planning approved the appointment of a nuclear staff of senior professionals from the National Institute of Statistics as a Core Group to work with the Project staff. The members of the core group were identified to cover essential aspects of survey planning and design, survey implementation and coordination, and survey processing so that the counterpart staff could work with the Project expert staff to immediately operationalise the survey and also simultaneously receive on the job training in household survey design and implementation. The core group comprised the Deputy Director responsible for industrial and trade statistics, the Deputy Director in charge of agriculture statistics, the bureau chiefs responsible for social statistics, and national accounts and prices and the vice bureau chiefs of the sample survey and data processing bureaus. The Director, National Institute of Statistics functioned as the survey director and reported to the Under Secretary of State, MOP under whom the NIS functioned who was also the National Project Coordinator. The survey director was responsible for the management and supervision of NIS staff as well as

the staff engaged from the Ministry of Planning and provincial planning and statistics departments who worked on the survey as enumerators and supervisors.

The Senior Statistics Adviser of the Project provided technical direction and overall guidance in the organization and implementation of the survey including preparation of cost estimates, survey design, preparation and review of survey implementation plan, review of survey instruments, as well as in the establishment of the survey project office and processing centre and in the preparation of tabulation plan and the survey report. The project consultants and experts recruited for the survey were responsible for the sampling design, preparation and review of survey instruments, design systems and programs for data processing, technical training of field staff and survey processing staff, technical supervision of all aspects of the survey, preparation of tabulation plan, extraction of tables, data validation and preparation of survey report.

The core group in collaboration with the project expert staff took all major decisions relating to the survey. The Under Secretary of State, MOP responsible for NIS was available for consultation and assistance to resolve administrative issues. As the survey activities gathered momentum, additional staff was co-opted, as required for the different survey activities. Recognizing the importance of provincial staff for the successful implementation of field data collection operations especially in the local context, the staff of provincial statistics bureaus were identified on a need basis which depended on the sample selected from the province. NIS was under pressure to assign both NIS personnel and staff of provincial statistics bureaus to two on-going projects having responsibilities for the population census scheduled for March 1998 and data collection for national accounts compilation, and NIS was unable to allocate an adequate number of trained staff for field operations and the staff of the MOP was co-opted for survey enumeration. Although staff was trained for survey enumeration, their inadequate experience and skills in surveys affected data quality and data editing and cleaning became more complex in a survey, which used an integrated set of long questionnaires. One of the most important and valuable results of the survey from a capacity building point of view is the exposure and hands on experience gained by statistical staff at all levels in several aspects of designing and conducting large scale multi-objective surveys.

8. Field Operations

The need to complete survey field operations before the end of July 1997 and release the NIS and provincial statistical staff was a major critical factor which determined many of the decisions relating to the timing and scheduling of survey operations. The population census project financed by UNFPA had scheduled the training of field staff to commence in July 1997. The census project was keen to have the services of all senior and middle level staff of NIS and provincial statistics bureaus.

The security situation has by and large determined the organization of fieldwork in household surveys conducted in Cambodia. As often attempted elsewhere in the conduct of field work on large scale surveys, deployment of centrally trained teams of enumerators with supervisory staff in motor vehicles is not a feasible option at the present time primarily

because of security and logistical issues including the safety of personnel and transport. Alternatively, provincial staffs who are familiar with local conditions, along with staff from NIS are assigned to work as teams arranging private transport on their own. Majority of enumerators use their own motor bicycles and others procure them from their friends and relatives. The provision of incentive allowances to meet the cost of travel and subsistence has made this arrangement operationally satisfactory and cost effective.

Accurate assessment of staff requirements, and staff deployment on the basis of work load assessments and careful monitoring and co-ordinatory arrangements that were instituted made it possible to conclude field work by the end of June 1997 and thus meeting the target date for this critical activity. In retrospect the decision imposed to finalise fieldwork before July 1997 turned out to be fortunate. The events and incidents that erupted in early July 1997 would have certainly prevented the conduct of field work in many areas and in addition resulted in the misplacement and loss of completed survey documents where field work had been completed by that time.

8.1 Field Test of Survey Instruments

Before finalizing the survey instruments, two pre-tests of listing form, village, core and module questionnaires and instructions for field operation were conducted in Kampong Speu Province and in Phnom Penh Municipality on 5th and 6th May 1997 by the staff of the National Institute of Statistics. A team comprising ten enumerators and two supervisors were selected and trained to conduct these tests and they functioned in two groups. In the selected villages households were randomly selected and interviewed. The Project staff, senior staff of NIS, and the Under Secretary of State, Ministry of Planning participated and observed the conduct of these interviews. The tests were useful in identifying a number of deficiencies in the questionnaires as well as in the enumerator's instructions manual. The survey instruments were modified on the basis of these tests, and these modifications related to the wording of questions, space provided for responses, recording of totals, recording of animal sign according to the Cambodian calendar to improve age data, changes in skip instructions, changes in response categories and codes among other changes made to finalize the questionnaires.

8.2 Training of Field Staff

CSES 97 is the first multi-objective national survey, which attempted to collect data on a wide range of socio-economic issues using a set of long questionnaires. The questionnaire was in four parts, Listing sheet, Village questionnaire, Core questionnaire and Social sector module. To completely fill the set of questionnaires, an interviewer had to admit 8 questions included in the listing form, 212 questions in the village questionnaire, and 192 questions included in the Core questionnaire, and 134 questions in the social sector module. A village questionnaire has not been admitted in the household surveys conducted earlier in Cambodia. The pretests had shown that a household interview would take one to two hours to obtain a complete and satisfactory response from the household. This relative complexity of the data collection task through household interviews was known and they were taken into account in planning and implementing a training program for enumerators

and supervisors. However, time constraints already referred to, made it infeasible to extend the training duration and training schedule, although the need to do so was apparent.

The core group of NIS senior staff and other staff who participated in the pretest had been actively involved in the survey design and in the preparation of survey instruments and they had also been trained to conduct the pretest. They had participated in drafting, reviewing and translating the field operations manual into Khmer. These officers assisted in training enumerators and supervisors taking on the dual role of resource person and interpreter.

NIS had two other ongoing activities referred to earlier, which were being conducted concurrently and it was unable to release its full complement of staff and could detail only 71 officers for the survey. Staff of provincial statistical bureaus were identified on a need basis that depended on the sample selected for the province. Even here the staff requirements for census mapping program reduced the staff that could be released from the provincial statistics bureaus. These limiting factors made it necessary to engage 78 officers of the Ministry of Planning for field work. In all 210 staff were deployed on field operations including 156 enumerators, 48 supervisors and 6 coordinators. Supervisors were selected on the basis of their seniority, aptitude and experience of having conducted supervisory work in previous surveys. They were trained in two batches in order to complete training by the end of May 1997. The first batch of 118 staff were trained for six days from 19th to 24th May 1997 and the second batch of 97 staff were trained from 28th May to 3rd June 1997.

The training program was started on 19th May through an opening ceremony presided over by the Minister of Planning, and attended by Under Secretary of State of Planning, Deputy Resident, Representative, UNDP among others. The Minister of Planning and also the other speakers emphasized the importance of CSES 1997 and exhorted the staff to do their best to collect complete and high quality information from respondents. The Minister of Planning gave a similar address to the outgoing participants of the second training program. The opening ceremony was televised and reported by Cambodian radio. A press release explaining the aims and objectives of the survey and seeking the cooperation from the public in general and from leaders and representative of the village was issued from the Ministry of Planning.

The project expert staff conducted training with the assistance of NIS core group members. The training was conducted in English and Khmer. The aims and objectives of the survey, scope and coverage, and broad features of the sampling design were described. The different questionnaires were taken up and explained in detail. The training was conducted more as a seminar where participants raised questions and sought clarifications relating to both the questions included in the questionnaires and explanatory notes provided in the manual of instructions. These training sessions had highlighted several issues in the survey instruments and in the process the manual got clarified and expanded. A role playing exercise was not attempted because the training had to be restricted to six days to cover four questionnaires and also explaining the systematic sampling procedures which enumerators and supervisors had to adopt in the field. The questions were directed at the enumerators to elicit responses from them to test whether the trainees had really understood the concepts, definitions and procedures to be followed by them in the field, and know the extent of the

information and knowledge they were able to acquire specially on complex questions and topics and skip patterns, such as those that were included in the village and core questionnaires. Further, the participants were given test data to work out exercises for the selection of sample households based on systematic sampling procedures explained to them.

A special effort was required in explaining some topics such as those on economic activity which involved a number of deep and complex concepts on gainful work, employment, and income questions; health problems and treatment used and the amount spent on hospitalization and treatment; and the collection of data on household expenditures where expenditure had been aggregated to a limited number of questions.

In order to ensure that the training imparted will still be fresh in their mind they were deployed on fieldwork immediately after the conclusion of training. In most instances, the fieldwork commenced on the second or third day after the training ended.

8.3 Data Collection

Each interviewer was assigned selected villages based on the sampling procedure. In order to complete the data collection activity within the planned time frame, each enumerator was assigned about 30/ 45 households in three or four villages. The questionnaires were filled by the method of personal interview.

A pre-listing of households was undertaken by the enumerator to generate the current list of households, which was essential to select the sample households based on the systematic sampling procedure. In addition to preparing a current list of buildings, housing units and households certain additional information such as the number of household members, principal economic activity of the household was also collected.

After the selection of sample households, the selected households were revisited to interview one or more responsible members of the household to fill in the core and social sector questionnaires. Before or after the household interviews, the enumerator interviewed the head of the village and other key informants to canvass information for the village questionnaire.

The field control procedures provided for the supervisors to inspect and make on the spot checks while the interview was being conducted and they were also required to re-interview a sub-sample of the households already interviewed by the enumerators under his supervision. To ensure effective supervision through inspections and re-interviews, adequate funds were allocated for the payment of honoraria to supervisors for their supervisory duties. Some of the core group staff functioned as area coordinators and they were in over all charge of supervision as well as the coordination of the areas assigned to them. There was also a visit of the Minister of Planning and the Under Secretary of State MOP, Project Staff and Senior NIS Staff in Mid June 1997 to encourage the field staff and to study the operational issues and problems encountered in field work.

Despite the length of the questionnaire, the respondents cooperated with the survey staff and provided answers to both questionnaires and it was possible to achieve a 100% response rate. At this stage it is not possible to comment on item non-response, and completeness of information provided by the respondents, and the respondent's fatigue arising from the length of the interviews which may have had a bearing on these issues.

9. Data Processing

9.1 Manual Processing

All completed questionnaires were brought to NIS for processing. Although completed questionnaires were checked and edited by supervisors in the field, specially because of the length of questionnaires and the complexity of the topics covered the need for manual editing and coding by trained staff was accepted as an essential priority activity to produce a cleaned data file without delay. In all 39 staff comprising 35 processing staff and 4 supervisors were trained for three days by the project staff. An instruction manual for manual editing and coding was prepared and translated into Khmer for the guidance of processing staff. Manual processing of questionnaires commenced in mid August 1997.

In order to produce an unedited data file, keying in the data as recorded by field enumerators and supervisors, (without subjecting data to manual edit as required by the Analysis Component Project staff), it was necessary to structure manual editing as a two-phase operation. Thus in the first phase, the processing staff coded the questions such as those on migration, industry, and occupation which required coding. Editing was restricted to selected structural edits and some error corrections. These edits were restricted to checking the completeness and consistency of responses, legibility, and totaling of selected questions. Error corrections were made without canceling or obliterating the original entry made by the enumerator, by inserting the correction close to the original entry.

Much of the manual editing was carried out in the second phase, after key entry and one hundred percent verification and extraction of error print outs. A wide range of errors had to be corrected which was expected in view of the complexity of the survey and the skill background of the enumeration and processing staff. The manual edits involved the correction of errors arising from incorrect key entry, in-correct/ failure to include identification, miss-coding of answers, failure to follow skip patterns, misinterpretation of measures, range errors, and other consistency errors.

9.2 Computer Data Processing

An in-house survey processing centre was established at the NIS to process the CSES 1997. A net work of 12 PC's with 2 high capacity PC's as servers was installed and NIS staff were trained to use the network system. The network can be strengthened with additional workstations to process a survey sampling of 15,000 households referred to in the project document.

Entire data processing was done on microcomputers and data entry and editing was carried out using Integrated Micro-Computer Processing System(IMPS) package developed by the US Bureau of the Census. Statistical Package for Social Sciences (SPSS) was used to obtain tabulations.

At the end of August 1997, the keyers and verifiers were trained for three days and key entry operations commenced. In all 30 key entry and verification staff and 3 supervisors were trained by the Data Processing Specialist to use the data entry screens prepared using IMPS software.

Four data entry systems were created to input the data from the four questionnaires. The data entry system for the listing form contains one record type with a maximum length of 49. The system for the village questionnaire contains 15 record types with a maximum record length of 105. The system designed for the core questionnaire contains 17 record types with a maximum record length of 116. The data entry system designed for the social sector module contains 12 record types with a maximum record length of 94. After keying in the data one hundred percent verification was done on all card types. In spite of this safeguard to minimize errors it was found that verifiers had not only failed to detect errors but had introduced errors during verification. The set of consistency edit checks prepared for the survey when applied for a sample of three villages, the error printouts were so voluminous that it was decided to clean the files in stages, selecting a single record, question or a topic at a time. The first computer edit was applied to check the basic structure of the data and to check the skipping patterns. The errors were corrected manually and the data file was updated using IMPS programs. After completing the structural edit, the data file was re-edited for validity of records. Consistency edits were designed to detect responses that appeared to be inconsistent with other responses or in conflict with definitions and processing rules. It was necessary to run several edit checks to clean some data items. For tabulation several sub-master files were created for most data items. The inflation factors that should be assigned to each village were applied to the data at the tabulation stage.

10. Limitations of Data

The results obtained from the survey are subject to sampling errors. Sampling errors in surveys occur as a result of limiting the survey observations to a subset rather than the whole population. These errors are related to the sample size selected and sampling design adopted in the survey. In order to maintain these errors within acceptable levels, the efficient sampling design with the sample allocation described earlier was adopted.

In addition to sampling errors, the estimates are also subject to non-sampling errors that arise in different stages of any survey operation. These include

- errors that are introduced at the preparatory stage
- errors committed during data collection including those committed by interviewers and respondents
- processing errors

The first item includes errors arising from questionnaire design, preparation of definitions and instructions, preparation of table formats etc. The other two categories are clear from the terminology used. The use of trained enumerators and processing staff and careful organization and thorough supervision are essential to control and minimize these errors.

As already referred to, it was possible to obtain responses from all the villages and households that were sampled, and thus it was not necessary to adjust the data for non-response. Thus the bias that is introduced into the estimates as a result of non-response was avoided.

SAMPLE SELECTION AND ESTIMATION

1. Sample Selection

1.1 First Stage Selection

In the first stage the villages or primary sampling units (PSU's) were drawn from each domain. Within the three domains the villages were arranged by geographic codes with the villages grouped within communes and the communes within districts and districts within the provinces providing for some implicit stratification. The villages that had geographic codes also had the reported number of households based on the frame. The latter was used as the measure of size (MOS) in deriving the cumulated list for sampling. The sample villages were selected using the systematic sampling method with a random start with probability proportional to size method (PPS). The selection of sample villages was carried out through the use of a computer program. The procedure adopted is described below.

The selection probability for village i in domain h is given by the formula

$$p_h^{(i)} = a_h M_{hi} / M_h \quad (\text{Eq. 1})$$

where

a_h = number of villages or PSU's drawn from the domain

M_{hi} = number of households in village i as reported in the frame

$$M_h = \sum M_{hi}$$

= total number of households in domain as recorded in the frame

The selection of PSU's was performed by arranging the villages in the h th domain according to region, province, district and commune and the estimated number of households was used as the measure of size M_{hi} . The values of M_{hi} were then cumulated and $\sum M_{hi}$ was recorded against each PSU. The sampling interval I_{hi} was computed which is given by

$$I_{hi} = M_h / a_h$$

The list of PSU's was examined to determine if any M_{hi} was greater than or equal to I_{hi} . Such overlage PSU's which are termed self-representing PSU's which will be certainly selected if allowed to remain as in their normal form, were divided into blocks of

certainly selected if allowed to remain as in their normal form, were divided into blocks of equal size, generally below 300 households and each block was treated as a separate PSU. The number of blocks into which the original PSU was divided was recorded.

Linear systematic sampling with a decimal interval was used to select the PSU's. The sampling interval I_{hi} was computed to 3 decimal places and a random number from 1 to $1000 \times I_{hi}$ was selected. When the decimal point is placed before its last 3 digits it becomes R. The sequence of sampling numbers were computed as

$$R, R + I_{hi}, R + 2I_{hi}, R + 3I_{hi}, \dots, R + (a_h - 1) I_{hi} \text{ as}$$

specified for the particular stratum.

1.2 The Second Stage Selection

For each selected village (PSU) a field listing was undertaken and let the actual number of households listed in the PSU be M_{hi}^* , then the probability of selecting a household in the i th PSU in the h th domain is

$$p_h^{(j/i)} = n_h / M_{hi}^* \quad (\text{Eq. 2})$$

where n_h is equal to 10 in domains 1 and 2 and 15 for domain 3. Circular systematic random sampling with a random start was used to select households. The sampling interval would be equal to the current estimate of households in the PSU ascertained through the listing operation divided by 10 in the urban domains and 15 in the rural domain..

2. Design Weights

The design weights are used to compensate for differences in the selection probabilities. The weight for the PSU is inversely proportional to its selection probability.

The probability of selection of j th household in normal size PSU's and blocks in the h th domain is

$$p_h^{(i)} \times p_h^{(j/i)} = p_h^{(ij)} \quad (\text{Eq. 3})$$

$$\text{where } p_h^{(i)} = a_h M_{hi} / M_h$$

$$\text{and } p_h^{(j/i)} = n_h / M_{hi}^*$$

Thus the design weights w_{hij} for these units are

$$\begin{aligned} w_{hij} &= 1 / p_h^{(ij)} \\ &= \frac{M_h \times M_{hi}^*}{a_h \times M_{hi} \times n_h} \end{aligned} \quad (\text{Eq. 4})$$

For the large PSU's which were segmented, the probability of selection of the j_{th} household in the s_{th} segment in the i_{th} PSU in the h_{th} domain is

$$p_h^{(i)} \times p_h^{(s/i)} \times p_h^{(j/is)} = p_h^{(isj)} \quad (\text{Eq. 5})$$

where $p_h^{(i)} = a_h M_{hi} / M_h$

$$p_h^{(s/i)} = 1 / s_i$$

and $p_h^{(j/is)} = n_h / M_{his}^*$ (Eq. 6)

The design weight for such large PSU is

$$\begin{aligned} w_{hisj} &= 1 / p_h^{(isj)} \\ &= \frac{M_h \times M_{his}^* \times s_i}{a_h \times M_{hi} \times n_h} \end{aligned} \quad (\text{Eq. 7})$$

The design for CSES is not self weighting and therefore it is necessary to compute weight for each PSU, block or segment selected in the sample and these weights have to be used in the estimation procedure.

3. Estimation Procedure

The design provides for estimators to be computed for the three domains, namely Phnom Penh, Other Urban and rural areas and for Cambodia. These estimates are in respect of the truncated frame used in the survey. However, as in the two preceding surveys estimates for the nation as a whole were also prepared in view of the need expressed for those estimates. The extrapolation procedure used in the estimation for the un-truncated frame is described later.

Most of the estimators that will be computed from the survey will be ratio estimates but frequently estimates of stratum totals are required for use by policy makers and administrators, accordingly estimators of stratum totals were prepared. The estimation procedure for these estimators are set out in the paragraphs that follow.

3.1 Estimation Procedure for Household Information

The estimate of the stratum total of a characteristic y is given by the following formula.

$$\hat{Y}_h = \sum_i \sum_j w_{hij} y_{hij} \quad \text{for } i = 1, 2, 3, \dots, a_h \quad (\text{Eq. 8})$$

$$j = 1, 2, 3, \dots, n_{hi}$$

where

\hat{Y}_h = estimate of characteristic y for stratum h

y_{hij} = any characteristic of household j in sample village i in stratum h

n_{hi} = number of sample households in village i

a_h = number of sample villages in stratum h

$w_{hij} = 1 / f_h$

$f_h = 1 / w_{hij}$

The estimate for the total for all three domains \hat{Y} was computed as the sum of the estimates for each domain viz.

$$\hat{Y} = \sum_h \hat{Y}_h \quad h = 1, 2, 3. \quad (\text{Eq. 9})$$

Most of the estimators to be computed from the survey are in the form of averages and proportions. In general these estimators are combined ratio estimators which take the form set out below. The estimated stratum mean is a ratio and it is given by

$$r_h = \frac{\hat{Y}_h}{\hat{X}_h} = \frac{\sum_i \sum_j w_{hij} y_{hij}}{\sum_i \sum_j w_{hij} x_{hij}} \quad (\text{Eq. 10})$$

where

$y_{hij}, a_h, n_{hi}, w_{hij}$ are as defined in Eq. 8

$$x_{hij} = 1 \quad \text{for } j = 1, 2, 3, \dots, n_{hi}$$

$$i = 1, 2, 3, \dots, a_h$$

The population mean is also a ratio, say r , which was estimated using the following formula.

$$r = \frac{\sum_h \sum_i \sum_j w_{hij} y_{hij}}{\sum_h \sum_i \sum_j w_{hij} x_{hij}} \quad (\text{Eq. 11})$$

where

Y_{hij} , a_h , n_{hi} , w_{hij} are as defined in Eq. 8

X_{hij} is as defined in Eq. xx 10

3.2 Estimation Procedure for Sector and National Level Estimates

As stated earlier, it was necessary to use a truncated frame that excluded areas where survey field operations could not be undertaken for security considerations. As a result two provinces and some districts and communes in the provinces that were covered had to be excluded because of the unsettled conditions which prevented survey teams from operating in those areas. It is noted that there is no sound basis for providing estimates for Cambodia as a whole or sectoral or regional estimates through household sample surveys or even censuses due to these reasons.

However, in view of the interest of a wide range of users who desire to even have approximate national level estimates, it was decided to prepare estimates for areas and regions excluded in the truncated frame. The procedure developed for the SESC 1993/94 to derive national level estimates was modified for use in this survey and the method adopted is set out in the paragraphs that follow.

3.3 Excluded Villages in Partly Covered Provinces.

Estimated totals for the excluded rural or urban villages were derived using the following formula:

$$\hat{Y}_{2h} = \hat{P}_h \bar{Y}_h^* \quad (\text{Eq. 12})$$

where

$$\hat{Y}_h^* = \frac{(M_h \bar{Y}_h)}{(M_h + P_h)} + \frac{(P_h \bar{Y}_h)}{(M_h + P_h)} \quad (\text{Eq. 13})$$

= weighted mean for characteristic y for areas in the truncated frame and excluded villages in the partly covered provinces.

$$\hat{Y}_h = \frac{\sum_i \sum_j w_{hij} Y_{hij}}{\sum_i \sum_j w_{hij} X_{hij}} \quad (\text{Eq. 14})$$

= mean for characteristic y for villages in domain

h that are included in the truncated frame

$$\bar{Y}_h = \sum_g \frac{P_{hg}}{P_h} \times \bar{y}_{hg}$$

= weighted mean of characteristic y in the excluded urban or rural villages

P_{hg} = number of households based on the frame in province g in the excluded rural/ urban villages.

P_h = total number of households based on the frame in excluded rural/ urban villages

$$\bar{y}_{hg} = \frac{\sum_i \bar{y}_{hgi}}{a_{hg}}$$

= mean of province g in domain h in excluded rural/ urban villages.

$$\bar{y}_{hgi} = \frac{\sum_j y_{hgij}}{\sum_j x_{hgij}}$$

= village sample mean

The estimate for characteristic y in the excluded rural and urban villages in the provinces from which villages have been excluded in the truncated frame were estimated by summing up for the domains.

$$\hat{Y}_2 = \sum_h \hat{Y}_{2h} \quad (\text{Eq. 15})$$

3.4 For Totally Excluded Provinces

The estimate for characteristic y in the excluded urban or rural villages in provinces that were totally excluded in the truncated frame was computed as follows.

$$\hat{Y}_{3h} = \hat{E}_h \times \bar{Y}_h^* \quad (\text{Eq. 16})$$

where

\hat{E}_h = number of households in the excluded urban/
rural villages in totally excluded provinces
based on the frame

3.5 Extrapolated Estimate for Cambodia

The estimates for the nation as a whole were derived by adding the estimates based on the truncated frame and the extrapolated data for the villages excluded from the frame as set out below.

$$\hat{Y}^\alpha = \hat{Y} + \hat{Y}_2 + \hat{Y}_3 \quad (\text{Eq. 17})$$

where

\hat{Y} = estimate for villages included in the frame

\hat{Y}_2 = estimate for excluded villages in the truncated frame
in the partly excluded provinces

\hat{Y}_3 = estimate for excluded villages in the truncated frame in
totally excluded provinces.

4. Estimation of Variances and Standard Errors

The computation procedure will be incomplete without establishing the procedure for assessing the precision or reliability of the survey estimates. The variances of the ratio estimates will be of the form

$$\text{var}(r) = \frac{1}{\bar{X}^2} \sum (1 - f_h) (a_h / a_h - 1) \sum (z_{hi}^2 - z_h^2 / a_h) \quad (\text{Eq. 18})$$

where

$$r = y / x$$

$$y_{hi} = \sum_j w_{hij} y_{hij}$$

$$x_{hi} = \sum_j w_{hij} x_{hij}$$

$$r = \frac{\sum_h \sum_i \sum_j w_{hij} y_{hij}}{\sum_h \sum_i \sum_j w_{hij} x_{hij}}$$

$$\hat{X}^2 = X^2 = \left(\sum_h \sum_i \sum_j w_{hij} x_{hij} \right)^2$$

$$z_{hi} = y_{hi} - r x_{hi}$$

a_h = number of sample villages from stratum h

w_{hij} = weight for each individual in the sample household

4.1 Variance of Ratio of r_h in Stratum h

The variance of ratio estimate r_h in stratum h is of the form:

$$\text{var}(r_h) = (1/x_h^2)(1-f_h)(a_h/a_h - 1) \sum (z_{hi}^2 - z_h^2/a_h) \quad (\text{Eq. 19})$$

where

$$\hat{X}_h = x_h = \sum_i \sum_j w_{hij} x_{hij}$$

and f_h , a_h , and z_{hi} are as defined earlier.

4.2 Standard Error and Coefficient of Variation

The standard error of a survey estimate provides a measure of how far the survey estimate is likely to vary from the true population value (i.e. parameter) as a result of having collected the data on a sample basis rather through a complete census. The standard error $se(r)$ of a survey estimate is by definition

$$se(r) = \text{var}(r)^{1/2}$$

The relative standard error or coefficient of variation (cv), on the other hand provides a measure of the relative variance of a survey estimate; that is the magnitude of the estimated sampling error relative to the magnitude of the estimate itself. The cv that is expressed as a proportional error enables the data user to compare the relative reliability or precision with which different types of survey characteristics have been measured eg. Means versus proportions, where direct comparisons of standard errors are uninformative since the magnitude of the standard error is dependent upon the magnitude of the estimate.

Computationally, the coefficient of variation is calculated as

$$cv(R) = se(r)/r.$$

4.3 Computation Details

Stratum Level Estimates

$$\hat{Y}_h = y_h = \sum \sum w_{hij} Y_{hij}$$

$$\hat{X}_h = x_h = \sum \sum w_{hij} X_{hij}$$

Ratio (r_h)

$$\begin{aligned} r_h &= y_h / x_h \\ &= \sum \sum w_{hij} Y_{hij} / \sum \sum w_{hij} X_{hij} \end{aligned}$$

ANNEX B

SAMPLE VILAGES AND SAMPLE WEIGHTS

Region 1
Province 12

DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	U/R	Village Name	No. of Households		
							Frame	Listed/ Reported	Whij
01	Chamkar Mon	01	Tonle Basak	01	1	Center 1	218	221	110.60476
01	Chamkar Mon	01	Tonle Basak	07	1	Center 7	222	234	115.00081
01	Chamkar Mon	01	Tonle Basak	10	1	Center 10	378	456	131.61672
01	Chamkar Mon	01	Tonle Basak	14	1	Center 14 - (B)	1335	1511	123.48699
01	Chamkar Mon	01	Tonle Basak	15	1	Center 15	984	1100	121.96511
01	Chamkar Mon	02	Boeung Keng kang 1	01	1	Center 1	159	165	113.22044
01	Chamkar Mon	02	Boeung Keng kang 1	06	1	Center 6	165	220	145.47111
01	Chamkar Mon	03	Boeung Keng kang 2	02	1	Center 2	238	259	118.73010
01	Chamkar Mon	03	Boeung Keng kang 2	08	1	Center 8	123	215	190.70908
01	Chamkar Mon	04	Boeung Keng kang 3	03	1	Center 3	344	396	125.59570
01	Chamkar Mon	04	Boeung Keng kang 3	07	1	Center 7	247	265	117.05418
01	Chamkar Mon	05	Olampik	02	1	Center 2	241	238	107.74520
01	Chamkar Mon	06	Tuol Svay Prey 1	02	1	Center 2	240	276	125.46883
01	Chamkar Mon	07	Tuol Svay Prey 2	01	1	Center 1	129	123	104.02876
01	Chamkar Mon	07	Tuol Svay Prey 2	08	1	Center 8	140	148	115.33781
01	Chamkar Mon	08	Tumnob Toek	03	1	Center 3	268	319	129.86553
01	Chamkar Mon	09	Toul Tompuong 2	02	1	Center 2	262	267	111.18546
01	Chamkar Mon	10	Toul Tompuong 1	03	1	Center 3	234	242	112.83336
01	Chamkar Mon	11	Boeung Trabak	04	1	Center 4	118	126	116.50017
01	Chamkar Mon	12	Phsar Doeum Thkov	02	1	Center 2	249	267	116.99032
01	Chamkar Mon	12	Phsar Doeum Thkov	06	1	Center 6	248	255	112.18286
02	Don Penh	01	Phsar Thmey 1	06	1	Center 6	83	218	286.56056
02	Don Penh	02	Phsar Thmey 2	03	1	Center 3	125	262	228.68059
02	Don Penh	03	Phsar Thmey 3	05	1	Center 5	88	94	116.54220
02	Don Penh	03	Phsar Thmey 3	12	1	Center 12	163	178	119.14352
02	Don Penh	04	Boeing Reing	07	1	Center 7	134	156	127.01582
02	Don Penh	05	Phsar Kandal 1	06	1	Center 6	87	113	141.70893
02	Don Penh	05	Phsar Kandal 1	16	1	Center 16	103	109	115.45887

(10 households to be selected in each village)

No of villages in stratum = 615
 No of villages in the sample = 120
 No of households in stratum = 130924
 No of households in the sample = 38654

CSSES 97 Sample Weights- Phnom Penh

Stratum 1

Region 1

Province 12

DIST	District Name	COM	Commune Name	VIL	U/R	Village Name	No. of Households		
							Frame	Listed/	Reported
CODE		CODE		CODE			Mhi	Mhi*	Whij
02	Don Penh	06	Phsar Kandal 2	09	1	Center 9	106	102	104.98623
02	Don Penh	07	Chak Tomuk	05	1	Center 5	159	190	130.37505
02	Don Penh	08	Chey Chumneas	03	1	Center 3	154	325	230.25054
02	Don Penh	08	Chey Chumneas	07	1	Center 7	121	277	249.76548
02	Don Penh	09	Phsar Chas	07	1	Center 7	151	180	130.05695
02	Don Penh	10	Sras Chak	04	1	Center 4	281	360	139.77651
02	Don Penh	10	Sras Chak	11	1	Center 11	164	173	115.09071
02	Don Penh	10	Sras Chak	17	1	Center 17	198	202	111.30744
02	Don Penh	10	Sras Chak	23	1	Center 23	106	124	127.63031
02	Don Penh	11	Wath Phnom	07	1	Center 7	139	144	113.02791
03	Prampi Makara	01	O Russey 1	03	1	Center 3	204	447	239.06466
03	Prampi Makara	02	O Russey 2	01	1	Center 1	171	330	210.55029
03	Prampi Makara	02	O Russey 2	07	1	Center 7	181	260	156.72302
03	Prampi Makara	03	O Russey 3	02	1	Center 2	334	391	127.72276
03	Prampi Makara	04	O Russey 4	01	1	Center 1	208	283	148.44348
03	Prampi Makara	04	O Russey 4	06	1	Center 6	211	170	87.90316
03	Prampi Makara	05	Monorom	04	1	Center 4	221	528	260.66317
03	Prampi Makara	05	Monorom	09	1	Center 9	220	220	109.10333
03	Prampi Makara	06	Mittapheap	04	1	Center 4	179	175	106.66527
03	Prampi Makara	06	Mittapheap	10	1	Center 10	150	228	165.83707
03	Prampi Makara	07	Veal Vong	05	1	Center 5	210	436	226.51930
03	Prampi Makara	07	Veal Vong	11	1	Center 11	190	180	103.36105
03	Prampi Makara	08	Boeung Profit	01	1	Center 1	182	484	290.14293
03	Prampi Makara	08	Boeung Profit	07	1	Center 7	190	238	136.66628
04	Toul Kork	01	Phsar Depo 1	02	1	Center 2	113	240	231.72389
04	Toul Kork	02	Phsar Depo 2	01	1	Center 1	132	236	195.06354
04	Toul Kork	02	Phsar Depo 2	06	1	Center 6	82	258	343.27634
04	Toul Kork	03	Phsar Depo 3	05	1	Center 5	134	261	212.50724

(10 households to be selected in each village)

No of villages in stratum = 615
 No of villages in the sample = 120
 No of households in stratum =130924
 No of households in the sample = 38654

WIPNP
 FRAME01S

DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	U/R Village Name	No. of Households		
						Frame	Listed	Whij
04	Toul Kork	04	Toek Laak 1	04	Center 4	Mhi 102	Reported Mhi* 338	Whij 361.53850
04	Toul Kork	05	Toek Laak 2	01	Center 1	125	223	194.64035
04	Toul Kork	05	Toek Laak 2	06	Center 6	102	278	297.36007
04	Toul Kork	06	Toek Laak 3	04	Center 4	141	290	224.39693
04	Toul Kork	07	Boeung Kak 1	01	Center 1	127	231	198.44780
04	Toul Kork	07	Boeung Kak 1	06	Center 6	99	112	123.43003
04	Toul Kork	08	Boeung Kak 2	02	Center 2	114	237	226.82009
04	Toul Kork	08	Boeung Kak 2	07	Center 7	200	271	147.83502
04	Toul Kork	08	Boeung Kak 2	12	Center 12	193	229	129.45421
04	Toul Kork	09	Phsar Doeum Kor	04	Center 4	98	291	323.97010
04	Toul Kork	09	Phsar Doeum Kor	09	Center 9	94	171	198.47521
04	Toul Kork	10	Boeung Salang	05	Center 5	141	186	143.92355
04	Toul Kork	10	Boeung Salang	10	Center 10	145	221	166.28853
05	Dangkor	01	Dangkor	01	Phum Thmey	257	261	110.80144
05	Dangkor	01	Dangkor	05	Phum Mol	352	357	110.65310
05	Dangkor	03	Kouk Roka	02	Phum Kab Strov Thom	130	134	112.46036
05	Dangkor	04	Phleung Chheh Roteh	04	Phum Kraing Tabanh	31	32	112.62280
05	Dangkor	05	Chom Chao	10	Phum Prey Pring Cheung	174	240	150.48736
05	Dangkor	05	Chom Chao	19	Phum Prey Chi Sac	244	265	118.49337
05	Dangkor	06	Ka Kab	03	Phum Ka Kab	76	107	153.60601
05	Dangkor	06	Ka Kab	08	Phum Por Prok Tbong	578	641	120.99522
05	Dangkor	07	Pong Toek	02	Phum Trapeang Kor	110	107	106.12779
05	Dangkor	08	Prey Veng	03	Phum Trapeang Chouk	107	119	121.33922
05	Dangkor	10	Prey Sor	02	Phum Prey Khang Keut	75	77	112.01276
05	Dangkor	11	Krang Thnuong	07	Phum Prey Moul	58	60	112.86552
05	Dangkor	13	Prateah Lang	05	Phum Kok Khsach	73	80	119.56530
05	Dangkor	15	Cheung Ek	03	Phum Srok Chek	140	176	137.15848
06	Mean Chey	01	Stoeng Mean Chey	03	Phum Trea	726	1152	173.12264

(10 households to be selected in each village)

No of villages in stratum = 615
 No of villages in the sample = 120
 No of households in stratum = 130924
 No of households in the sample = 38654

WIPNP
 FRAME01S

DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	U/R Village Name	No. of Households		
						Frame	Listed/ Reported	
06	Mean Chey	01	Stoeng Mean Chey	04	2	Phum Mean Chey	Mhi 569	Whij 729
06	Mean Chey	01	Stoeng Mean Chey	07	2	Phum Dam Nak Thom	444	546
06	Mean Chey	02	Boeung Tumpun	03	2	Phum Sansam Cosal 2	556	681
06	Mean Chey	02	Boeung Tumpun	04	2	Phum Kbal Tum Nub	871	992
06	Mean Chey	02	Boeung Tumpun	05	2	Phum Thnoat Chrum	1020	1036
06	Mean Chey	03	Prek Pra	03	2	Phum Prek Ta Peuo	496	541
06	Mean Chey	04	Chbar Ampau 1	01	2	Phum Prek	416	536
06	Mean Chey	04	Chbar Ampau 1	03	2	Phum Doeum Ampel	414	424
06	Mean Chey	05	Chbar Ampau 2	01	2	Phum Daeum Chan - (D)	1249	1748
06	Mean Chey	05	Chbar Ampau 2	03	2	Phum Daeum Slaeng	792	1066
06	Mean Chey	06	Chak Angre Leu	01	2	Phum Prek Takuong	1060	1207
06	Mean Chey	06	Chak Angre Leu	02	2	Phum Prek Tanou	1068	1135
06	Mean Chey	07	Chak Angre Kraom	01	2	Phum Tool Ro Ka - (B)	1345	1542
06	Mean Chey	07	Chak Angre Kraom	02	2	Phum Prek Talong	964	1064
06	Mean Chey	08	Nirouth	01	2	Phum Tangou	582	750
06	Mean Chey	08	Nirouth	04	2	Phum Koh Norea	540	622
07	Rusey Keo	01	Khmuonh	05	2	Phum Tra Paing Raing	525	1058
07	Rusey Keo	02	Tuol Sangke	02	2	Phum Tuol Sangke - (A)	1240	1522
07	Rusey Keo	02	Tuol Sangke	02	2	Phum Tuol Sangke - (D)	1240	1522
07	Rusey Keo	03	Svay Pak	02	2	Center Lou	575	693
07	Rusey Keo	04	Kilometr Lekh 6	01	2	Phum Kroal Ko	697	821
07	Rusey Keo	04	Kilometr Lekh 6	02	2	Phum Spean Khpos	751	757
07	Rusey Keo	05	Phnom Penh Thmei	02	2	Phum Pong Peay	236	311
07	Rusey Keo	05	Phnom Penh Thmei	06	2	Phum Raong Chak	252	295
07	Rusey Keo	05	Phnom Penh Thmei	10	2	Phum Tra Paing Svay	63	79
07	Rusey Keo	06	Russey Keo	02	2	Phum Samma Ki	621	898
07	Rusey Keo	06	Russey Keo	04	2	Phum Beong Salang	461	596
07	Rusey Keo	07	Toek Thla	02	2	Phum Trapeang Chhouk	970	1048

(10 households to be selected in each village)

No of villages in stratum = 615
No of villages in the sample = 120
No of households in stratum =130924
No of households in the sample = 38654

CSES 97 Sample Weights- Phnom Penh

DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	U/R	Village Name	No. of Households			
							Frame	Listed/ Reported	Whij	
07	Rusey Keo	07	Toek Thla	05	2	Phum Se_Pe_Se	Mhi	Mhi*	249	109.54327
07	Rusey Keo	07	Toek Thla	09	2	Phum Tuk Thla	400	687	187.38498	
07	Rusey Keo	08	Prek Leap	03	2	Phum Bak Kheng	306	322	114.80808	
07	Rusey Keo	09	Prek Ta Sek	03	2	Phum Prek Rang	138	153	120.96239	
07	Rusey Keo	10	Chrouy Changva	01	2	Phum Chrooy Chang Var 1	760	794	113.98427	
07	Rusey Keo	10	Chrouy Changva	04	2	Phum Doeum Kor	235	248	115.13884	
07	Rusey Keo	11	Chrang Chamreh 1	03	2	Phum 3	336	357	115.92229	
07	Rusey Keo	12	Chrang Chamreh 2	02	2	Phum Khor 1	426	462	118.32333	
							38654			
							38654	50252	17858	
								30.0		
							NO.of Households=			178,580

(10 households to be selected in each village)

No of villages in stratum = 615
No of villages in the sample = 120
No of households in stratum =130924
No of households in the sample = 38654

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Village Name	No. of Households		
								Frame	Listed/ Reported	Whij
01	Banteay Meanchey	06	Sisophon(PT)	01	Bos Sbov	02	Kandaal	80	95	168.81619
01	Banteay Meanchey	06	Sisophon(PT)	02	Kampong Svay	02	Kang Vaa	85	267	446.55279
01	Banteay Meanchey	06	Sisophon(PT)	02	Kampong Svay	05	Souphi	724	1200	235.62597
01	Banteay Meanchey	06	Sisophon(PT)	05	O Ambel	01	Saesen	249	490	279.75458
01	Banteay Meanchey	06	Sisophon(PT)	05	O Ambel	05	Ou Ambel	558	940	239.48269
01	Banteay Meanchey	06	Sisophon(PT)	07	Preah Ponlea	03	Phum 3	159	440	393.40151
01	Banteay Meanchey	06	Sisophon(PT)	08	Toek Thla	01	Keab	283	543	272.76828
02	Battambang	03	Battambang(PT)	01	Tuol Ta Ek	01	Ou Taa Kam 1	580	663	162.50473
02	Battambang	03	Battambang(PT)	01	Tuol Ta Ek	04	Tuol Taa Aek	779	964	175.92196
02	Battambang	03	Battambang(PT)	02	Prek Preah Sdech	03	13 Meakkakra	626	778	176.67933
02	Battambang	03	Battambang(PT)	02	Prek Preah Sdech	08	Chamkaar Ruessei	286	318	158.06713
02	Battambang	03	Battambang(PT)	03	Rotonak	05	Rumcheek 5	212	219	146.85500
02	Battambang	03	Battambang(PT)	04	Chamkar Samraong	01	Chamkaar Samraong 1	823	1030	177.91717
02	Battambang	03	Battambang(PT)	04	Chamkar Samraong	03	Voat Lieb	670	818	173.56373
02	Battambang	03	Battambang(PT)	05	Sla Ket	02	Dam Spey	535	669	177.76768
02	Battambang	03	Battambang(PT)	06	Kdol Don Teav	04	Taa Pruoch	286	265	131.72260
02	Battambang	03	Battambang(PT)	07	O Mal	03	Saalaa Baalaat	151	183	172.28783
02	Battambang	03	Battambang(PT)	08	Voat Kor	01	Voat Kor	429	613	203.13448
02	Battambang	03	Battambang(PT)	08	Voat Kor	04	Khsaach Pouy	297	422	201.99307
02	Battambang	03	Battambang(PT)	09	O Char	02	Prey Koun Seek	128	174	193.25011
02	Battambang	03	Battambang(PT)	09	O Char	06	Ang	292	382	185.97775
02	Battambang	03	Battambang(PT)	10	Svay Pao	02	Kampong Krabei	535	613	162.88728
03	Kampong Cham	05	Kampong Cham(PT)	01	Boeng Kok	02	Boeng Kok 2	110	249	321.80081
03	Kampong Cham	05	Kampong Cham(PT)	02	Kampong Cham	07	Phum 13	106	92	123.38502
03	Kampong Cham	05	Kampong Cham(PT)	03	Sambour Meas	06	Boeng Snaay	221	258	165.96171
03	Kampong Cham	05	Kampong Cham(PT)	04	Veal Meas	03	Phum 3	444	440	140.88027
04	Kampong Chhnang	03	Kampong Chhnang(PT)	01	Phsar Chhnang	01	Phsaar Leu	620	568	130.23782
04	Kampong Chhnang	03	Kampong Chhnang(PT)	01	Phsar Chhnang	08	Kandaal	167	165	140.45847
04	Kampong Chhnang	03	Kampong Chhnang(PT)	03	Pheer	02	Thormmeak Yuit	134	190	201.57157

(10 households to be selected in each village)

No of villages in stratum = 761
 No of villages in the sample = 100
 No of households in stratum = 142161
 No of households in the sample = 30268

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Village Name	Frame	Listed/ Reported	
								Mhi	Mhi*	
									Whij	
05	Kampong Speu	02	Kampong Speu(PT)	01	Chabar Mon	02	Phkong	35	55	223.39586
05	Kampong Speu	02	Kampong Speu(PT)	02	Kandaol Dom	08	Trapeang Preah	85	96	160.55831
05	Kampong Speu	02	Kampong Speu(PT)	03	Roka Thum	11	Rokaa Thum	104	136	185.90285
05	Kampong Speu	02	Kampong Speu(PT)	05	Svay Kravan	05	Phsaar Chaas	100	133	189.07413
06	Kampong Thom	03	Kampong thom(PT)	02	Kampong Thum	03	Phum Bei	78	66	120.29008
06	Kampong Thom	03	Kampong thom(PT)	04	O Konthor	03	Ou Kanthor Cheung	116	131	160.54389
06	Kampong Thom	03	Kampong thom(PT)	06	Kampong Krabau	03	Kampong Krabau	225	278	175.64781
06	Kampong Thom	03	Kampong thom(PT)	08	Prey Ta Hu	03	Prey Ta Hu	301	372	175.69399
06	Kampong Thom	03	Kampong thom(PT)	10	Srayov	05	Pou Ta Un	223	252	160.64830
06	Kampong Thom	03	Kampong thom(PT)	10	Srayov	11	Chambak	160	200	177.70125
07	Kampot	08	Kampot(PT)	01	Kampong Kandal	01	Sovann Saakor	405	625	219.38426
07	Kampot	08	Kampot(PT)	03	Kampong Bay	01	Kampong Baay Khaang	388	560	205.18082
07	Kampot	08	Kampot(PT)	04	Andong Khmer	04	Andong Khmaer	160	212	188.36333
08	Kandal	11	Takhmau(PT)	01	Ta Kdol	03	Preaek Long	108	131	172.43603
08	Kandal	11	Takhmau(PT)	03	Daum Mien	03	Preaek Taa Pov	562	829	209.70012
08	Kandal	11	Takhmau(PT)	04	Ta Khmau	01	Taa Khmau	1129	1200	151.10115
08	Kandal	11	Takhmau(PT)	04	Ta Khmau	03	Thmei	405	570	200.07844
09	Koh Kong	04	Koh Kong(PT)	01	Smach Mean Cheay	01	Phum Ti Muoy	290	312	152.94563
09	Koh Kong	04	Koh Kong(PT)	02	Dang Tong	01	Phum Ti Muoy	393	858	310.36676
09	Koh Kong	04	Koh Kong(PT)	03	Stoeng Veng	01	Stueng Veaeang	134	304	322.51451
10	Kratie	02	Kratie	03	Dar	02	Chuor Chrey	86	102	168.60956
10	Kratie	02	Kratie	05	Kou Loab	01	Banteay	98	122	176.97594
10	Kratie	02	Kratie	08	Krakor	01	Krakor	392	622	225.57179
10	Kratie	02	Kratie	10	O Roessei	03	Ou Ruessei Muoy	364	422	164.81303
10	Kratie	02	Kratie	12	Sambok	01	Boeng Run	99	112	160.82861
10	Kratie	02	Kratie	13	Thma Andaeuk	04	Sampong	68	77	160.97643
10	Kratie	02	Kratie	15	Thmei	10	Veal Sambour	122	148	172.45761
14	Prey Veng	11	Prey Veng(PT)	01	Baray	01	Baaraay Kaeut	265	291	156.10887
14	Prey Veng	11	Prey Veng(PT)	02	Cheung Toek	04	Svaay Sokhao	297	315	150.77682
14	Prey Veng	11	Prey Veng(PT)	03	Kampong Leav	05	Phum Pram	296	308	147.92428

No of villages in stratum = 761
 No of villages in the sample =100
 No of households in stratum = 142161
 No of households in the sample = 30268

(10 households to be selected in each village)

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Village Name	Frame	Listed/ Reported
								Mhi	Mhit*
14	Prey Veng	11	Prey Veng(PT)	04	Pou Rieng	03	Veal Prov	213	302
14	Prey Veng	11	Prey Veng(PT)	06	Prek Chrey	02	Preaek Chrey Kraom	200	222
14	Prey Veng	11	Prey Veng(PT)	07	Prey Kanlaong	05	Prey Kanlaong	275	330
15	Pursat	05	Pursat(PT)	01	Chamraeun Phal	03	Ou Tong	113	119
15	Pursat	05	Pursat(PT)	03	Lolok Sa	02	Preaek Sdei	196	247
15	Pursat	05	Pursat(PT)	04	Phteah Prey	01	Peal Nheaek Muoy	707	918
15	Pursat	05	Pursat(PT)	04	Phteah Prey	09	Kok	125	147
15	Pursat	05	Pursat(PT)	06	Roleab	05	Spean Thma	219	221
15	Pursat	05	Pursat(PT)	07	Svay At	01	Sihaani	222	290
16	Ratanak Kiri	02	Banlung(PT)	02	Labansiek	02	Phum Pir	139	207
17	Siem Reap	10	Siem Reap(PT)	01	Sla Kram	03	Chong Kausu	413	1072
17	Siem Reap	10	Siem Reap(PT)	01	Sla Kram	07	Mondol Bei	211	274
17	Siem Reap	10	Siem Reap(PT)	02	Svay Dangcum	10	Vihear Chen	383	508
17	Siem Reap	10	Siem Reap(PT)	03	Kouk Chak	01	Trapeang Seh	254	485
17	Siem Reap	10	Siem Reap(PT)	04	Sala Kamraeuk	02	Voat Svaay	343	480
17	Siem Reap	10	Siem Reap(PT)	05	Nokor Thum	05	Aareaks Svaay	55	73
17	Siem Reap	10	Siem Reap(PT)	07	Chong Khnies	07	Phum Prampir	68	202
17	Siem Reap	10	Siem Reap(PT)	09	Siem Reab	06	Spean Chreav	259	302
18	Sihanouk Ville	01	Mittapheap	01	Sangkat 1	01	Mondol Muoy	323	330
18	Sihanouk Ville	01	Mittapheap	02	Sangkat 2	01	Mondol Muoy	690	815
18	Sihanouk Ville	01	Mittapheap	03	Sangkat 3	01	Mondol Muoy	301	358
18	Sihanouk Ville	01	Mittapheap	03	Sangkat 3	03	Mondol Bei	962	1119
18	Sihanouk Ville	01	Mittapheap	04	Sangkat 4	01	Mondol Muoy - (D)	1718	1831
18	Sihanouk Ville	01	Mittapheap	04	Sangkat 4	03	Mondol Bei	613	617
18	Sihanouk Ville	02	Prey Nup	02	Boeng Ta Prohm	02	Boeng Ta Prum	177	234
18	Sihanouk Ville	02	Prey Nup	04	Cheung Kou	01	Chamkaar Kausu	146	173
18	Sihanouk Ville	02	Prey Nup	06	O Oknha Heng	01	Bat kokir	301	381
18	Sihanouk Ville	02	Prey Nup	07	Prey Nob	04	Prey Nob Bei	119	152
18	Sihanouk Ville	02	Prey Nup	10	Samrong	02	Samrong Kandaal	87	112
18	Sihanouk Ville	02	Prey Nup	13	Tuol Totoeng	01	Tuol Totueng Muoy	173	194

(10 households to be selected in each village)

No of villages in stratum = 761
 No of villages in the sample = 100
 No of households in stratum = 142161
 No of households in the sample = 30268

CSES 97 Sample Weights- Other Urban

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Village Name	Frame	Listed/ Reported	Whij
								Mhi	Mhi*	
18	Sihanouk Ville	02	Prey Nup	14	Veal Renh	03	Veal Thum	190	288	215.48615
18	Sihanouk Ville	03	Stung Hav	03	Turnnob Rolok	03	Mondol Bei	263	244	131.89081
19	Stung Treng	04	Stung Treng(PT)	01	Stoeng Treng	03	Phum Kandal	253	285	160.14184
19	Stung Treng	04	Stung Treng(PT)	04	Samokki	01	Thmei	99	135	193.85591
20	Svay Rieng	06	Svay Rieng(PT)	01	Svay Rieng	04	Phum Leekh Buon	299	425	202.06831
20	Svay Rieng	06	Svay Rieng(PT)	03	Koy Trabek	02	Taaraang Baal	250	316	179.69150
21	Takeo	08	Takeo(PT)	01	Baray	10	Krachaab	47	57	172.40802
21	Takeo	08	Takeo(PT)	02	Roka Knong	09	Phum Muoy	66	116	249.85873
21	Takeo	08	Takeo(PT)	03	Roka Krau	11	Preech	122	189	220.23302
23	Kep Ville	01	Damnak Changaeur	02	O Krasar	01	Ou Krasaar	512	570	158.26518
23	Kep Ville	01	Damnak Changaeur	03	Pong Toek	04	Ronees	105	127	171.94711
								30268		

(10 households to be selected in each village)

WT0u2

F02_S02S

No of villages in stratum = 761

No of villages in the sample =100

No of households in stratum = 142161

No of households in the sample = 30268

CSES 97 Sample Weights- Rural

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Name of the village	No. of Households		
								Frame	Listed/ Reported	Whij
01	Banteay Meanchey	02	Mongkol Borei	02	Bat Trang	06	Bang Bat Kaeut	82	125	487.58082
01	Banteay Meanchey	02	Mongkol Borei	06	O Prasat	08	Kouk Thnong Kandaal	77	93	386.31598
01	Banteay Meanchey	02	Mongkol Borei	09	Rossei Kraok	06	Anlong Mean Trop	154	198	411.23960
01	Banteay Meanchey	02	Mongkol Borei	12	Srah Reang	08	Kouk Chraab	75	102	435.00010
01	Banteay Meanchey	04	Preah Net Preah	01	Chhnour Mean Cheay	06	Samraong Treas	54	117	693.01487
01	Banteay Meanchey	04	Preah Net Preah	05	Preah Net Preah	05	Paoy Samraong	238	257	345.38750
01	Banteay Meanchey	05	Serey Sophorn	03	Kuttasat	01	Koub Touch	274	278	324.52241
01	Banteay Meanchey	07	Thmar Puork	01	Kouk Samraong	02	Kbaal Tonsaong	174	169	310.66184
01	Banteay Meanchey	07	Thmar Puork	03	Phkoam	16	Mau	151	186	393.99114
01	Banteay Meanchey	07	Thmar Puork	10	Treas	06	Treas	332	672	647.41334
01	Banteay Meanchey	07	Thmar Puork	14	Kumru	06	Svaay Chrum	111	124	357.31328
02	Battambang	01	Banan	06	Phnum Sampou	04	Sampov Lech	239	281	376.06150
02	Battambang	02	Battambang(DC)	01	Ta Pung	02	Paoy Yong	314	429	436.99664
02	Battambang	02	Battambang(DC)	03	O Ta Ki	01	Ou Taa Ki	451	565	400.70278
02	Battambang	02	Battambang(DC)	06	Chrouy Sdau	01	Chrouy Sdau	441	534	387.30502
02	Battambang	02	Battambang(DC)	08	Kouk Khmum	06	Kandaal Tboung	244	284	372.28794
02	Battambang	04	Bavel	01	Bavel	02	Baveel 2	385	468	388.80834
02	Battambang	04	Bavel	02	Khnach Romeas	06	Khnaach Romeas	404	482	381.60682
02	Battambang	05	Ek Phnom	03	Prek Khpop	01	Preaek Snao	342	369	345.10457
02	Battambang	06	Mong Russey	01	Moung Roessei	03	Kaoh Chaar	61	94	492.88826
02	Battambang	06	Mong Russey	04	Roessei Krang	01	Neak Taa Tvear	151	185	391.87290
02	Battambang	06	Mong Russey	06	Ta Laos	09	Kruos	167	185	354.32819
02	Battambang	08	Sangke	01	Anlong Vil	01	Chraab Veal	177	253	457.19104
02	Battambang	08	Sangke	03	Ta Pon	04	Basaet	382	518	433.72739
02	Battambang	08	Sangke	06	Kampong Pring	06	Kbaal Thnal	176	260	472.51014

No of villages in stratum = 9903

No of households in the sample = 254

No of households in stratum = 1218640

No of households in the sample = 44224

WiRural

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(15 households to be selected in each village)

CSES 97 Sample Weights- Rural

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Name of the village	Frame Mhi	Listed/ Reported Mhi*	Whij
02	Battambang	08	Sangke	09	O Dambang 1	04	Svaay Thum	313	368	376.05722
03	Kampong Cham	01	Bathey	02	Chbar Ampou	01	Chbaar Ampov	190	257	432.64329
03	Kampong Cham	01	Bathey	08	Sandek	01	Kampaal	257	303	377.10297
03	Kampong Cham	01	Bathey	12	Turnnob	02	Prayuk	185	220	380.36575
03	Kampong Cham	02	Chamkar Leu	03	Choyou	01	Spueu Ka	548	690	402.73464
03	Kampong Cham	02	Chamkar Leu	06	Svay Teab	08	Mouhaa	137	131	305.84486
03	Kampong Cham	02	Chamkar Leu	12	Multhanh Svay Meas	05	Phum 34	121	176	465.24075
03	Kampong Cham	03	Cheung Prey	05	Pring chrum	01	Pring Chum	216	276	408.70108
03	Kampong Cham	03	Cheung Prey	08	Sotip	02	Skon	290	373	411.39716
03	Kampong Cham	03	Cheung Prey	10	Trapeang Kor	02	S'aang ----	82	87	339.35625
03	Kampong Cham	06	Kampong Siem	01	Ampil	05	Roliek	185	175	302.56367
03	Kampong Cham	06	Kampong Siem	07	Kaoh Samrong	01	Phum 1	113	130	367.97250
03	Kampong Cham	06	Kampong Siem	12	Rumchek	02	Chheu Teal Srot Krao	127	166	418.07560
03	Kampong Cham	07	Kang Meas	02	Kang Ta Noeng	08	Phum TI Prambe	95	108	363.62238
03	Kampong Cham	07	Kang Meas	06	Prek Krabau	09	Tuek Cheenh	40	46	367.83097
03	Kampong Cham	07	Kang Meas	11	Sor Kong	11	Anlong Ak Kaeut	168	196	373.16185
03	Kampong Cham	08	Koh Sotin	04	Moha Leaph	01	Chong Preaek	59	93	504.17510
03	Kampong Cham	08	Koh Sotin	07	Pongro	03	Preaek Rumdeeng Le	115	161	447.79423
03	Kampong Cham	09	Kroch Chhmar	04	Kaoh Pir	04	Chuor Kandaal	97	118	389.09955
03	Kampong Cham	09	Kroch Chhmar	09	Roka Khnor	02	Phum TI Pir	189	256	433.24007
03	Kampong Cham	10	Memot	02	Choam	09	Poploam	30	33	351.83832
03	Kampong Cham	10	Memot	10	Rung	07	Maasin	140	120	274.15973
03	Kampong Cham	10	Memot	15	Treak	07	Samraong Tboung	145	183	403.67657
03	Kampong Cham	11	O Reang Ov	02	Chak	02	Chamlak	132	172	416.77818
03	Kampong Cham	11	O Reang Ov	04	Kong Cheay	11	Tuol Traach	98	119	388.39295
03	Kampong Cham	11	O Reang Ov	07	Preah Theat	08	Preah Theat Kandaal	98	97	316.58921

No of villages in stratum = 9903
 No of households in the sample = 254
 No of households in stratum = 1218640
 No of households in the sample = 442224

(15 households to be selected in each village)

WIRural
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CSES 97 Sample Weights- Rural

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Name of the village	Frame	Listed/ Reported	Whij
								Mhi	Mhi*	
03	Kampong Cham	12	Ponhea Krek	02	Don Tei	12	Sovann Mealea	121	120	317.20960
03	Kampong Cham	12	Ponhea Krek	04	Kandaol Chrum	14	Trapeang Tonsaong	120	140	373.16185
03	Kampong Cham	12	Ponhea Krek	06	Krek	10	Prey Totueng	31	40	412.71357
03	Kampong Cham	12	Ponhea Krek	08	Trapeang Phlong	07	Trapeang Rumsaeng	123	151	392.66509
03	Kampong Cham	13	Prey Chhor	02	Boeng Nay	16	Chonloat Dai	88	138	501.58769
03	Kampong Cham	13	Prey Chhor	05	Kor	10	Trapeang Poun	182	211	370.81861
03	Kampong Cham	13	Prey Chhor	10	Sor Sen	08	Svaay Reaks	151	197	417.29169
03	Kampong Cham	13	Prey Chhor	15	Trapeang Preah	06	Kur	111	117	337.14237
03	Kampong Cham	14	Srei Santhor	04	Kaoh Sandek	04	Krouch Saeuch	251	263	335.14480
03	Kampong Cham	14	Srei Santhor	08	Prek Dambok	06	Preaek Dambouk Leu	178	172	309.07146
03	Kampong Cham	14	Srei Santhor	11	Rossei Srok	02	Prey Totueng	239	298	398.81255
03	Kampong Cham	15	Stung Trang	04	Khpob Ta Nguon	01	Ou Run	246	250	325.05388
03	Kampong Cham	15	Stung Trang	13	Tuol Preah Khleang	02	Thmei	99	93	300.46799
03	Kampong Cham	16	Tbong Khmum	03	Muldthan Thma Pechr	03	Phum Pir Dabprampir	143	152	339.98363
03	Kampong Cham	16	Tbong Khmum	07	Muldthan Chrab	01	Phum Dab Dabmuoy	150	288	614.11780
03	Kampong Cham	16	Tbong Khmum	12	Kor	09	Veal Khmum	249	315	404.63334
03	Kampong Cham	16	Tbong Khmum	16	Roka Po Pram	03	Rokaa Pram Ti Muoy	401	502	400.41450
03	Kampong Cham	16	Tbong Khmum	18	Sralab	08	Dang Kambet	161	192	381.43962
03	Kampong Cham	16	Tbong Khmum	20	Muldthan Ta Pav	06	Samrom	313	197	201.31324
03	Kampong Cham	16	Tbong Khmum	23	Vihear Luong	07	Prasrae Kraom	228	271	380.17618
04	Kampong Chhnang	01	Baribo	10	Ponley	01	Ponley	179	267	477.09920
04	Kampong Chhnang	02	Chul Kiri	05	Prey Kri	03	Prey Kri Cheung	625	741	379.21774
04	Kampong Chhnang	05	Kampong Tralach	02	Chhuk Sa	10	Tuol	98	170	554.84707
04	Kampong Chhnang	05	Kampong Tralach	07	Peani	03	Taa Kol	103	130	403.69798
04	Kampong Chhnang	06	Rolea Phiear	02	Banteay Preal	03	Phlov Kou	78	92	377.26253
04	Kampong Chhnang	06	Rolea Phiear	07	Pongro	03	Sraang Khpos	140	138	315.28369

No of villages in stratum = 9903
 No of villages in the sample = 254
 No of households in stratum = 1218640
 No of households in the sample = 44224

(15 households to be selected in each village)

CSES 97 Sample Weights- Rural

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name CODE	VIL CODE	Name of the village	Frame		Listed/ Reported	Whij
								Mhi	Mhi*		
04	Kampong Chhnang	06	Rolea Phiear	11	Sre Thmei	11	Trea Tboung	123	137	356.25905	
04	Kampong Chhnang	07	Samaki Meanchey	03	Krang Lvea	10	Tang Kruos Kaeut	231	275	380.77740	
04	Kampong Chhnang	08	Tuk Phos	03	Chaong Maong	07	Aaleang Kae	87	185	680.14722	
05	Kampong Speu	01	Baset	07	Pou Angkrang	16	Seerei Phoat	53	64	386.23761	
05	Kampong Speu	03	Kong Pisey	06	Prey Nheat	16	Prey Kuk	46	58	403.29294	
05	Kampong Speu	03	Kong Pisey	12	Toek Laak	05	Pravoek Pong	90	109	387.37754	
05	Kampong Speu	03	Kong Pisey	11	Srang	09	Trabaek Tung	80	86	343.84199	
05	Kampong Speu	05	Oudong	04	Ksem Ksant	11	Taa Laak	91	119	418.26933	
05	Kampong Speu	05	Oudong	08	Prey Krasang	12	Trapeang Chrov	70	80	365.54631	
05	Kampong Speu	05	Oudong	15	Phnum Toch	03	Sdok Slaat	123	144	374.46207	
05	Kampong Speu	07	Samrong Tong	03	Khtum Krang	06	Sab Nga	55	100	581.55094	
05	Kampong Speu	07	Samrong Tong	08	Sambor	16	Prey Pongro	34	43	404.51999	
05	Kampong Speu	07	Samrong Tong	15	Voll Sa	02	Voa Sa	137	142	331.52649	
05	Kampong Speu	08	Thpong	08	Yea Angk	02	Thma Chongruk	62	84	433.34925	
06	Kampong Thom	01	Baray	03	Baray	09	Ou Suosdei	108	153	453.12511	
06	Kampong Thom	01	Baray	06	Chranieng	10	Trapeang khlong	154	266	552.47340	
06	Kampong Thom	01	Baray	09	Chrolong	06	Trapeang Chhuok	83	402	1,549.16763	
06	Kampong Thom	01	Baray	14	So Young	06	Khloy Khaang Kaeut	101	128	405.35828	
06	Kampong Thom	01	Baray	18	Treal	06	Triel	196	223	363.91440	
06	Kampong Thom	02	Kampong Svay	07	San Kor	03	Tang Krouch	61	65	340.82699	
06	Kampong Thom	02	Kampong Svay	09	Trapeang Roessei	11	Kouk Nguon	138	143	331.44190	
06	Kampong Thom	05	Prasat Sambo	02	Koul	02	Ou Taa Siev	74	83	358.75406	
06	Kampong Thom	06	Sandon	01	Chheu Teal	08	Kae Rang	126	132	335.08411	
06	Kampong Thom	07	Santuk	02	Chroab	02	Sdok Sdam	240	261	347.84016	
06	Kampong Thom	07	Santuk	07	Prasat	09	Banteay Yumreach	189	213	360.46927	
06	Kampong Thom	08	Stong	03	Charnar Leu	01	Srang	158	165	334.02372	

No of villages in stratum = 9903
 No of villages in the sample = 254
 No of households in stratum = 1218640
 No of households in the sample = 44224

(15 households to be selected in each village)

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CSES 97 Sample Weights- Rural

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Name of the village	Frame	Listed/ Reported	Mhi	Mhi*	Whij
06	Kampong Thom	08	Stong	06	Msa Krang	10	Chi Meas	161	192	161	192	381.43962
06	Kampong Thom	08	Stong	12	Samprouch	17	Slaak Kraanh	85	110	85	110	413.92744
07	Kampot	01	Angkor Chey	04	Dambok Khpos	02	Sbov Andaet	284	327	284	327	368.28147
07	Kampot	01	Angkor Chey	08	Phnum Kong	04	Prey Phkoam	143	161	143	161	360.11424
07	Kampot	02	Banteay Meas	01	Banteay Meas Khang K	04	Trapeang poun	243	290	243	290	381.71759
07	Kampot	02	Banteay Meas	06	Sdech Kong Khang Che	03	Traeng	168	190	168	190	361.73853
07	Kampot	02	Banteay Meas	12	Tuk Meas Khang Kaeut	05	Srae Kaan Chen Khaa	135	142	135	142	336.43799
07	Kampot	03	Chhouk	03	Boeng Nimol	01	Srangae	197	249	197	249	404.28123
07	Kampot	03	Chhouk	07	Krang Snay	05	Lvee	227	273	227	273	384.66905
07	Kampot	04	Chum Kiri	06	Sre Samraong	01	Thlok Yul	116	134	116	134	369.48538
07	Kampot	05	Dang Tung	08	Totung	02	Tuol Khpos	122	140	122	140	367.04445
07	Kampot	06	Kampong Trach	03	Damnak Kantuot Khang	02	Prey Kees	249	289	249	289	371.23503
07	Kampot	06	Kampong Trach	08	Kanthaor Khang Kaeut	07	Chong Suong	139	169	139	169	388.88604
07	Kampot	06	Kampong Trach	15	Svay Tong Khang Cheu	01	Doung	210	166	210	166	252.83620
07	Kampot	07	Kampot(DC)	08	Kon Satv	02	Koun Saat	210	214	210	214	325.94546
07	Kampot	07	Kampot(DC)	17	Trapeang Pring	01	Trapeang Pring Khaa	251	249	251	249	317.30439
08	Kandal	01	Kandal Stung	05	Cheung Kaeub	01	Krasang	75	103	75	103	439.26481
08	Kandal	01	Kandal Stung	14	Prek Kampis	06	Krang Svaay	149	195	149	195	418.59959
08	Kandal	01	Kandal Stung	27	Trapeang Veng	02	Damnaak Trabaek	52	58	52	58	356.75914
08	Kandal	02	Kean Svay	03	Dei Edth	03	Sdau Kanlaeng	790	1420	790	1420	574.92568
08	Kandal	02	Kean Svay	06	Kokir	02	Taa Reab Doun Sa	466	615	466	615	422.12362
08	Kandal	02	Kean Svay	09	Prek Eng	04	Tuol Taa Chaan	124	225	124	225	580.37846
08	Kandal	02	Kean Svay	11	Samraong Thum	04	Stueng	376	484	376	484	411.72569
08	Kandal	03	Khsach Kandal	04	Kaoh Choram	04	Leu	165	173	165	173	335.36104
08	Kandal	03	Khsach Kandal	09	Prek Ta Kov	02	Preaek Lvea	299	440	299	440	470.68672
08	Kandal	03	Khsach Kandal	13	Sanlung	01	Sanlung	261	280	261	280	343.13734

No of villages in stratum = 9903
 No of villages in the sample = 254
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 No of households in the sample = 44224

(15 households to be selected in each village)

CSES 97 Sample Weights- Rural

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Name of the village	Frame	Listed/ Reported	Mhi	Mhi*	Whij
08	Kandal	03	Khsach Kandal	18	Vihear Suork	05	Prey Thum	68	91	68	91	428.03860
08	Kandal	04	Koh Thom	03	Kampong Kong	09	Preaek Ruessei	237	265	237	265	357.64156
08	Kandal	04	Koh Thom	08	Pouthi Ban	01	Phum 1	203	267	203	267	420.69338
08	Kandal	04	Koh Thom	10	Prek sdei	08	Pouthi Reamea	498	608	498	608	390.50328
08	Kandal	04	Koh Thom	12	Sampou Pun	04	Khpob	440	527	440	527	383.09668
08	Kandal	05	Leuk Dek	04	Peam reang	02	Peam Reang Leu	302	355	302	355	375.98616
08	Kandal	06	Leuk Dek	01	Ary Ksotr	02	Khsaach	361	464	361	464	411.11302
08	Kandal	06	Leuk Dek	10	Prek Rey	01	Preael Rey	211	264	211	264	400.19525
08	Kandal	07	Muk Kampoul	01	Bak Kheng	03	Chambak Meas	255	312	255	312	391.34958
08	Kandal	07	Muk Kampoul	04	Prek Dambang	05	Saameakki	342	437	342	437	408.70108
08	Kandal	08	Phnom Penh(DC)	01	Bek Chan	10	Kau	26	31	26	31	381.36321
08	Kandal	08	Phnom Penh(DC)	08	Lumhach	05	Lumhaach	54	67	54	67	396.85467
08	Kandal	08	Phnom Penh(DC)	13	Prey Pouch	08	Prab Voat	33	49	33	49	474.93327
08	Kandal	09	Ponhea Leau	02	Chrey Loas	12	Taa Touch	79	86	79	86	348.19443
08	Kandal	09	Ponhea Leau	08	Ponhea Pon	01	Thum Tboung	190	251	190	251	422.54267
08	Kandal	09	Ponhea Leau	13	Turnob Thum	14	Trapeang Thnong	44	59	44	59	428.89382
08	Kandal	10	Saang	03	Kaoh Khel	04	Kaoh Khael	224	259	224	259	369.83005
08	Kandal	10	Saang	07	Prek Ambel	03	Sampaan Leu	464	494	464	494	340.53317
08	Kandal	10	Saang	09	Roka Khpos	03	Preaek Samraong	247	338	247	338	437.69360
08	Kandal	10	Saang	12	Svay Prateal	07	Paaraen Leu	162	170	162	170	335.64823
08	Kandal	10	Saang	15	Traeuy Sla	05	Preaek	416	431	416	431	331.38618
09	Koh Kong	02	Kiri sakor	01	Kaoh Sdech	02	Peam Kaay	38	38	38	38	319.85302
09	Koh Kong	06	Sre Ambel	06	Kampong Seila	03	Krang Aat	308	452	308	452	469.39469
10	Kratie	01	Chhlong	05	Kanhchor	01	Chheu Teal Phluoh Le	160	168	160	168	335.84567
10	Kratie	03	Prek Prasap	01	Chambak	05	Chrouy Thma	94	118	94	118	401.51762
10	Kratie	03	Prek Prasap	07	Saob	03	Preaek Chik	297	594	297	594	639.70604

No of villages in stratum = 9903
 No of households in the sample = 254
 No of households in stratum = 1218640
 No of households in the sample = 44224

(15 households to be selected in each village)

CSES 97 Sample Weights- Rural

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name CODE	VIL CODE	Name of the village CODE	Frame		Listed/ Reported	Whij
								Mhi	Mhi*		
10	Kratie	04	Sambo	07	Sambor	04	Kaoh Real	63	86	436.62476	
10	Kratie	05	Snuol	05	Sre Char	06	S'aat	115	188	522.89015	
14	Prey Veng	01	Ba Phnom	01	Boeng Preah	06	Kbaal Damrei	134	147	350.88354	
14	Prey Veng	01	Ba Phnom	04	Roks Cheay	11	Chruol Thmei	118	148	401.17158	
14	Prey Veng	01	Ba Phnom	08	Spoe Kha	01	Prey Chamkaar	236	288	390.32911	
14	Prey Veng	02	Kamchay Mear	02	Doeun Koeng	02	Doun Koeng	221	222	321.30032	
14	Prey Veng	02	Kamchay Mear	05	Seang Khveang	05	Leak Luem	177	218	393.94327	
14	Prey Veng	02	Kamchay Mear	07	smaong Tbong	15	Rumduol	56	57	325.56468	
14	Prey Veng	03	Kampong Trabek	03	Cheang Dek	01	Boeng Kratieub	227	284	400.16853	
14	Prey Veng	03	Kampong Trabek	06	Kou Khchak	04	Skaar	262	310	378.45204	
14	Prey Veng	03	Kampong Trabek	08	Peam Montear	09	Dangkieb Kdaam	269	286	340.06678	
14	Prey Veng	03	Kampong Trabek	12	Prey Poun	01	Chi Peay	172	198	368.20289	
14	Prey Veng	04	Kanh Chreach	02	Kanhchritech	10	Pou Tong	96	106	353.17104	
14	Prey Veng	04	Kanh Chreach	06	Preal	06	Trapeang Thlaan Che	105	110	335.08411	
14	Prey Veng	05	Mesang	01	Angkor sar	06	Sambur	243	274	360.65731	
14	Prey Veng	05	Mesang	03	Chi Phoch	15	Yeang Touch	104	120	369.06118	
14	Prey Veng	05	Mesang	06	Prey Totoeng	02	Tbaeng	105	110	335.08411	
14	Prey Veng	05	Mesang	08	Trapeang Sre	07	Tbaeng	255	277	347.44818	
14	Prey Veng	06	Peam Chor	06	Krang Ta Yang	01	Chrey Otdam	239	288	385.42958	
14	Prey Veng	07	Peam Ro	01	Ba Baong	02	Doung	131	166	405.30993	
14	Prey Veng	07	Peam Ro	06	Prek Khsay Ka	02	Otdam	547	731	427.44526	
14	Prey Veng	08	Peareang	01	Kampong Popil	05	Traal	253	241	304.68212	
14	Prey Veng	08	Peareang	04	Kampong Roessei	01	Kampong Ruessei	333	424	407.26030	
14	Prey Veng	08	Peareang	07	Prey Pnou	05	Prey Slaa	712	732	328.83765	
14	Prey Veng	08	Peareang	09	Prey Sralet	08	Kok Thum	159	152	305.77144	
14	Prey Veng	08	Peareang	11	Roka	07	Sahtlung	83	84	323.70667	

No of villages in stratum = 9903
 No of villages in the sample = 254
 No of households in stratum = 1218640
 No of households in the sample = 44224

(15 households to be selected in each village)

WiRural
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CSES 97 Sample Weights- Rural

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Name of the village	Frame Mhi	Listed/ Reported Mhi*	Whij
14	Prey Veng	09	Preah Sdech	03	Boeng Daol	02	Taa Ouk	148	173	373.88224
14	Prey Veng	09	Preah Sdech	05	Kmapong Soeng	13	Krang Phluk	285	320	359.13321
14	Prey Veng	09	Preah Sdech	08	Preah Sdech	13	Tuol Chey	240	326	434.46702
14	Prey Veng	09	Preah Sdech	11	Sena Reach Otdom	15	Trea	120	158	421.13981
14	Prey Veng	10	Prey Veng(DC)	04	Damrei Puon	01	Chamkaar Kuoy Lech	184	192	333.75967
14	Prey Veng	10	Prey Veng(DC)	06	Pean Roung	18	Prey Chhlong	97	104	342.93519
14	Prey Veng	10	Prey Veng(DC)	10	Svay Antor	03	Pou Chentam	346	514	475.15737
14	Prey Veng	12	Sithor Kandal	03	Lve	04	Kaong Tonlee Kraom	119	145	389.73687
14	Prey Veng	12	Sithor Kandal	08	Prey daeum Thnoeng	04	Prey daeum Thnoeng	239	259	346.61896
15	Pursat	01	Bakan	01	Boeng Bat Kandaol	05	Bat Traach	100	95	303.86037
15	Pursat	01	Bakan	04	Me Toek	05	Paolao	133	161	387.19050
15	Pursat	01	Bakan	07	Snam Preah	13	Khmaar	135	205	485.70273
15	Pursat	02	Kandieng	02	Banteay Dei	03	Ou Baa Krang Kanda	44	44	319.85302
15	Pursat	02	Kandieng	09	Veal	02	Pralaay Thum	91	177	622.13170
15	Pursat	03	Krakor	08	O Sandan	04	Puttream	93	112	385.19933
15	Pursat	04	Kravanh	04	Prongil	05	Baak Traa	201	332	528.31444
16	Ratanak Kiri	05	Lum Phat	01	Lumphat	02	Srae Chhuk	53	71	428.48235
16	Ratanak Kiri	07	O Ya Dav	07	Ya Tung	01	Teen Ngol	82	118	460.27629
17	Siem Reap	01	Angkor Chum	05	Nokor Pheas	03	Sambuor	160	198	395.81811
17	Siem Reap	03	Banteay Srey	03	Preah Dak	01	Preah Daak	196	241	393.28866
17	Siem Reap	04	Chi Kreng	02	Chi Kreng	12	Phniet	79	98	396.77969
17	Siem Reap	04	Chi Kreng	07	Lveng Roessei	09	Chambak Khpos	117	127	347.19088
17	Siem Reap	04	Chi Kreng	12	Spean Tnaot	05	Thnal Louk	137	140	326.85710
17	Siem Reap	06	Kra Lanh	06	Sambuor	04	Sambuor	147	154	335.08411
17	Siem Reap	07	Puork	01	Sasar Sdampth	07	Kouk Pnov	89	94	337.82229
17	Siem Reap	07	Puork	06	Krabei Riel	04	Totea	61	89	466.67080

WIRural
F04_samp

(15 households to be selected in each village)

No of villages in stratum = 9903
No of households in the sample = 254
No of households in stratum = 1218640
No of households in the sample = 44224

CSSES 97 Sample Weights- Rural

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Name of the village	Frame	Listed/ Reported	Whij
								Mhi	Mhi*	
17	Siem Reap	07	Puork	11	Prey Chruk	04	Svaay Chantor	157	179	364.67319
17	Siem Reap	07	Puork	15	Trei Nhor	09	Thveas	144	172	382.04666
17	Siem Reap	09	Siem Reap(DC)	06	Kandek	05	Ou	160	189	377.82638
17	Siem Reap	11	Sotr Nikum	02	Dam Dek	02	Dam Daek Leu	116	129	355.69862
17	Siem Reap	11	Sotr Nikum	04	Kampong Khleang	10	Roteang	102	132	413.92744
17	Siem Reap	11	Sotr Nikum	09	Samraong	01	Samraong Khaang Ch	202	232	367.35594
17	Siem Reap	13	Svay Leu	03	Khnaang Phnum	02	Khlaa Khnum	28	36	411.23960
19	Stung Treng	02	Siem Bok	03	Kaoh Sampeay	04	Kang Daek	113	129	365.14194
19	Stung Treng	05	Thala Bariwatt	08	Preah Rumkel	08	Anlong Svaay	47	73	496.79299
20	Svay Rieng	01	Chan Trea	05	Me Sa Thngak	04	Bos	118	151	409.30344
20	Svay Rieng	02	Kampong Ro	02	Nhor	06	Svaay Aanaat	165	201	389.63913
20	Svay Rieng	02	Kampong Ro	07	Samlei	08	Prey Ph'aav	116	129	355.69862
20	Svay Rieng	03	Ramduol	01	Bos Mon	06	Thmei	131	162	395.54343
20	Svay Rieng	03	Ramduol	07	Pong Toek	07	Seek Yum	116	129	355.69862
20	Svay Rieng	04	Romeas Hek	04	Angk Prasre	08	Angk Knong	43	58	431.42965
20	Svay Rieng	04	Romeas Hek	08	Kampong Trach	01	Khlaa Lout	178	205	368.37005
20	Svay Rieng	04	Romeas Hek	12	Mream	10	Thmea	62	78	402.39573
20	Svay Rieng	05	Svay Rieng(DC)	01	Angk Taso	10	Rokaa	115	142	394.94894
20	Svay Rieng	05	Svay Rieng(DC)	05	Ta Suos	01	Pnov	199	223	358.42826
20	Svay Rieng	05	Svay Rieng(DC)	07	Chheu Teal	12	Nearea Teen	193	236	391.11561
20	Svay Rieng	05	Svay Rieng(DC)	11	Kruos	01	Chambak	177	199	359.60876
20	Svay Rieng	05	Svay Rieng(DC)	15	Svay Thum	04	Traok Thum	137	147	343.19995
20	Svay Rieng	07	Svay Teap	01	Chrak Mtes	08	Tuol Ampil	124	183	472.04115
20	Svay Rieng	07	Svay Teap	07	Prasotr	07	Prey Taa Yueng	166	269	518.31604
21	Takeo	01	Angkor Borey	01	Angkor Borei	03	Prey Sambour	178	284	510.32729
21	Takeo	01	Angkor Borey	06	Prey Phkoam	02	Prey Phkoam Kha	229	290	405.05404

No of villages in stratum = 9903
 No of villages in the sample = 254
 No of households in stratum = 1218640
 No of households in the sample = 44224

(15 households to be selected in each village)

CSES 97 Sample Weights- Rural

PRO CODE	Province Name	DIST CODE	District Name	COM CODE	Commune Name	VIL CODE	Name of the village	Frame	Listed/ Reported	
								Mhi	Mhi* Whij	
21	Takeo	02	Bati	04	Kandoeng	06	Kandoeng Thum	180	259	460.23295
21	Takeo	02	Bati	09	Pea Ream	02	Pea Ream	160	185	369.83005
21	Takeo	02	Bati	14	Trapeang Krasang	06	Trapeang Kieb	58	90	496.32365
21	Takeo	03	Borey Chulasar	05	Kouk Pou	01	Kandaol	184	217	377.21796
21	Takeo	04	Kiri Vong	04	Kampeng	06	Hantea	89	104	373.76083
21	Takeo	04	Kiri Vong	08	Prey Ampok	08	Pump Edth	96	115	383.15726
21	Takeo	04	Kiri Vong	12	Ta O	08	Taa Ou Cheung	232	264	363.97068
21	Takeo	05	Koh Andet	04	Prey Yuthka	05	Taa Hien	117	160	437.40584
21	Takeo	06	Prey Kabbass	03	Champa	06	Samraong	128	154	384.82316
21	Takeo	06	Prey Kabbass	08	Pou Rumchak	05	Krasang	87	104	382.35303
21	Takeo	06	Prey Kabbass	13	Tang Yap	03	Trapeang Sdok	86	105	390.51822
21	Takeo	07	Samrong	03	Cheung Kuon	08	Anhchaanh	174	200	367.64715
21	Takeo	07	Samrong	06	Lumchang	08	Rung	81	93	367.23865
21	Takeo	07	Samrong	10	Sla	02	Slaa Kaeut	80	102	407.81260
21	Takeo	09	Tram Kak	02	Cheang Tong	05	Tuol Rokaa	132	176	426.47069
21	Takeo	09	Tram Kak	04	Leay Bor	15	Thnong Roleung	105	115	350.31521
21	Takeo	09	Tram Kak	10	Samraong	12	Thmei	63	69	350.31521
21	Takeo	09	Tram Kak	13	Tram Kak	07	Samrang	84	140	533.08836
21	Takeo	10	Traeng	04	Khvav	04	Kakaoh	130	127	312.47179
21	Takeo	10	Traeng	09	SamBuo	01	Prey Phdau	191	213	356.69473
21	Takeo	10	Traeng	13	Thiak	06	Chen	146	156	341.76076
								44224		

WtRural
F04_samp

(15 households to be selected in each village)

No of villages in stratum = 9903
No of villages in the sample = 254
No of households in stratum = 1218640
No of households in the sample = 44224

CAMBODIA SOCIO-ECONOMIC SURVEY (CSES) 1997

**LIST OF INSTRUCTION MANUALS AND
TECHNICAL PAPERS**

The following documents were prepared as instruction manuals and technical papers to serve as training material. The documents are available at the National Institute of Statistics.

1. CSES 1997 Manual of Instructions for Field Operation
2. CSES 1997 Instructions for Manual Processing (Coding and Editing)
3. CSES 1997 Data Entry Procedures
4. CSES 1997 Range Edit Checks
5. CSES 1997 Consistency Edit Checks
6. CSES 1997 List of Sample Villages and Sample Weights (Annex B)

Cambodia Socio-Economic Survey 1997 (CSES 1997)

SURVEY DATA FILES

Cambodia Socio-Economic Survey (CSES) 1997 used a Village questionnaire, a Core questionnaire and a Social Sector module. The data entry programs were prepared using Integrated Microcomputer Processing System (IMPS) and data files were created for each questionnaire. In the record design 15 record types were created for the Village questionnaire, 17 record types were created for the Core questionnaire and 12 record types were created for the Social Sector module. In order to facilitate data processing and also to assist the users, inter relatedness of questions and their location on a given page or pages were the principal guidelines used in the creation of record types. Data entry and verification and data cleaning were undertaken in-house at the Survey Processing Center of the National Institute of Statistics, Phnom Penh. The original set of survey data files that were generated is in ASCII (American National Standard Code for Information Interchange) code.

In order to assist data users, the survey data files were re-formatted in dBase format. The file names were defined with the first two letters of the questionnaires and the record type code. Information relating to record type codes, reference to the questionnaire, the record length used, file name and the total number of records in each file are listed below.

Village Questionnaire Data Files.

Record Type Code	Page Number of Questionnaire	Question Numbers Included in the Record	Column Numbers Included	Record Length	Data File Name	Number of Records in the File
B01	Page 2 of 12	1 to 5		79	VITYPE01.DBF	474
B02	Page 2 of 12	6 to 10				
	Page 3 of 12	11 to 22				
	Page 4 of 12	23 to 24		90	VITYPE02.DBF	474
B03	Page 4 of 12	25 to 28		26	VITYPE03.DBF	474
B04	Page 4 of 12	29 to 38		40	VITYPE04.DBF	228
B05	Page 5 of 12	39 to 43		32	VITYPE05.DBF	474
B06	Page 5 of 12	44 to 53		40	VITYPE06.DBF	35
B07	Page 6 of 12	54 to 58		32	VITYPE07.DBF	474

Village Questionnaire Data Files.

Continued.....

Record Type Code	Page Number of Questionnaire	Question Numbers included in the Record	Column Numbers Included	Record Length	Data File Name	Number of Records in the File
B08	Page 6 of 12	59 to 68		40	VITYPE08.DBF	50
B09	Page 7 of 12	69 to 71		24	VITYPE09.DBF	474
B10	Page 7 of 12	72 to 75				
	Page 8 of 12	76 to 82		95	VITYPE10.DBF	474
B11	Page 9 of 12	83				
	Page 10 of 12	83		37	VITYPE11.DBF	7646
B12	Page 10 of 12	84				
	Page 11 of 12	84		37	VITYPE12.DBF	3868
B13	Page 11 of 12	85		37	VITYPE13.DBF	1688
B14	Page 12 of 12	86		105	VITYPE14.DBF	474
B15	Page 12 of 12	87 to 89		22	VITYPE15.DBF	474

Core Questionnaire Data Files.

Record Type Code	Page Number of Questionnaire	Question Numbers included in the Record	Column Numbers Included	Record Length	Data File Name	Number of Records in the File
C01	Page 2 of 16	1	1 & 3 to 10	33	COTYPE01.DBF	29931
C02	Page 3 of 16	1	1, 11 to 13,15 &17	28	COTYPE02.DBF	29931
C03	Page 3 of 16	2	-			
	Page 4 of 16	3	1 to 7	26	COTYPE03.DBF	6010
C04	Page 4 of 16	4	1 & 3 to 10	31	COTYPE04.DBF	26675
C05	Page 5 of 16	5	1 & 3 to 10	36	COTYPE05.DBF	22349
C06	Page 6 of 16	5	11 to 18	35	COTYPE06.DBF	22336
C07	Page 7 of 16	5	19 to 29	74	COTYPE07.DBF	15445
C08	Page 8 of 16	6	1 & 3 to 14	39	COTYPE08.DBF	29931
C09	Page 10 of 16	7 to 16	-	37	COTYPE09.DBF	6010
C10	Page 11 of 16	17	1 & 3 to 5	46	COTYPE10.DBF	66380
C11	Page 12 of 16	18	1 & 3 to 6	54	COTYPE11.DBF	52544
C12	Page 13 of 16	19 to 22	-	22	COTYPE12.DBF	6010
C13	Page 13 of 16	23				
	Page 13 of 16	24	1 to 4 for 3 Rows	116	COTYPE13.DBF	6010
C14	Page 14 of 16	25	1 to 5			
	Page 14 of 16	26	1 to 9			
	Page 14 of 16	27 & 28	-	41	COTYPE14.DBF	6010
C15	Page 14 of 16	28	1 to 6	46	COTYPE15.DBF	2303
C16	Page 15 of 16	29	1 & 3 to 12	40	COTYPE16.DBF	7849
C17	Page 16 of 16	30	2 to 20	51	COTYPE17.DBF	1467

Social Questionnaire Data Files.

Record Type Code	Page Number of Questionnaire	Question Numbers included in the Record	Column Numbers Included	Record Length	Data File Name	Number of Records in the File
D01	Page 2 of 14	1	1 & 3 to 13	37	SOTYPE01.DB F	13947
D02	Page 3 of 14	2	2 to 15	94	SOTYPE02.DBF	6994
D03	Page 4 of 14	3	2 to 7 for 4 Rows	87	SOTYPE03.DBF	3669
D04	Page 5 of 14	4	1a & 3 to 13	57	SOTYPE04.DBF	29853
D05	Page 7 of 14	4	14a to 27	65	SOTYPE05.DBF	2136
D06	Page 9 of 14	Before 6	-	19	SOTYPE06.DBF	5994
D07	Page 9 of 14	6	2 to 7	48	SOTYPE07.DBF	250
D08	Page 10 of 14	7	1 to 5 for 5 Rows	59	SOTYPE08.DBF	5994
D09	Page 11 of 14	8	-	19	SOTYPE09.DBF	5994
D10	Page 11 of 14	9	Line no & 2 to 9	41	SOTYPE10.DBF	371
D11	Page 12 of 14	10	-			
	Page 12 of 14	11	2 to 8 for 2 Rows			
	Page 12 of 14	12	3 for Columns			
	Page 13 of 14	13 to 19	-	67	SOTYPE11.DBF	5994
D12	Page 14 of 14	20	2 to 10	32	SOTYPE12.DBF	3082

The sampling design is not self-weighting. The weighting factors required to produce stratum and national level estimates were incorporated in the core questionnaire and social sector questionnaire data files. In these two questionnaires, the last field in each record type contains the weight assigned to the household data.

In view of the size of the survey data, ZIP files were created and the diskette identification and file descriptions are given below.

Type of Questionnaire	Name of ZIP File	Number of files	File Identification	Diskette Identification
Village	VIT01D15.ZIP	15	Type B01 to B15	Disk-1/4
Core	COT01D09.ZIP	09	Type C01 to C09	Disk-2/4
Core	COT10D17.ZIP	08	Type C10 to C17	Disk-3/4
Social	SOT01D15.ZIP	12	Type D01 to D12	Disk-4/4

As stated earlier, the original survey data files were created in ASCII code, and they are available at the NIS. The ASCII data files were given the same file names as the dBase data files except that the extension of ASCII files will have TXT as the extension. The record design for the ASCII data files were prepared and they are also available for users who are interested in using ASCII files.

SURVEY PERSONNEL NIS STAFF

I. NIS Core Group Staff (8 Persons)

Mr. Hou Taing Eng	Director of NIS
Mr. San Sy Than	Vice Director of NIS
Mr. Khieu Sary	Director of Department
Mr. Heang Kanol	Deputy Director of Department
Ms. Hang Lina	Deputy Director of Department
Ms. Tong Chay Rine	Deputy Director of Department
Mr. Saint Lundy	Vice Bureau Chief
Mr. Kang Siphana	Bureau Chief

II. Field Staff

1. NIS Staff (65 Persons)

Mr. Sarin Prasith	Mr. Sim Sam Ath
Mr. Phok Sophea	Mr. Nguon Vanna
Mr. Lach Chhoeum	Mr. Seung Kear
Mr. Chhoy Sokha	Mr. Tan Kantol
Mr. Mak Huch	Mr. Preab Yorn
Mr. Reun Sothea	Mr. Chey Nath
Ms. Chun Phally	Mr. Hor Sarin
Mr. Khin Bunna	Mr. Khem Khy
Ms. Sok Chanthet	Mrs. Tho Sam Chin
Mr. Bun Tha	Mr. Vann Khan
Mr. Sok Kosal	Mr. Tun Eau
Mr. Yi Sophal	Mr. Yip Thavrin
Mr. Hem Rak Sa	Ms. Pol Sophea
Mr. Yi Sophany	Mr. Seung Heng
Mr. Lay Sopheat	Ms. Chuon Serey Rath
Ms. Ty Chan Kanha	Mr. Mao Saron
Ms. Khieu Madary	Ms. Kong Srey Ny
Ms. San Sokhamal	Ms. Nuth Srey Touch
Mr. Sum Vansan	Mr. Khuon Sithana
Mr. Savang Savannarith	Mr. Louk Sam Phis
Mr. Hun Chan Diner	Mr. Yuos Samrith
Mr. Men Sam On	Mr. Khin Song
Ms. Chhin Phearum	MRs. Ouk Samasathy
Mr. Em Sam Nga	Mr. Vong Sina
Mr. Sim Ly	Mr. Tea Vanna
Mr. Tuy Nareth	Mr. Nuth Sok Saoroeun
Mr. Lenh Heang	Mr. Hy Kimkry

Mr. Lmot Samkol
Mr. Yim Sothea
Mr. Lay Chhan
Mr. Chan Sarim
Mr. Mech Kanthul
Mr. Uch Soeurn

Mr. Sou Kim Prithy
Mr. Nim Sao Mony
Mr. Vann Men
Mr. Oeur Sophal
Mr. Lean Eang

2. Ministry of Planning Staff (67 Persons)

Mr. Phan Nang
Mr. Chen Sao
Mr. Mam Chhor Vireak
Mr. Samreth Leakhena
Mr. Mr. Cheng Ratha
Mr. Tith Sovann
Mr. Kim Chantharith
Mr. Mam Borath
Mr. Kem Vibol
Mr. Mean Thavreak
Mr. Loun Savuth
Mr. Ying Chim
Mr. Kruoch Say
Mr. Lay Pharin
Mr. Keo Ouly
Ms. Ang Kanika
Ms. Seoung Sorsocheatta
Mr. Neth Saroeun
Mr. Lay Sarith
Mr. Sith Chea Ay
Mr. Sim Lay
Mr. Ly Sam Aun
Ms. Soth Sithon
Ms. Hun Phany
Ms. Nhem Srey
Ms. Hor Meakear
Ms. Um Phary
Mr. Pen Sam On
Mr. Hoeung Sophal
Mr. Nuth Chea
Mr. Kheng Sam Bath
Mr. Chap Polvath
Mr. Pal Muon
Mr. Sum Serey Vuth

Mr. Suon Chuon
Mr. Eang Ritheany
Mr. Ky Long
Mr. Leng Kheang
Mr. Yem Sophearum
Mr. Sem Veasna
Mr. Ith Chhonly
Mr. Leang Visal
Mr. Yan Chum Nith
Mr. Nim Sitha
Mr. Vy Heang
Mr. Teang Rann
Mr. Pao Cheang An
Ms. Chou Putheany
Ms. Chun Chhavy
Mr. Ly Soley
Mr. Sum Neang
Mr. Lim Vutha
Mr. Hum Pisal
Mr. Thvi Tevin
Mr. Min thy
Mr. Long Sareth
Ms. Mao Sophon
Ms. Sar Putheany
Mr. Chin Ouch
Ms. Long Forsavy
Mr. Han Danin
Mr. Sar Phuong
Mr. Keo Mony Angkea
Mr. Ly Vuthy
Mr. Po Mao
Mr. Duch Chanroeun
Mr. Chuon Nearin

3. Provincial Staff (79 Persons)

Mr. Som Sokhann
Ms. Throeung Sothy

Mr. Yim Rath
Mr. San Sopath

Mr. Sek Samon
Mr. Chan Leng
Mr. Mak Phearum
Mr. Heng Vibol
Mr. Mak Kim San
Mr. Im Thearith
Mr. Chhuon Navy
Mr. Mey Sophon
Mr. Phall Bon
Mr. Svay Sam Nang
Mr. Neang Saroeun
Mr. Sam Lors
Mr. Som Sam Ol
Mr. Sok Teang
Mr. Um Ry
Mr. Choeurng Sarath
Mr. Mr. Sek Yorn
Ms. Say Phally
Mr. Sem Saroeun
Mr. Muong Sopheap
Mr. Hou Nhim
Mr. Puong Nakry
Mr. Mr. Ma Saroeun
Mr. In Vannorin
Mr. Mr. Yim Kosal
Mr. In Kim Sear
Mr. Men Rith
Mr. Sin Sam Nang
Mr. Tun Sovanny
Mr. Kong Savatha
Mr. Mam Sothy
Mr. Ou Chheng Loch
Mr. Ou Sinay
Mr. Eng Nareth
Mr. Mao Chorn
Mr. Gnek On
Mr. Sy Ve
Mr. Yim Oeun

Mr. Tith Sarath
Ms. Lam Roskunthea
Mr. Mao Vantheoun
Mr. Nop Phinly
Mr. Soeun Vithya
Mr. Kim Chan Dina
Mr. Long Sary
Mr. Han Sam Ath
Mr. So Sary
Mr. Chhim Sam Ath
Mr. Em Vichet
Mr. Chorn Saphon
Mr. Ka Den
Mr. Kong Meng
Mr. Chum Oeum
Mr. Heng Sovann
Mr. Mean Samuon
Ms. Som Sariem
Mr. Lay Borith
Mr. Nob Chan Than
Mr. Pov Setha
Mr. Iv Kosal
Mr. Mr. Hee Sross
Mr. Chuon Chamroeun
Mr. So Kim Tan
Mr. Kim Phalla
Mr. Phauk Chan Setha
Mr. Thong Sam Ath
Mr. Kong Vansotha
Mr. Sar Saroeun
Mr. Tun Chantha
Mr. Tep Tha
Mr. Khim Sophearoon
Mr. Prak Tith
Mr. Chheang Chhay
Mr. Len Dara
Mr. Tes Phuoth

4. Manual Processors (39 Persons)

a. Manual Processing Supervisors (4 Persons)

Mr. Khieu Sary
Ms. Tong Chhay Rine

Mr. Heang Kanol
Mrs. Hang Lina

b. Manual Processors (35 Persons)

Mrs. Ouk Samasathy

Mrs. Um Phary

Ms. Chhin Phearum
Mr. Chhe Bo
Ms. Tho Sam Chine
Mr. Yuos Samrith
Mr. Tea Vanna
Mr. Oeur Sophal
Mr. Khin Bunna
Mr. Reun Sothea
Mrs. Long Forsey
Ms. Nhem Srey
Mr. Khin Song
Mr. Tuy Nareth
Mr. Em Samnga
Mr. Chan Sarim
Ms. San Sokhamal
Mr. Chheang Vantha
Mr. Lenh Heang

Ms. Hor Meakear
Mr. Nuth Sok Saoreoun
Mr. Men Sam Onn
Mr. Louk Sam Phis
Mr. Yip Thavarin
Mr. Ouch Soeum
Mr. Khuon Sithana
Mr. Him Kim Kry
Ms. Sar Putheavy
Mr. Vann Khan
Ms. Hun Phany
Mr. Lay Chhan
Mr. Chey Nath
Mr. Vong Sina
Mr. Lay Sophat
Mr. Mak Huch

5. Data Processors (33 Persons)

a. Data Processing Supervisors (3 Persons)

Mr. Saint Lundy
Mr. Ker Bopha

Mr. Kang Siphanara

b. Data Processors (30 Persons)

Mr. Sim Ly
Mr. Lean Eang
Mr. Sok Kosal
Mrs. Uon Len
Mr. Hok Narin
Mr. Bun Tha
Mr. Meng Kim Hor
Mr. Sin Serey Vuth
Ms. Chuon Sereyroth
Mrs. Nuth Srey Touch
Mr. Mech Kanthul
Ms. Sok Chanthet
Mr. Sum Vansan
Ms. Kong Srey Ny
Mr. Tun Eau

Mr. Sou Kim Prithy
Mr. Yim Sothea
Mr. Chhuon Sothy
Ms. Khieu Madary
Mr. Sok Borith
Ms. Ty Vuthy
Mr. Oum Det
Mr. Nim Sao Mony
Mr. Mao Saron
Mrs. Ty Chankanha
Mr. Lim Penh
Ms. Chun Phally
Mr. Khem Khy
Ms. Pol Sophea
Mr. Tan Kantol

SURVEY PERSONNEL PROJECT STAFF

Mr. R. B. M. Korale	Senior Statistics Adviser
Prof. Nikhilesh Bhattacharya	Social Statistics Consultant
Prof. Anil Deolalikar	Questionnaire Consultant
Mr. Jerrold Huguet	Social Statistics Consultant
Mr. Kwok Kwan Kit	Sampling Consultant
Mr. D. Amarasinghe	Field Operation Specialist
Mr. S. A. S. Bandulasena	Computer Programming Specialist
Mr. D. C. A. Gunawardena	Survey Data Analysis Specialist
Mr. Tan Sam Bon	Computer Programming Specialist
Mr. Uttam N. Malla	Social Statistics Specialist
Mr. E. A. G. S. Perera	Computer Programming Specialist
Mr. Nhem Sam Ol	Administrative Assistant
Mr. Em Pon Nara	Project Driver

ANNEX F

SURVEY QUESTIONNAIRES

Royal Government of Cambodia
 National Institute of Statistics
 Ministry of Planning
 Phnom Penh

CAMBODIA SOCIO - ECONOMIC SURVEY 1997
 LISTING OF HOUSEHOLDS IN THE VILLAGE

CONFIDENTIAL
 All information collected in this survey is strictly confidential and will be used for statistical purposes only

I. IDENTIFICATION INFORMATION	II. INTERVIEW INFORMATION
1. PROVINCE/CITY : _____	1. DATE OF LISTING : ____ / ____ / 97; ____ / ____ / 97
2. DISTRICT/KHAN : _____	2. DATE OF SUPERVISION : ____ / ____ / 97; ____ / ____ / 97
3. COMMUNE/SANKAT : _____	3. INTERVIEWER'S NAME : _____ SIGNATURE : _____ DATE _____
4. VILLAGE/MONDOL : _____	4. SUPERVISOR'S NAME : _____ SIGNATURE : _____ DATE _____
5. URBAN (1)/RURAL (2) : _____	5. REMARKS : _____
6. SERIAL NO. OF SELECTED VILLAGE: _____	6. PAYMENT DETAIL : _____
7. TOTAL NO. OF HOUSEHOLDS REPORTED BY VILLAGE LEADER: _____	

III. DATA PROCESSING INFORMATION

For Central Office Use Only

Manual Data Processing

Name :	Batch Name :	Shift Number :	Payment Detail :
Signature :	Signature :	Signature :	
Date :	Date :	Date :	

Computer Data Processing

Diskette Number	Batch Name	Shift Number
Data Entry	Key Verification	Modification
Name	Name	Name
Signature	Signature	Signature
Date	Date	Date
Approved by	Approved by	Approved by

IV. HOUSEHOLD INFORMATION

PROVINCE

DISTRICT

COMMUNE

VILLAGE

U/R

NO. OF

SEGMENT

SEGMENTS NO. SELECTED

Line No.	BLDG Serial Number	Housing Unit Serial Number	Household Serial Number	Name of Household Head	Address	Number of Household Members			Principal Economic Activity of the Building/Premises/ Household	For Sample Section	Remarks *	
						Total	Male	Female				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
01												
02												
03												
04												
05												
06												
07												
08												
09												
10												
11												
12												
13												
14												
15												
16	Page Total		Total Household	Population								

* Col. 13 : Identify the households with any of the following persons with the code given to them by inserting the code in the remarks column.
 1=Village leader 2= Health worker/Pharmacist 3= Head master/ Teacher 4= Retail shop keeper/Market Vendor

CSES FORM 1



CONFIDENTIAL

All information collected in this survey is strictly confidential and will be used for statistical purposes only

**Royal Government of Cambodia
Ministry of Planning
National Institute of Statistics**

CAMBODIA SOCIO- ECONOMIC SURVEY 1997

VILLAGE QUESTIONNAIRE

<i>A. To be completed by Supervisors before interview</i>	<i>Enter Code</i>	
Province/City		
District/Khan		
Commune/Sangkat		
Village/Mondol		
Urban (=1)/Rural(=2)		
Serial no. of selected village		

<i>B. To be completed by Interviewer</i>	
Name of persons Interviewed :	<u>Name</u> <u>Position</u>
1.	
2.	
Date of Initial Interview (1997)	_____ (month) _____ (day)
Interviewer's Name	_____
Interviewer's Signature	_____
<i>C. To be completed by Supervisor after checking completed questionnaires</i>	
Date Checked by Supervisor (1997)	_____ (month) _____ (day)
Date of Re-interview (if necessary) (1997)	_____ (month) _____ (day)
Supervisor's Name	_____
Supervisor's Signature	_____

I. DEMOGRAPHIC INFORMATION

1. How many households live in this village? _____ as at _____ month _____ year
2. How many people live in this village? _____ persons as at _____ month _____ year
- 3.1 Of these, how many are below 18 years? as at _____ month _____ year

Total	Boys	Girls

- 3.2 Of these, how many are 18 years or more? as at _____ month _____ year

Total	Men	Women

4. What are the principal ethnic groups represented in this village? (List in order of importance. Enter Code)

First	Second	Third	Fourth

(Ethnic Codes: 1=Khmer, 2. Cham, 3=Vietnamese, 4= Chinese, 5=Thai, 6=.Khmer ethnic minorities, 7=Other (specify))

5. Since 1992 (that is, five years ago), have more new people moved to your village, or have there been more people that moved out of your village? (Encircle Code)
 1. More arrivals
 2. More departures
 3. About the same of both
 4. No arrivals or departures

II. ECONOMY AND INFRASTRUCTURE

6. What are the major income earning activities of the people of this village?

In order of importance enter upto three (3) codes ---->>

--	--	--

(Codes: 1=Agriculture, 2. Forestry , 3=Fishing, 4=.Livestock , 5=Manufacturing , 6=Craft/artisan, 7=Construction, 8=Commerce, 9=Transport, 10=Service, 11=Other (Specify))

7. What is the total area of agricultural land available in this village? _____ hectares
- 7.1 Of which the area of paddy land is ? _____ hectares
8. How much of total agricultural land is irrigated? _____ hectares
- 8.1 Of which the area of irrigated paddy land is ? _____ hectares
9. Do you think that life for the people of this village is better or worse than it was five years ago? (Encircle Code)
 1. Better off
 2. Worse off
 3. No change (>>Q11)

- 10 Why? _____ (Enter Code)

(Codes: 1=Changes in agricultural policies, 2=Expansion in nonagricultural employment, 3=Weather changes, 4= Improvement in infrastructure including road access 5= Natural disaster, 6=inflation, 7=Changes in access to medical care, 8=Changes in access to other social services, 9=War, civil strife, 10 =Cessation of war, civil strife, 11=Other (specify))

11. Does a motorable road enter this village? (Encircle Code)

1. Yes (>>Q13) 2. No

12. How far from this village is the nearest motorable road? _____ kms.

13. Is the nearest road to this village impassable during certain times of the year? (Encircle Code)

1. Yes 2. No (>>Q15)

14. For how long is the road usually impassable during the year? _____ days

15. Is the village accessible by water (i.e., river or canal)? (Encircle Code)

1. Yes 2. No

16. Approximately what proportion of households in this village have electricity _____ %

17. Do any households in this village have piped water? (Encircle Code)

1. Yes 2. No (>> Q19)

18. Approximately what proportion of households in this village have piped water _____ %

19. What is the major source of drinking water for most people in this village during the dry season?
 _____ (Enter Code)

(Codes: 1=Private tap, 2=Public tap, 3=Deep well with pump, 4=Shallow well lined, 5=Shallow well unlined, 6=Intermittent stream, 7=River, 8=Pond, 9=Lake/reservoir, 10=Other (Specify))

20. Are there the following amenities in this village?

Line No.	Amenity/service	Is there a ... in the village? 1=Yes >> next line 2=No (Enter Code)	How far is the nearest ... from this village? (Kilometres)
(1)	(2)	(3)	(4)
01	Food shop or restaurant		
02	Bank or loan credit unit		
03	Agricultural extension worker		
04	Permanent market		
05	Shop selling manure and agro-chemicals		

21. What is the distance to the district town? _____ kms.

22. What is the distance to the provincial town? _____ kms.

23. What kinds of government (or NGO) development projects presently exist in this village? (Encircle each appropriate code)

1. Agricultural Development (e.g., irrigation, pisciculture)
2. Infrastructure Development (e.g., road development)
3. Education
4. Other (Specify) _____
5. No Project exists

24. Is there any large industrial or commercial enterprise (e.g., factory or company employing more than 10 persons) in this village or within 10 kms. of this village? (Encircle Code)

1. Yes
2. No

III. EDUCATION

25. Is there a primary school in this village? (Encircle Code)

1. Yes (>>Q27)
2. No

26. How far away is the nearest primary school to this village? _____ kms. (0.0)

27. How far away is the primary school preferred by most of the village children? _____ kms. (0.0)

28.1 How do most of the children of this village go to this primary school? (Encircle code)

1. Foot
2. Bicycle
3. Private motor-bike
4. Public transport
5. Other (Specify) _____

28.2 How long does it typically take for children of this village to reach there? (Time one way) _____ hours
_____ minutes

(Ask the following questions for all primary schools in this village)

School Information	School 1	School 2	School 3
(1)	(2)	(3)	(4)
29. What is the name of the school?			
30. Is this school public or private? (1=Public, 2=Private) (Enter Code)			
31. In what year was this school started?			
32. What is the highest grade (class) taught in this school?			
33. How many teachers are there in this school?			
34. How many of these teachers have had teacher training?			
35. How many pupils are enrolled at the beginning of the current school year?			
36. What is the average school fees per student per year? (Riels)			
37. Does this school provide text books to students free of charge or must they pay for books? (1=Free, 2=Some students must pay, 3=All must pay) (Enter Code)			
38. Do all the students get enough text books for their use? (1=No, 2=Some, but not enough, 3=Enough) (Enter Code)			

54. What are the major problems with lower secondary schooling in this village?

(List the three most important issues, in order of their importance.)

(Read out a few possible answers only if respondent does not respond.)

- a. Most important problem _____ (use codes below)
 b. Second most important problem _____
 c. Third most important problem _____

1=No school

3=Poor school building (e.g., no roof)

5=School budget constraint

7=Not enough supplies

9=not enough teachers

11=Other (specify)

2=Too far

4=Living standard of teachers is too low

6=Not enough places/desks

8=Poor quality of teachers

10=classes not held regularly

55. Is there an upper secondary school in this village? (Encircle Code)

1. Yes (>>Q57) 2. No

56. How far away is the nearest upper secondary school to this village? _____ kms. (0.0)

57. How far away is the upper secondary school which most of the children of this village attend? _____ kms. (0.0)

58.1 How do most of the children of this village go to this upper secondary school? (Encircle code)

1. Foot 2. Bicycle
 3. Private motor-bike 4. Public transport
 5. Other (Specify) _____

58.2 How long does it typically take for children of this village to reach there? (Time one way) _____ hours
 _____ minutes

(Ask Questions 59 to 68 for the **upper secondary school** in this village with maximum enrolment.)

59. What is the name of the upper secondary school in this village? _____

60. Is this school public or private? (Encircle Code)

1. Public 2. Private

61. In what year was this school started? _____

62. What is the highest grade (class) taught in this school? _____

63. How many teachers are there in this school? _____

64. How many of these teachers have had teacher training? _____

65. How many pupils are enrolled in the school at the beginning of the current school year? _____

66. What is the average school fees per student per year? (Riels) _____

67. Does this school provide text books to students free of charge or must they pay for books? (Encircle Code)

1. Free 2. Some students must pay 3. All must pay

68. Do all the students get enough text books for their use? (Encircle Code)

1. No 2. Some, but not enough 3. Enough

69. What are the major problems with upper secondary schooling in this village?

(List the three most important issues, in order of their importance.)

(Read out a few possible answers only if respondent does not respond.)

- a. Most important problem _____ (use codes below)
- b. Second most important problem _____
- c. Third most important problem _____

- 1=No school
- 3=Poor school building (e.g., no roof)
- 5=School budget constraint
- 7=Not enough supplies
- 9=Poor job prospects
- 11=Other (specify)
- 2=Too far
- 4=Living standard of teachers is too low
- 6=Not enough places/desks
- 8=Poor quality of teachers
- 10=Financial problems for family

70. Is there, or has there been, an adult literacy program in this village? (Encircle Code)

- 1. Yes
- 2. No (>>Q72)

71. In what year was this program launched? _____

IV. HEALTH

72. Is there a... in this village? 1=Yes (>>Q74) 2=No	Code	73. How far away is the nearest... (Kilometers)	74. In what year did this... begin operation or practice? (Year)
(1)	(2)	(3)	(4)
1. Khum clinic?			
2. Private clinic?			
3. Pharmacy or drug store?			
4. District health center?			
5. Provincial hospital?			
6. Private hospital?			
7. Doctor?			
8. Nurse?			
9. Trained midwife?			
10. Traditional Birth Attendant (TBA)?			
11. Khru Khmer?			
12. Other traditional healer?			
13. Other? (specify)			

75. Are there any other health services or personnel in this village that were not cited above? (Encircle Code)

- 1. Yes (Specify: _____)
- 2. No

76. What are the major health problems in this village?

(List the three most important issues, in order of their importance.)

(Read out a few possible answers only if respondent does not respond.)

a. Most important problem _____ (use codes below)

b. Second most important problem _____

c. Third most important problem _____

1=Malaria

3=Child malnutrition

5=Injuries/accidents

7=Diarrhoea

9=Leprosy

11=Other (specify)

2=Complications from childbirth

4=Adult malnutrition

6=Childhood diseases (measles, chicken pox etc.)

8=Respiratory diseases (e.g., chronic cough, tuberculosis)

10=Dengue

77. What are the major problems with the health services for the people in this village?

(List the three most important issues, in order of their importance.)

(Read out a few possible answers only if respondent does not respond.)

a. Most important problem _____ (use codes below)

b. Second most important problem _____

c. Third most important problem _____

1=Lack of beds, equipment etc.

3=Poor quality of services

5=Health services are too expensive

7=Unsanitary health facilities

9=Other (specify)

2=Not enough medicines, drugs

4=No physician or qualified medical assistant available

6=Long distance to better quality care

8=Staff are unhelpful

78. Where do most of the women in this village give birth? (Encircle Code)

1. Their homes

2. Government hospital / clinic

3. Private hospital / clinic

4. Other (specify) _____

79. Has there been a child immunization campaign in this village within the last 12 months? (Encircle Code)

1. Yes

2. No

80. Has there been an anti-malaria or anti-hemorrhagic fever campaign in this village within the last 12 months? (Encircle Code)

1. Yes

2. No

81. Has there been an anti-leprosy campaign in this village within the last 12 months? (Encircle Code)

1. Yes

2. No

82. Has there been a campaign to educate mothers about health practices in this village within the last 12 months? (Encircle code)

1. Yes

2. No

V. RETAIL PRICES AND WAGES

83. Food prices

No.	Item	Description (Mark, Quality, Name, etc.)	Unit	Price (in Riels)		
				First observation	Second observation	Third observation
(1)	(2)	(3)	(4)	(5)	(6)	(7)
01	Ordinary paddy	Quality No.1, Neang Menh	kg			
02	Rice	Quality No.1, white, 3' cm long, Neang Menh	kg			
03	Broken rice	Quality No.2	kg			
04	Whole grain maize	Good quality, Red	kg			
05	Rice cakes, medium	Ansom, Pork cake, medium	1 cake			
06	Fermented rice noodles	Coil, Khmer	100 gms			
07	White rice/clear noodles	Fiber type	100 gms			
08	Phnum Pan	30 cm long	loaf			
09	Pork without fat	Pure meat	kg			
10	Fresh Beef	Quality No.1	kg			
11	Fresh Chicken	Quality No.1, dressed	kg			
12	Fresh Duck	Quality No. 1, dressed	kg			
13	Sea fish, small	Platou, 5-7 fish = 1 kg	kg			
14	Fresh water Mud fish	Large, 1 fish = 1 kg	kg			
15	Chicken egg	Fresh	piece			
16	Duck egg	Fresh	piece			
17	Peanuts	Raw seed, good quality	kg			
18	Mung bean	Good quality	kg			
19	Soy bean	Good quality	kg			
20	Mung bean sprouts	Short, fresh	100 gms			
21	Trakun	Good quality, medium size	Bundle			
22	Potatoes	Medium size	kg			
23	Sweet potatoes	Red, Medium size	kg			
24	Onions	White, medium size	kg			
25	Banana	Ripe, Namva, medium size	kg			
26	Papaya	Ripe, medium size, approx. 1 kg	1 unit			
27	Salt	Powder, white	kg			
28	Fish sauce	Quality No.1	liter			
29	Glutamate/MSG	Spoon brand, Thai	kg			
30	Sugar (Refined)	White, Quality No.1, Thai	kg			

No.	Item	Description (Mark, Quality, Name, etc.)	Unit	Price (in Riels)		
				First observation	Second observation	Third observation
(1)	(2)	(3)	(4)	(5)	(6)	(7)
31	Sweetened condensed milk	Lotus brand, 375 ml	tin/can			
32	Alcohol	Royal Whiskey, 750 ml.	bottle			
33	Rice wine	Good quality	Lt.			
34	Beer bottle	Angkor brand, 750ml	bottle			
35	Cigarettes	Local, Ara brand	pkt. (20)			
36	Pipe tobacco	Strong Fibrous	100 gms			

84. Nonfood prices

No.	Item	Description (Mark, Quality, Name, etc.)	Unit	Price (in Riels)		
				First observation	Second observation	Third observation
(1)	(2)	(3)	(4)	(5)	(6)	(7)
01	Kerosene		liter			
02	Gasoline		liter			
03	Detergent	Viso fab, Vietnam	kg.			
04	Bath soap	Lux, big, Thai	1 cake			
05	Tooth paste	Klaichet, small, Thai	tube			
06	Cotton netting	Quality No. 1, 0.8x1 m, Vietnam	meter			
07	Ready-made mosquito nets	Nylon, 2mx1.5m, Thai	piece			
08	Cotton cloth	Good quality, White, 1.2mx1m, Cam.	meter			
09	Synthetic cloth	Tetron, White, 1.2m x 1m, Japan	meter			
10	Shirts (ready-made)	Long, GQ, Size (M-L), Thai	piece			
11	Trousers (ready-made)	GQ, Size (27-33), Thai	piece			
12	Skirt (ready-made)	Long, Large, Thai	piece			
13	Sleeping mat	Red-K ok, 1.2x1.8m, Cam.	piece			
14	Sandals (plastic)	Quality No. 1, Medium size	pair			
15	Rain coat	Medium size, Vietnam	piece			
16	Light bulb	60 W, 220V, Thai	piece			
17	Porcelain rice bowl	Dia. 15-20 cm., Chinese	piece			
18	Aluminum saucepan	Medium size, Cam.	piece			

No.	Item	Description (Mark, Quality, Name, etc.)	Unit	Price (in Riels)		
				First observation	Second observation	Third observation
(1)	(2)	(3)	(4)	(5)	(6)	(7)
19	Plastic basin	Medium Size, Cam.	Piece			
20	Themos flask	Deer brand, medium size, china	piece			
21	Cement	Elephant, P600, Thai	kg			
22	Iron rod	1 cm diameter, Vietnam	kg			
23	Bicycle inner tube	Medium size, Cam	piece			
24	Bicycle tyre	Horse, Size 650, Cam	piece			
25	Paper for pupils	20 sheets with lines	sheaf			
26	Notebooks	100 ruled pages	piece			
27	Textbooks	for class one, 100 pages	1 copy			
28	Radio receiver	Ultra, 2 brand (AM, FM), China, 2 batteries of size AA	set			
29	Radio cassette player	SONY, 1 cassette, 60w, Singapore	set			

85. Medicine prices

No.	Item	Description (Mark, Quality, Name, etc.)	Unit	Price (in Riels)		
				First observation	Second observation	Third observation
(1)	(2)	(3)	(4)	(5)	(6)	(7)
01	Tetracycline		pill			
02	Ampicillin	250 mg., Russia	pill			
03	Penicillin	Thai	vial			
04	Aspirin	Korean	pill			
05	Vitamin C	Orange colour, 500m, Australia	100 pills			
06	Rifampicin	Korean	pill			
07	Co-trimoxazol	Korean	pill			
08	Paracetamol	Korean	pill			
09	ORS	Thai	packet			
10	Multi-Vitamin	Thai	pill			
11	Other _____					

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Royal Government of Cambodia
Ministry of Planning
National Institute of Statistics

CSES FORM 3

CAMBODIA SOCIO-ECONOMIC SURVEY 1997

CORE QUESTIONNAIRE FOR HOUSEHOLDS

<i>A. To be completed by supervisors before interview</i>		<i>B. To be completed by interviewer</i>	
Province/City	Enter code	Name of person interviewed	_____
District/Khan		Relationship to head of household	_____
Commune/Sangkat		Date of Initial Interview (1997)	____ (month) ____ (day)
Sample Village/Mondo		Interviewer's Name	_____
Urban (=1)/Rural (=2)		Interviewer's Signature	_____
Sample Reference Number			
Name of Household head			
Address (Location)			
(Enter house No., Street or other identification)			

C. To be completed by supervisors after checking completed questionnaire thoroughly

Supervisor's Name _____

Date Checked by Supervisor (1997) ____ (month) ____ (day)

Date of Re-interview (if necessary) (1997) ____ (month) ____ (day)

Supervisor's Signature _____

I. LIST OF HOUSEHOLD MEMBERS

The following questions should be asked of the head of household, spouse of the head of household, or of another adult household member, if both head and spouse are absent

1. Please provide the following information on all members usually residing in this household.

ID No.	Name of household member	Relationship to the head (use Relationship Codes below)	Sex (1=Male, 2=Female) (ENTER CODE)	What is _____'s date of birth?			What calendar are you using? 1. Western/Universal 2. Buddhist/Cambodian (ENTER CODE)	What is _____'s age in completed years? (Enter 98 if age is 98 or over)	Marital Status (use Marital Status Codes below)
				Day	Month	Year			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
CODES									
Relationship Codes (Col.3)		1=Head, 2=Spouse, 3=Son/daughter, 4=Stepchild/adopted child, 5=Parent, 6=Sibling, 7=Grandchild, 8=Niece/nephew, 9=Son/daughter-in-law, 10=Brother/sister-in-law, 11=Parent-in-law, 12=Other relative, 13=Servant, 14=Other non-relative including boarders							
Codes for Col. (7) - Year for Cambodian calendar		1= Rat/Mouse, 2= Ox, 3= Tiger, 4= Rabbit, 5= Dragon, 6= Snake, 7=Horse, 8= Ram/Sheep, 9= Monkey, 10= Rooster, 11=Dog, 12= Pig							
Marital Status Codes (Col.10)		1=Never married, 2= Currently married, 3= Widowed, 4= Divorced, 5= Separated							

PHNOM PENH COMMUNITY AND ECONOMIC SURVEY (PHNOM PENH CES) 2008



ID No.	Does person have any disability? 1=Yes, 2=No (Enter Code) If no, >> Col.(14)	If yes, what type of disability does person have? (use Disability Codes below)	Cause of disability (use Cause of Disability Codes below)	Where was _____ living exactly five years ago, that is, in June 1992? (ENTER "SAME" IN COL. 14 IF SAME DISTRICT, OTHERWISE SPECIFY NAME OF PROVINCE/DISTRICT) (ENTER "NA" IN COL. 14 FOR CHILDREN UNDER 5 YEARS OLD)			
				District (14)	Code (15)	Province (16)	Code (17)
(1)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							

CODES

Disability Codes (Col. 12)
 1=Amputation of one or more limbs, 2=Unable to use one or more limbs, 3=Blind, 4=Deaf, 5=Mute, 6=Mentally disturbed or retarded, 7=Permanent disfigurement, 8=Paralyzed, 9=Deaf and Mute, 10= Other multiple disabilities, 11=Other (Specify)

Cause of Disability Codes (Col.13)
 1=Congenital (i.e., since birth), 2=Due to war or conflict, 3=Due to land mine explosion, 4=Due to illness/disease, 5=Due to accident, 6=Other (Specify)

2. What is the ethnic origin of the household head? (Encircle Code)
 1. Khmer 2. Cham 3. Other local group 4. Chinese 5. Vietnamese 6. Thai 7. Other (Specify) _____

I D N U M B E R (from Col.(3))	ACTIVITY STATUS DURING PAST 7 DAYS (Contd.) Why was ___ not seeking work and/or not available for work during the past 7 days? (use Reason Codes below)	Has ___ ever been employed in the past? 1= Yes 2=No >> next person (Enter Code)	How many jobs did have in the past seven days? (Write Number)	How many hours did ___ work in the past 7 days? (Enter "0" If ___ did not work at all)	PRIMARY OCCUPATION				CO DE
					Under what type of employer did ___ work? (use Type of Employer Codes below)	What was ___ 's primary occupation during the past 7 days? (Write Specific Job)	In what kind of economic activity, like agriculture, manufacturing, construction, trade or service did ___ work in the past 7 days? (Write Industry)		
(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)		
CODES									
Reason Codes (Col. (12))		1=Believes no work is available, 2=Awaiting results of job applications etc., 3=Disabled, 4=Too old/infirm/retired, 5=Student, 6=Housekeeping, 7= Other (specify)							
Type of Employer Codes (Col.(16))		1=Government, 2=State enterprise, 3=Joint venture, 4=Private, 5=Foreign Govt, international organization, 6= NGO, 7=Self-employed, 8=Other (Specify)							



PRIMARY OCCUPATION (Contd.)		SECONDARY OCCUPATION																		
ID NUMBER (from Col.(3))	What was _____'s employment status? (use Employment Status Codes below)	(20)	How much was _____'s average monthly wages from the primary job? (Enter Amount in Riels)	(21)	How much did _____ earn from this activity last month? (Enter Amount in Riels)	(22)	How many hours did _____ work in the past 7 days? (Enter "0" if did not work at all)	(23)	Under what type of employer did _____ work? (Use Type of Employer Codes below)	(24)	What was _____'s secondary occupation during the past 7 days? (Write Specific Job)	(25)	In what kind of economic activity, like agriculture, manufacturing, construction, trade or service did _____ work in the past 7 days? (Write Industry)	(26)	What was _____'s employment status? (use Employment Status Codes below)	(27)	How much was _____'s average monthly wages from the secondary job? (Enter Amount in Riels)	(28)	How much did _____ earn from this activity last month? (Enter Amount in Riels)	(30)
(19)																				

CODES

Type of Employer Codes (Col.24)
 1=Government, 2=State enterprise, 3=Joint venture, 4=Private, 5=Foreign Govt, international organization, 6=NGO, 7=Self-employed, 8=Other (Specify)

Employment Status Codes (Col.20)
 1=Paid employee, 2=Employer, 3=Own-account worker/self-employed, 4=Unpaid family worker, 5=Other (specify)

V. HOUSING AND ENVIRONMENT

(The following questions should be asked of the head of household, spouse of the head of household, or of another adult household member, if both head and spouse are absent.)

7. What is the floor area of your house/dwelling? _____ square meters
8. What is the year of construction of your house? _____
9. What is the primary construction material of the outer wall of your house? _____ (ENTER CODE)
- Outer Wall Codes: 1=Bamboo, Thatch, 2=Wood or logs, 3=Plywood, 4=Concrete, brick, stone, 5=Galvanized iron or aluminium, 6=Fibrous cement, 7=Makeshift, salvaged or improvised materials, 8=Other (Specify)
10. What is the primary construction material of the roof of your house? _____ (ENTER CODE)
- Roof Codes: 1=Thatch, 2=Tiles, 3=Fibrous cement, 4=Galvanized iron or aluminium, 5=Salvaged materials, 6=Mixed but predominantly made of galvanized iron/aluminium, tiles or fibrous cement, 7=Mixed but predominantly made of thatch or salvaged materials, 8=Concrete, 9=Plastic sheet, 10=Other (Specify)
11. What is the primary construction material of the floor of your house? _____ (ENTER CODE)
- Floor Codes: 1=Earth, clay, 2=Wood, bamboo planks, 3=Cement, 4=Parquet, polished wood, 5=Polished stone, marble, 6=Vinyl, 7=Ceramic tiles, 8=Other (Specify)
12. What is your household's main source of lighting? _____ (ENTER CODE)
- Lighting Source Codes: 1=Publicly-provided electricity, 2=Privately-generated electricity, 3=Battery, 4=Pump lantern, 5=Kerosene lamp, 6=Candles, 7=Other (Specify)
13. What is your household's main source of drinking water? _____ (ENTER CODE)
- Drinking Water Source Codes: 1=Piped in dwelling, 2=Public tap, 3=Tubed/piped well or borehole, 4=Protected dug well, 5=Unprotected dug well, 6=Pond, river or stream, 7=Rainwater, 8=Tanker truck, vendor or otherwise bought, 9=Other (Specify)
14. What is the distance to the nearest drinking water source? _____ kilometers _____ meters
15. What toilet facility does your household have? _____ (ENTER CODE)
- Toilet Facility Codes: 1=Connected to sewerage, 2=Septic tank, 3=Pit latrine, 4=Other without septic tank, 5=Public toilet, 6=None, 7=Other (Specify)
16. What type of fuel does your household use for cooking? _____ (ENTER CODE)
- Fuel Codes: 1=Firewood, 2=Charcoal, 3=Liquefied petroleum gas, 4=Kerosene, 5=Publicly-provided electricity, 6=Privately-generated electricity, 7=None, 8=Other (Specify)

VI. HOUSEHOLD CONSUMPTION EXPENDITURES AND MAIN SOURCES OF INCOME

(The following questions should be asked of the head of household, spouse of the head of household member, if both head and spouse are absent.)

17. What was the total value of food, beverages and tobacco consumed in your household during the previous week?

No.	Food item	Value of consumption out of		
		purchase (Riels)	Own produce, wages in kind, gifts, free collections (imputed value) (Riels)	Total consumption (Riels)
(1)	(2)	(3)	(4)	(5) = (3) + (4)
1	Cereals (rice, bread, corn, wheat flour, rice flour, rice cakes, noodles, biscuits, etc.)			
2	Fish (fresh fish, salted and dried fish, canned fish, shrimp, prawn, crab, etc.)			
3	Meat and poultry (beef, buffalo, mutton, lamb, pork, chicken, ducks, mammals including liver, spleen, dried beef)			
4	Eggs (chicken eggs, duck eggs, quail eggs, fermented/salted eggs, etc.)			
5	Dairy products (fresh milk, condensed milk, powdered milk, ice cream, cheese, other dairy products, etc.)			
6	Oil and fats (rice bran oil, vegetable oil, pork fat, butter, margarine, coconut/frying oil, etc.)			
7	Fresh vegetables (trakun, onion, shallot, cabbage, spinach, carrot, beans, chili, tomato, etc.)			
8	Tuber (cassava, sweet potato, potato, taro, sugar beet, etc.)			
9	Pulses and legumes (green gram, dhall, cowpea, bean sprout, other seeds, etc.)			
10	Prepared and preserved vegetables (cucumber pickles, other pickles, tomato paste, etc.)			
11	Fruit (banana, orange, mango, pineapple, lemon, papaya, durian, watermelon, grape, apple, canned and dried fruits, etc.)			
12	Other produce (coconut, cashew nut, lotus nut, peanut, gourd seed, other nuts)			
13	Sugar, salt and spices (sugar, jaggery, salt, chocolate, candy, coriander, red pepper spice, garlic, ginger, soy sauce, fish sauce, monosodium glutamate, etc.)			
14	Tea, coffee, cocoa			
15	Non-alcoholic beverages (canned soft drink, bottled soft drink, mineral water, fruit juice, fruit syrup, etc.)			
16	Alcoholic beverages (beer, wine, whisky, scotch, other distilled spirits)			
17	Tobacco products (cigarettes, mild tobacco, strong tobacco, etc.)			
18	Other food products (fried insects, peanut preparation, flavoured ice, ice, other food products)			
19	Food taken away from home (meals at work, school, restaurants, snacks, coffee, soft drinks purchased outside home)			
20	Prepared meals bought outside and eaten at home			
				Total

18. What was your household's expenditure on the following items during the indicated time period?

No	Item	Time period	Value (in Riels) of		
			In-cash expenditure	In-kind exp. or gifts received	Total expenditure
(1)	(2)	(3)	(4)	(5)	(6) = (4)+(5)
1	Clothing and footwear (tailored clothes, ready-made clothes, underwear, baby clothes, baby blanket, hat, shoes etc.)	Last 6 months			
2	House rent (house rent, rental value of rent-free housing, rental value of owner-occupied housing, hotel charges) and house maintenance and repair	Average per month			
3	Water charges	Last 6 months			
4	Fuel and power (kerosene, candles, electricity, LPG, etc.) excluding wood fuel	Last 6 months			
5	Wood fuel (firewood, charcoal)	Last 6 months			
6	Furniture, furnishing and household equipment and operation (curtain, mosquito net, household appliances, cooking utensils, light bulbs, soap and detergent, servant's salary etc.)	Last 12 months			
7	Medical care (doctors' fees, other medical services, drugs, hospital charges, other medical supplies, etc.)	Last 6 months			
8	Transportation and communication (personal transport equipment, operation of transport equipment, maintenance and repair of equipment, fees for public transport, postage stamps, fax and telephone charges, moving fee, driving lesson, etc.)	Last 1 month			
9	Recreation (entertainment services, recreational goods and supplies, musical instruments, newspapers etc.)	Last 12 months			
10	Education (school fees, textbooks, private tutoring charges, etc.)	Last 12 months			
11	Personal care (soap, toothpaste, razor, sanitary napkins, haircut, manicure, etc.)	Last 1 month			
12	Personal effects (costume/gold jewellery, handbags, wallets, wristwatch, umbrella)	Last 12 months			
13	Miscellaneous items (special household occasions, rituals, gifts and charity, insurance premium, real estate tax, repayment of debts, etc.)	Last 12 months			

19. What was your household's main source of income during the previous 12 months? _____ (ENTER CODE)

1=Wages and salaries, 2=Agriculture, 3=Livestock and fisheries, forestry, 4= non-agricultural enterprise, 5=Rent of land, house or other assets, 6=Transfers including pensions and remittances, 7=Other (specify) _____

20. Was your household's consumption expenditure during the last 12 months unusually lower, higher, or no different from its normal annual expenditure?(ENCIRCLE CODE)

1. Lower (>> Q21) 2. Higher (>> Q22) 3. No different (>> Q23)
21. What was the reason for your household's consumption last year to be lower than usual? _____ (ENTER CODE)

1=Natural disaster (floods, drought), 2=Loss of jobs, 3= Business loss/fall in income, 4=Loss of enterprise, 5=Other (specify)

22. What was the reason for your household's consumption last year to be higher than usual? _____ (ENTER CODE)

1=Good rainfall (and good crop), 2=Addition of earning member, 3=New job, 4=New enterprise, 5=Gift and bequest/inheritance, 6=Purchase of major consumer durable, 7=Ceremonial occasions, 8=Other (specify)

VII. HOUSEHOLD ASSETS AND LIABILITIES

(The following questions should be asked of the head of household, spouse of the head of household, or of another adult household member, if both head and spouse are absent.)

23. Does the household own or occupy any residential lands or farm lands? (Encircle Code)

- 23.1 Residential lands 1. Yes 2. No 23.2 Farm lands 1. Yes 2. No

24. If you own or occupy any residential lands or farm lands please provide the following information.

	Residential lands/buildings		Farm Lands	
	area (square meters)	market value (Riels)	area (square meters)	market value (Riels)
24.1 Owned with title	(1)	(2)	(3)	(4)
24.2 Ownership unsettled/ held for free				
24.3 Rented/ leased				

25. How many animals does your household own? (Enter Number)

Animal	(1)	(2)	(3)	(4)	(5)
Pigs		Buffalo	Cow	Poultry (chicken, ducks, etc.)	Other (specify)
Number					

26. Does your household own the following? (1=Yes, 2=No) (ENTER CODE)

Item	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Bicycle		Cart	Boat	Motorcycle or Scooter	Radio/Cassette recorder	Television set	Car	Truck/van	Tractor/other agricultural equipments
Code									

27. Does your household have its own pond for growing fish (for fish or shrimp culture)? (Encircle Code)

1. Yes 2. No

28. Does your household have any outstanding loans or debts? (Encircle Code)

1. Yes 2. No (> Q29)

Loan No	In which year was the loan originally taken out? (use 4-digit years, e.g., 1994)	From whom did you obtain the loan? (use Source of Loan Codes below)	What was the primary purpose for which you borrowed the money? (use Purpose of Borrowing Codes below)	What was the total amount borrowed initially? (Riels)	How much of the amount in Col. (5) is still to be repaid, including interest? (Riels)
(1)	(2)	(3)	(4)	(5)	(6)
1					
2					
3					
4					
5					
6					

CODES

Source of Loan Codes (Col.(3))	1=Relatives, friends, 2=Money lender, 3=Trader, 4=Landlord, 5=Employer, 6=Government bank, 7= Other bank, 8=NGO, 9=International agency, 10=Other (specify)
Purpose of Borrowing Codes (Col.(4))	1=Agricultural production, 2=Investment in business, 3=Household normal consumption needs, 4=Emergency needs- death or sickness, 5=Marriage or other ceremonies, 6=Purchase/improvement of dwelling, 7=Purchase of consumer durables, 8=Other (specify)

CONFIDENTIAL

All information collected in this survey is strictly confidential and will be used for statistical purposes only.

Royal Government of Cambodia
Ministry of Planning
National Institute of Statistics

CSES FORM 4

CAMBODIA SOCIO-ECONOMIC SURVEY 1997

SOCIAL SECTOR HOUSEHOLD MODULE

A. To be completed by supervisors before interview		Enter code	B. To be completed by interviewer	
Province/City			Name of person interviewed	_____
District/Khan			Relationship to head of household	_____
Commune/Sangkat			Date of Initial Interview (1997)	____ (month) ____ (day)
Sample Village/Mondol			Interviewer's Name	_____
Urban(=1)/Rural(=2)			Interviewer's Signature	_____
Sample Reference Number				
Name of Household head	_____			
Address (Location)	_____			
(Enter house No., Street or other identification)	_____			

C. To be completed by supervisors after checking completed questionnaire thoroughly

Supervisor's Name	_____
Date Checked by Supervisor (1997)	____ (month) ____ (day)
Date of Re-interview (if necessary) (1997)	____ (month) ____ (day)
Supervisor's Signature	_____

C. Distance to School

3. (Please ask the following question for each level of school currently attended by one or more children in the household)

If your children currently attend the following types of institutions, from your home, what is the:

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Pre-school	Primary school (classes 1-5)	Lower secondary school (classes 6-8)	Upper secondary school (classes 9-12)	Technical and vocational institution	College or university	
1. Distance (kilometers 0:0)							
2. Type of transport used (use Transport Type Codes below)							
3. Travel time, one way (minutes)							
4. Travel cost, one way (Riels)							
CODES							
Transport Type Codes (row 2)	1=walk; 2=bicycle; 3=boat; 4=cyclo; 5=motorbike; 6=bus; 7=car; 8=other (specify)						

B. Hospitalization

5. (This question refers to hospitalizations during the past 12 months by any household member, apart from the past 4 weeks. In cases where household members who were hospitalized during the past 4 weeks, as reported in Q4, were also hospitalized prior to that time, the information on their prior hospitalization should be provided below. For these persons, the information provided in columns 4-7 below should refer only to the additional period hospitalized prior to the past 4 weeks.)

[In addition to information you have already provided about hospitalization during the past 4 weeks,] were any household members hospitalized at any other time during the past 12 months? (Encircle Code)

1. Yes 2. No (>> Q7)

6. Please provide the following information about household members' [additional] hospitalizations during the past 12 months:

Name of person hospitalized	ID No. (Order No. from List of Household Members)	Where hospitalized (use Health Facility Codes below)	[Additional] number of days hospitalized during past 12 months	[Additional] out-of-pocket amount paid to hospital or clinic (includes consultations, treatment, surgery fees, food, medicines) during past 12 months (Riels)	[Additional] other out-of-pocket costs of hospitalization (for example, purchased medicines and medical supplies, gifts to providers, food, and transportation) during the past 12 months (Riels)	[Additional] amount for treatment or drugs reimbursed by employer or insurance (Riels)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.						
2.						
3.						
4.						
5.						
6.						
7.						
CODES						
Health Facility Codes (Col. 3)						
1=Khum clinic; 2=District health center; 3=Provincial hospital; 4=Central hospital; 5=Private hospital; 6=Other (specify)						

C. Distance to Health Providers

7. (Please ask the following question for each level of health facility.)

From your home to the [level of health facility], what is the type of transport usually used for a not critically ill person? What is the:

	Khum clinic	District health center	Provincial hospital	Pharmacy or drug seller	Private Clinic
	(1)	(2)	(3)	(4)	(5)
1. Distance (kilometers, 0.0)					
2. Type of transport used (use Transport Type Codes below)					
3. Travel time, one way (minutes)					
4. Travel cost, one way (Riels)					
CODES					
Transport Type Codes (Row 2)	1=walk; 2=bicycle; 3=cart; 4=boat; 5=cyclo; 6=motorbike; 7=bus; 8=car; 9=other (specify)				



IV. WATER AND FIREWOOD

(Please ask the following questions of the head of household or the spouse of the head, or of another adult household member, if both the head and spouse are absent.)

A. Water

10. Has any member in your household been usually fetching water during the past 12 months? (Encircle Code)

- 1. Yes
- 2. No (> Q13)

11. Please answer the following questions.

Season	Did you fetch water during this season? 1=Yes, 2=No (Enter Code)	Was there a water shortage during this period? 1=Yes, 2=No (Enter Code)	How far did you need to go to fetch water in this season? (Kilometers 0.0)	How many times a day did members of your household go to collect water during this season?	How long did it take to collect water each time? (Round trip)		Where did you store water in this season? (Use Water Storage Codes below)
					Hours	Minutes	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dry (Nov. 96 to May 1997)							
Wet (June to Oct. 1996)							
CODES							
Water Storage Codes (Col. 8) 1= Earthenware pot, 2= Cement jar, 3= Cement/Concrete tank, 4= Plastic or metal container, 5=Other (specify)							

12. Who in the household are mainly responsible for collecting water? (Record in order of importance)

ID No. (Order No. from List of Household Members)	ID No. (Order No. from List of Household Members)	ID No. (Order No. from List of Household Members)

B. Firewood

13. Has any member in your household been *usually collecting* firewood for home use in the past 12 months? (*Encircle Code*)
1. Yes 2. No (>> Q18)
14. How far do you typically need to go to collect firewood? _____ kilometers (0.0)
15. How much time* do members of your household spend on collecting firewood during a typical month? _____ hours
 * (Add time spent by different members)
16. Who in the household are mainly responsible for collecting firewood? (Record in order of importance)

ID No. (Order No. from List of Household Members)	ID No. (Order No. from List of Household Members)	ID No. (Order No. from List of Household Members)

17. Where did you mainly collect the firewood? (*Encircle one Code*)

1. Own land
 2. Government forest
 3. Other (specify) _____

C. Fodder

18. Did you collect *fodder* for your livestock fairly often over the past 12 months? (*Encircle Code*)

1. Yes 2. No (>> Q20)

19. Where did you mainly collect the *fodder*? (*Encircle one Code*)

1. Own land
 2. Government forest
 3. Other (specify) _____

