

Basic Information

Peru: Living Standards Measurement Survey
(PLSS) 1991

Poverty and Human Resources Division
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1. Introduction

The methodology of the Living Standards Measurement Survey (LSMS) was developed by the World Bank in order to provide policy relevant data on the welfare and living standards of households in developing countries. In Peru three surveys have been completed: in 1985-86 and 1991 at the national level and in 1990 in Metropolitan Lima ¹. The 1991 Peru Living Standards Survey (PLSS) ("Encuestas de Hogares Sobre Medición de Niveles de Vida - ENNIV 1991") provides data from 2,308 households. The data from the 1991 PLSS is available upon request from the World Bank. Procedures for obtaining the data are described in Appendix A.

All stages of the survey were performed by the Peruvian research enterprise Cuánto S.A., with the technical and financial assistance of the World Bank.

This document describes the design and coverage of the survey for users who might not be familiar with the data from the 1991 PLSS. It also provides broad pictures of the principal characteristics of the survey (questionnaire, sample, field work) and of the resulting data which will be used in analytical studies.

1

A special characteristic of the PLSS surveys for Metropolitan Lima is that they provide panel data for household information obtained in the three surveys. For example, the 1990 PLSS collected data from the same 727 households that were surveyed in 1985-86. The same potential exists for matching the 1991 data with both the 1990 and 1985-86 data sets, but no data file containing merge codes exist.

2. Survey Questionnaire

2.1 Coverage of the Household Questionnaire

The 1991 PLSS household questionnaire collects individual level and household level socio-economic data. The household is defined as the person or collection of persons, whether related or not, that habitually live in the same private dwelling, occupying it in part or in whole, and that tend to their life needs together ². The unit of observation for the education, health, labor, fecundity, and migration sections of the survey is the individual; and for housing, consumption, agro-pastoral activities, and home production the unit of observation is the household.

The questionnaire is an abbreviated version of the original questionnaire used in the 1985-86 PLSS. Budgetary constraints required the questionnaire to be trimmed by removing some sections, or by excluding some questions of relatively minor significance for the purposes of analysis and current policy. Compared to the questionnaire from the 1990 PLSS, the questionnaire included a few additional questions ³ and a new section about agro-pastoral activities. None of the LSMS surveys applied to Peru have contained a section on anthropometric measures.

2

Members of the household are all people that habitually have eaten and slept in the house for at least three of the twelve months preceding the survey, except boarders and household employees. Nevertheless, the head of the household, though he or she might not have lived in the home habitually for at least three months of the last twelve, is considered always a member of the household, as are children of members of the household less than three months old.

3

The following questions or sections are new or expanded: Sec. 1 (question 9); Sec.2 (Part B, question 10); Sec.3 (questions 8,15B,15D,19,20,21 and 22); Sec.4 (questions 8,9,10, and 19); Sec.5 (Part A, questions 3 and 4); Part B, questions 7,17,18 and 19); Part E, questions 5, 16,17 and 18); Sec. 6 (questions 1,5,6,9 and 10); Sec.8 (Part B, item 125); Sec.12 (entire section); Sec. 13 (entire section).

Referring to the questionnaire when using the data is highly recommended. The following points will be helpful to keep in mind when reading the questionnaire:

- Everything written in capital letters was not read to the respondent. The interviewer read only what is written in small case.
- The questionnaire is pre-coded with the exception of a few questions (occupations and economic activity).
- The instructions to skip from one question to another are indicated in three forms: (i) if no instructions appear, one moves to the succeeding question; (ii) an arrow (->) after an answer indicates the number of the question to which one should jump; (iii) an arrow followed by instructions enclosed in a rectangle indicates that, whatever the answer given, one should move to the question or person indicated.
- The signs expressed as dots, bracket, and dots: ...[]... , signal that the interviewer had to replace the name of a person, animal, or thing.
- If the answers given by respondents are not found on the list of pre-coded answers, the code of "others" is applied (and the answer specified).

The 1991 questionnaire contains 13 sections, 36 parts, and various time periods of reference (see questionnaire), as shown in Table 1. ⁴

4

For more details, refer to the documents "Encuesta Nacional de Hogares sobre Medicion de Niveles de Vida (ENNIV 1991): Manual del Encuestador, and "Encuesta Nacional de Hogares sobre Medicion de Niveles de Vida (ENNIV 1991): Variables Principales y Conceptos", references for which are found in Appendix C.

TABLE 1: SECTIONS OF THE 1991 PERU LSMS QUESTIONNAIRE

Section/ Part	Description	Respondent
0	- Identification of the household	
CHARACTERISTICS OF THE MEMBERS OF THE HOUSEHOLD household		Head of
1	- Household roster (age, sex, civil status)	
HOUSING household		Head of
2	A Characteristics of dwelling B Housing expenses	
EDUCATION household		Head of
3	- Education	
HEALTH household		Head of
4	- Health	
ECONOMIC ACTIVITIES household		Head of
5	A Economic activity of household members	Others above 15

Section/ Part	Description	Respondent
	B Principal employment	
	C Secondary employment	
	D Search for additional employment	
	E Principal employment	
	F Employment History	
	G Secondary employment	
MIGRATION		Those older than 15 years
6	- Migration	
NON-FARM SELF-EMPLOYMENT		Best informed person
7	A Non-farm self-employment	
	B Expenditures	
	C Capital and inventory	
EXPENDITURES AND INVENTORY OF GOODS		Best informed person
8	A Daily expenses	
	B Expenses in semi-durable goods and services	
	C Inventory of durable goods	
	D Expenses for transfers	
FOOD EXPENSES AND HOME PRODUCTION		Best informed person
9	A Food expenses	
	B Expenses, home food production	
OTHER INCOME		Best informed person
10	- Other income	
SAVINGS AND CREDIT		Best informed person
11	- Savings and credit	

Section/ Part	Description	Respondent
DAILY FOOD INTAKE		Best informed person
12	- Daily food intake	
AGRO-PASTORAL ACTIVITY		Best informed person
13	A Agricultural land	
	B Crops	
	C Age of tree crops	
	D Farm inputs	
	E Exchange of agro-pastoral work	
	F Agro-pastoral technical assistance	
	G Products made from crops	
	H Livestock	
	I Products of animal origin	
	J Agro-pastoral equipment	
	K Hand tools	

2.2 The respondents

The survey was directed to the head of the household. The head of the household was the person whom the other members of the household recognized as such, whether a man or a woman. When there was doubt, the person designated as head was the individual with greatest economic responsibility in the household; or as a last resort, it simply was the oldest person. If the head of the household was not present or not available for the interviews, another person was found who was capable of responding and providing information concerning all the other members of the household. The respondents required for each section are indicated in Table 1.

The answers were given principally by the head of the household. Answers for children under 15 years of age (sections 5, 6, and 7) were given by other well-informed members of the household.

In practice, some flexibility was necessary in the selection of persons who responded to the survey. For example, it was often difficult to interview personally a household member because he or she was working outside of the home. In these cases, the supervisor decided if the interviewer was to go to the work site, if it was not too far away, or if the interviewer would return to the household at a time when the desired respondent would be present. As a last resort, answers were solicited from another member of the household who was well informed.

2.3 Characteristics of the Questionnaire

The principal advantages of the questionnaire were the following:

- The structure of the questionnaire was well defined, its sections and parts complementing each other.
- The work of the interviewer was facilitated because the data collection largely involved taking down numerical codes and quantities.
- Skip patterns simplified the collection of data by suppressing unnecessary questions.

The principal problems noticed during the surveys were the following:

- The print of the questionnaire was very small, making its reading difficult, especially at night when working in the light of candles or kerosene lamps.
- The signs to skip were also very small, causing the omission of questions and mistakes in the passage between questions, especially during the first days of the survey.
- Respondents found it confusing or difficult to distinguish and remember the various periods of time referred to in the questionnaire.

2.4 Community Questionnaire

The community questionnaire was applied to selected population centers in rural areas. This questionnaire was similar to the one used in the 1985-86 PLSS. The sections probed were:

SECTION 1: Demographic Information

On the basis of the number of households and the age of the population center.

SECTION 2: Economy and Infrastructure

Economic activity of the inhabitants, means of communication, mail service, restaurants, means of transportation, migration, and market prices of the principal products of domestic consumption.

SECTION 3: Education

Existence of primary schools, secondary schools, age, distance from the school, time required to reach the school, attendance of school-age children, type of school, reasons for non-attendance, literacy programs.

SECTION 4: Health

Existence of health centers, pharmacies, doctors and other health professions, time required to reach an examination center.

SECTION 5: Agriculture

Principal crops, technical assistance, cooperatives, price of one day's labor, labor exchanges.

3. Sample

3.1 Size and Coverage of the Sample

The unit of count was the private dwelling, a place formed by a room or a group of structurally separated and independent rooms, housing one or more households.

The geographic field of study did not cover the entire national territory. Not included were the rural coast, the central urban coast (save Metropolitan Lima), the rain forest, and the departments of Ayacucho, Apurimac, and Huancavelica. There were several reasons for not including these areas. First, financial resources were limited, which required investigators to select areas of greatest interest. These were the urban areas, because they contain the highest percentage of the national population, and the rural mountain areas, because this is historically the most deprived section of the country. The departments mentioned above, located in the central mountains, were not considered because they are recognized as dangerous zones for reasons of terrorist activity. The forest areas were excluded due to costs, and the rest of the central urban coast for being very close to Metropolitan Lima.

The total selected sample was 2,450 dwellings, distributed according to domains of study in the following manner:

TABLE 2: DISTRIBUTION OF THE 1991 PERU LSMS SAMPLE, BY DOMAIN OF STUDY

Domain	Conglomerates	Households
COAST		
01 Urban North	27	297
02 Urban South	4	64
MOUNTAIN		
03 Urban North	3	48
04 Rural North	10	150
05 Urban Center	14	210
06 Rural Center	16	240
07 Urban South	16	240
08 Rural South	13	195
LIMA		
09 Metropolitan Lima ¹	137	1,006
TOTAL	240	2,450

¹ Metropolitan Lima is formed by the Province of Lima and the Constitutional Province of Callao.

About 70% of the Peruvian population lives in the area of study. The population studied was divided into 9 domains, which were areas with similar socio-economic and geographic characteristics ⁵.

⁵

The land area of Peru is 1,285,217 square kilometers. It has three natural regions: the coast, the mountains (over 1200 meters above sea level, approximately), and the forest. The political division in 1991 was: political regions (12), departments (25), provinces (185), and districts (1,784). Its population in 1991 was 22 million inhabitants.

In the rural areas a sample of 585 dwellings was selected, and in the urban areas the total sample was 1,865 dwellings⁶, (see Appendix F for the listing of the sample by Rural Census Areas and Urban Population Centers)⁷.

3.2 Sample Design and Selection

The sample is multi-stage and independent in each domain of study. In the urban area (including Lima), it is stratified and three-staged. In rural areas with population between 500 and 2000 inhabitants, the sample is stratified and three-staged. In rural areas with a population of less than 500, the sample was drawn in two stages.

The sampling units were:

- Primary Sampling Units (PSUs): These were of two types: (i) urban population centers of 2,000 or more inhabitants; and (ii) rural population centers with less than 2,000 inhabitants. Two types of rural PSUs were defined: the Rural Census Areas (AER), from the National Census of Population and Dwellings of 1981, formed by one or more population centers in which there are around 100 dwellings (approximately 500 inhabitants); and the population centers with populations greater than 500 and less than 2,000 inhabitants.

- Secondary Sampling Units (SSUs): These consisted of approximately 100 individual dwellings in urban areas and in rural areas with a population greater than 500. In the rural areas with population of less than 500, these units consisted of each individual dwelling.

- Tertiary Sampling Units (TSUs): (i) In the urban area these were individual households listed in the urban SSUs; and (ii) in the rural area, these were individual households in conglomerates of population centers with more than 500 and less than 2,000 inhabitants. There were no TSUs in rural areas with a population less than 500.

6

Separating out Metropolitan Lima: 1,006 in Metropolitan Lima and 859 in the rest of the urban areas.

7

Rural Census Area ("Area de Empadronamiento Rural - AER"): Land area which contains an average of 100 households. **Urban Population Center:** A locale defined as containing a minimum of 2,000 inhabitants, including the district capitals even when they have less than 2,000 inhabitants.

The original intention was to interview the same households that were surveyed in 1985-86, that is, to obtain a panel survey that would permit an analysis of the economic and social changes in the households at two different points in time; but due to the high rate of migration and the amount of time that had elapsed between the two surveys, as well as the absence of a list identifying the dwellings completely, it was decided to draw the sample of dwellings from the conglomerates and AERs of the sample of LSMS 1985-86.

For Metropolitan Lima the sample was selected from the sample of dwellings for the 1985-86 PLSS and from the enlarged sample of the 1990 PLSS. ⁸ Of the 1,006 dwellings selected, 941 corresponded to the sample used in the 1985-86 PLSS and 65 to the sample amplification of PLSS 1990. The selection of dwellings was proportional to the number of individual dwellings and randomly drawn.

In the rest of the urban areas of the country, the PSUs selected for the 1990 PLSS 1991 were, in each domain of study, the same PSUs selected for the 1985-86 PLSS. ⁹ Next, taking into account the number of conglomerates of SSUs used in PLSS 1985-86, the Sus for PLSS 1991 were selected. Before selecting the dwellings, alongside the field work, the individual dwellings in the selected conglomerates were relisted. This procedure utilized the plans of each district made available by the Regional Offices of Statistics or by the Municipal Councils. The selection of the dwellings used simple, systematic, random sampling.

In the rural area the set of selected PSUs is a sub-sample of the conglomerates and rural census areas selected in the PLSS 1985-86. That selection process had considered the division into domains of study and the feasibility of conducting the survey in these zones, that is, those zones were chosen that were not

8

Because of the accelerated growth of the city after 1985, the implementation of PLSS 1990 required an amplification of the sample which accounted for new areas of the city, especially in the marginalized sectors. For details see the document "Basic Information: Peru: Living Standards Measurement Survey (PLSS) 1990," Division of Poverty and Human Resources, The World Bank.

9

With the exception of the population centers of Santiago de Chuco and Conchucos (in the departments of La Libertad and Ancash, respectively), which were not considered, and the population center of San Pedro de Cajas, which was replaced by Acobamba because of terrorism in the department of Junín.

classified as dangerous for reasons of terrorist activity.¹⁰ The SSUs in the population centers with more than 500 and less than 2,000 inhabitants were selected in simple, systematic, random manner. At the date of the survey, current maps of the country were not available from the Statistical Institute of Peru (INEI). To update information available and to identify completely the rural population centers, the supervisor therefore convened district authorities for consultations regarding characteristics of the locales (name, number of dwellings, approximate number of inhabitants, security, distances, and travel times). The selection of the dwellings used simple, systematic, random sampling.

It is important to mention that the selection of the sample in the rural mountainous areas was influenced by logistical considerations resulting from problems related to the terrorism. It was necessary to replace some AERs for security reasons. For example, the majority of inhabitants in some AERs refused to be interviewed or in some cases the self-defense committees did not permit the performance of the survey. These factors have probably influenced the representative character of the sample. To minimize this effect, the replacements selected had similar characteristics and were from the same district as the original AERs.

The size of the sampling unit in the last stage of the selection process was 15 dwellings per conglomerate and AER in the rural area. In the urban area, it was 11 dwellings per conglomerate in the northern coast, 16 dwellings per conglomerate in the southern coast and in the northern mountains, and 15 dwellings per conglomerate in the central and southern mountains. In Metropolitan Lima the number of dwellings per conglomerate varied.

3.3 The Sample Implemented

A total of 2,252 dwellings in 240 conglomerates were visited, resulting in a sample of 2,208 households.¹¹

¹⁰

During the period of survey's implementation (October - November, 1991), the activity of the terrorist group Sendero Luminoso had extended to almost the entire mountain region, with heavy concentration in the central and southern mountain areas.

¹¹

The distinction between physical dwellings and households is made in surveys in developing countries because some times more than one household resides in a dwelling. This explains the greater number of households than dwellings.

In Metropolitan Lima the performance of the survey was as follows: of the 1,006 dwellings of the original sample, data was collected from 801 dwellings, in which 849 households reside. In the rest of the country, data was gathered from 1,451 dwellings (including 7 additional dwellings that were added to the original sample), in which 1,459 households were found.

A total of 591 dwellings were replaced, which represents 24% of the sample. The principle causes of replacement were the absence of residents, refusal to participate, or dwellings that were unoccupied, transitory, or abandoned.

TABLE 3: PERCENTAGE OF HOUSEHOLDS REPLACED, BY DOMAIN OF STUDY

Domain of study	Dwellings replaced (%)
Total	24
RURAL AREA	
1. Northern mountain	16
2. Central mountain	17
3. Southern mountain	31
URBAN AREA	
4. Northern coast	25
5. Southern coast	30
6. Northern mountain	40
7. Central mountain	24
8. Southern mountain	43
9. Metropolitan Lima	20

3.4 Sample for the Community Questionnaire

The sample of the community questionnaires was a function of the rural census areas (AERs) selected. In total, 41 completed questionnaires were obtained.

**TABLE 4: NUMBER OF COMMUNITY QUESTIONNAIRES,
BY RURAL DOMAIN OF STUDY**

Rural domain of study	AER	Total questionnaires
Total	39	41
Northern mountain	10	10
Central mountain	16	16
Southern mountain	13	15

The AERs that received more than one community questionnaire (CQ) were the following: 035 (2 CQs); 036 (2 CQs); 036 (3 CQs) and 064 (2 CQs). It was impossible to implement a community questionnaire in AERs 045, 046, and 072.

It is important to note that, unlike LSMS 1985-86, in which a community questionnaire was applied to every rural population centers in a given AER (that is, an AER can contain more than one rural population center), the PLSS 1991 generally implemented the community questionnaire jointly to the entire AER and in only a few cases to a population center individually. This explains the existence of more than one community questionnaire for a single AER.

3.5 Expansion Factors

While each domain of the study is representative or self-weighted, the entire sample is not. To correct for this it is necessary to use expansion factors which have taken into account the size of the effective sample surveyed.

TABLE 5: POPULATION EXPANSION FACTORS

Domains	Population (Thousands)	Sample Population	Expansion Factors
RURAL AREA			
1. Northern Mtn.	1,171.1	782	1,497.57
2. Central Mtn.	1,025.7	1,200	854.75
3. Southern Mtn.	1,122.2	888	1,263.74
URBAN AREA			
4. Northern Coast	2,687.5	1,621	1,627.93
5. Southern Coast	358.7	325	1,103.69
6. Northern Mtn.	285.4	284	1,004.93
7. Central Mtn.	1,304.3	1,110	1,175.05
8. Southern Mtn.	1,659.7	1,206	1,376.20
9. Metrop. Lima	6,459.0	4,245	1,521.55
Total	16,073.6	11,661	

4. Organization and Implementation of the Survey

4.1 Management

The structure of the management and administration of the survey, which coordinated and supervised the planning of the survey, was the following:

1. Director of Field Operations - Responsible for the implementation of the survey, from the training of personnel and the planning and performance of field work to the delivery of the revised questionnaires ready for input.
2. Regional Supervisors - Three supervisors responsible for the coordination of field work in the northern, central, and southern regions of the country, respectively.
3. Director of Logistics - Responsible for the timely delivery of materials, ongoing expenses, and the payment of salaries.
4. Director of Computation - Developed the program for data entry and supervised the consistency checks and the revision of entered data.

4.2 Schedule of Activities

The field work of the 1991 Peru LSMS was performed during the months of October and November of 1991. The schedule of the principal activities of the survey was the following:

Planning	Aug. 8 - Sept. 25
Sample, questionnaire, and manuals	Aug. 8 - Sept. 20
Training and selection of personnel	Aug. 26 - Sept. 20
Pilot survey	Sept.14 - Sept. 20
Field work	Oct. 1 - Nov. 30
Programming and data entry	Sept.20 - Dec. 31

In practice, the scheduled dates for the different activities changed slightly. For example, a few questionnaires were completed during the first days of December.

4.3 Training and Selection of Personnel

This activity unfolded in several stages: recruitment of personal, technical training of supervisors and interviewers, course for data processors.

4.3.1 Recruitment of Personnel

Forty individuals were recruited in Lima using advertisements in newspapers that required three years of post-secondary schooling and previous experience in household surveys. Preference was given to women, who could gain access to homes more easily. In the provinces, individuals were found through the universities and/or personal contacts. The same prerequisites were stipulated. Personnel were recruited from the cities of Chiclayo, Trujillo, Cusco, Huaraz, Huancayo, and Puno.

4.3.2 Course for the Training and Selection of Personnel

A training course for interviewers, team leaders, and regional supervisors was given in Lima from September 5 - 20, 1991. The instructors were professionals of the research company. After tests of theory and practical skills and a personal interview, twenty-four interviewers (twelve for Lima and twelve for the provinces), six team leaders, three regional supervisors, and two information coordinators were selected. The team leaders and regional supervisors received additional training about supervising and monitoring the survey and the administration of funds.

4.3.3 Course for Data Processors

A practical course in data processing was also held for the seven individuals selected to be data processors and data entry supervisors.

4.4. Pilot Survey

A pilot survey was carried out during a period of two days, in conditions similar to those set for the actual study. The trial was short because the questionnaire was not very different

from the questionnaires used in 1990 and 1985-86, which functioned well. The emphasis in this trial was to evaluate the coherence of the new sections and questions, such as section 13 on agro-pastoral activities, and to evaluate the candidates for the interviewer and team leader positions.

The field work was performed in two stages: the first, in the urban area (first day), took place in the district of Puente Piedra en Lima. The second, in the rural area (second day), was performed in the district of Carabayllo de Lima. The selection of the dwellings was random and each interviewer was required to complete at least one questionnaire.

The reception of the survey in the households, the duration of the interview (on average two hours per survey), and the instructions on the means of locating conglomerates and dwellings were also examined during the pilot test.

4.5 Field Work

4.5.1 Organization

The field operation was organized by geographic regions (north, center, and south) in order to facilitate the travel of the regional supervisors. The supervisor of the northern region was responsible for the surveys in the departments of Cajamarca, Lambayeque, La Libertad, Piura, and Tumbes; the supervisor of the central region for the departments of Junín, Pasco, Huánuco, Ancash, and Metropolitan Lima; and the supervisor of the southern region for the departments of Puno, Cusco, Arequipa, Moquegua, and Tacna.

The work teams were organized in the following manner: six teams composed of four interviewers and one team leader, three regional supervisors, one logistics officer, and one director of field operations.

4.5.2. Administration

The logistics officer was responsible for providing the work materials, the flow of documents (sending and receiving questionnaires and messages), and the administration of monetary resources. He wrote letters and solicited official support from the civil and military authorities from the respective regions and districts in order to guarantee the normal functioning of the survey and the security of the personnel. All personnel involved in field work were insured against work accidents and acts of terrorism.

4.5.3 Supervision

The supervision was performed with the aims of verifying that the survey was carried out in accordance with established norms and technical guidelines and of solving problems that appeared in the field. The supervisor was charged with the detailed planning of field work and was the only person authorized to change those plans. The levels of supervision were three:

1. The team leader supervised the work of the interviewers under him.
2. The regional supervisor checked the work of the team leaders.
3. The director of field operations supervised work at all levels.

4.5.4. Implementation

One team was deployed in the northern region and one team in the southern region in the first month of the survey, and two teams worked in each region during the second month. Four teams worked in the central region during the first month and two in the second month. The work began in the urban and rural mountains and in Metropolitan Lima and concluded in the urban coast.

The procedures for the collection of data were as follows:

1. The interviewer completed the entire questionnaire.
2. The team leader reviewed the questionnaire and checked for consistency, returning it, if corrections were necessary, to the interviewer, who if necessary returned to the dwelling in question.
3. The corrected questionnaire passed on to the coordinator at the computation center, who after revising and codifying the questionnaire delivered it to data entry.
4. If the consistency program found errors, the questionnaire was returned to the coordinator for his corrections.
5. After the data entry was completed, a printed list of the results was checked for typing errors.

The average time for each interview was 1 hour and 45 minutes. At the beginning of the field work the duration was 2 hours, but in the last few weeks it fell to 1 hour and 30 minutes. The time taken for each survey depended on the number of household members, the degree of co-operativeness and understanding exhibited by the respondents, and the skill of the interviewer. In general, the respondents were friendly and helpful, especially the people in the rural areas. The urban residents exhibited greater understanding of the questions. In zones fraught with terrorism, the populace was suspicious. And in rural areas with social aid programs from non-governmental organizations the people guarded information about their incomes jealously.

In the majority of the domains of study the interview was performed in Spanish alone, but in the central and southern mountains the interview was conducted in Spanish, Quechua, or Aymara. In some cases the interview was performed directly in Quechua and in other cases with the aid of an interpreter (for Quechua or Aymara). ¹²

4.5.5 Community Questionnaire

The community questionnaire was administered by the supervisor or team leader. The data was solicited from the principal authorities of the locality, such as the lieutenant governor, directors of the community, or some notable person in the population center.

The implementation encountered no major problems because it obtained the cooperation of the authorities of the community.

4.5.6 Additional Activities

Recovery of data.- The recovery of data, whether for reasons of not having encountered all members of the household or for errors or omissions, involved a second or third visit to the household. In the provinces, the recoveries were performed the same day or the day following the interview, while in Lima they occurred during the same week.

Observation of the interviews.- This was the responsibility of the team leader and/or supervisor. Its purpose was to correct initial errors of the interviewer and to verify compliance with prescribed methods and procedures.

Verification of the dwellings selected and second interviews.- This was the responsibility of the team leader and/or supervisor, and its aim was to verify the data contained in the questionnaire. Dwellings were revisited and several key questions were repeated to household members.

4.6 Transport

In Metropolitan Lima two vehicles were used for taking interviewers to their assigned work sites and bringing them back at the end of the day. The vehicles also allowed the supervisor to check on the field work and to watch over the security of the interviewers in dangerous zones. In the safest and most centrally located zones the interviewers used public transportation.

¹²

In Quechua and Aymara, the head of the household or another member of the household acted as an interpreter for other members of the household.

Public transportation was used in the rest of country both for travel among and within cities. Provincial cities in Peru are relatively small and suited to public transportation. In rural areas, the interviewers moved about primarily on foot or in the means of transportation available in the locale (donkey, horse, truck).

No substantial travel problems were encountered in the urban areas, but in the rural areas the work teams had difficulty in finding adequate transportation and in dealing with the irregularity of whatever was found.

4.7 Data Consistency

Consistency checks were performed first in the field by team leaders, and then in the central headquarters in Lima, where, along with data entry, an iterative process validated the data and checked for consistency with one listing. After data entry, a list of identification numbers was checked manually. A third level consistency check occurred in the various computer programs that detected omissions, inconsistencies in logic, the validity of variables (income vs. expenses), and identified extreme values for subsequent verification.

5. Quality of the Data

The quality of the data collected in the 1991 Peru LSMS is generally good. The data is highly consistent. But during the analysis of the data one should keep in mind factors related to the political and economic conditions of Peru during the time of the survey's implementation.

5.1 Limiting Factors

Because of the climate of political violence, some households were distrusting and recalcitrant in their reception to the survey, especially in Lima and in the interior zones affected by the problem. The highest income sectors rejected the survey the most. In Lima it was very difficult to complete the requisite replacements.

Some of the upper income households that accepted the interview probably underestimated portions of the data related to income and/or expenses out of fear of a government tax review.

In some rural areas where there were non-governmental aid programs, some interviewees probably underestimated their income out of an unfounded fear of losing their benefits.

During the months in which the survey was implemented, the mean monthly inflation rate was 4%, and in the twelve previous months it was 9%. These rates are plainly less than the inflation observed before the implementation of the macroeconomic

adjustment program in August, 1990 (37% monthly average); nevertheless, these rates of inflation might have diminished in part the quality of the data on expenditures and income. (People quickly forget past prices and the value of small purchases, and, in 1991, the monetary unit changed from Intis to Nuevos Soles).

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5.2 Impact on the Results

When analyzing the data it is important to keep in mind the potential impact of the above-mentioned factors, whether one is using only the 1991 PLSS or doing comparative work with other LSMS surveys. In Metropolitan Lima the lower rate of collection of data from high income households and the probable undervaluation of the income data will underestimate the degree of inequality in the distribution of income in 1991. For work that compares values over time, the data for 1991 might underestimate the average consumption of the population in that year. One should note that the political and economic strife in 1991 was less than what it was when the 1990 survey was conducted, but more than the environment of 1985-86.

6. Aggregate Consumption Data

An estimate of aggregate consumption was constructed for the purposes of a specific study. This is included with the data files, but some researchers might prefer to construct their own estimates of aggregate consumption from the original data.

Aggregate consumption was calculated using the sum of explicit monetary values, appropriately annualized (whose prices were adjusted in the manner explained in section 7).

The data relevant for the estimation of household aggregate consumption were:

1. Expenses on housing (section 2-B). Data provided by renting households and reported estimates of rents received by owners were used for the calculation of payments by renters.
2. Expenses on education (section 3).
3. Expenses on health (section 4).
4. The value of food-items and other goods and services received free from employers (section 5).
5. Expenses on daily food intake of household members in co-operative restaurants ("comedores populares"), "clubs de madres," etc. (section 12).
6. Expenses on regular purchases for non-food items and food items consumed outside of the household in the last 15 days (section 8-A).

7. Expenses on semi-durable goods and services (clothes, goods and services for the upkeep of the household, medicines, and other irregular expenses) (section 8-B). The "use value" of durable goods was not estimated because the survey did not collect their purchase values and dates. Only purchases made from October, 1990, were solicited (section 8-C).
8. Expenses for transfers during the last 12 months (section 8-D).
9. Expenses in food items in the last two weeks (section 9-A).
10. Value of the foods produced and consumed by the household in the last 15 days (section 9-B).

The distribution of the total expenditures by consumption groups was as follows: food items, drinks and alcohol; clothing and shoes; housing expenses, fuels, and electricity; furniture and household utensils; health care and prevention; transportation and communication; teaching services and entertainment; other goods and services; and transfer payments.

The monetary values of expenses are expressed in constant Nuevos Soles from the first week of October, in Metropolitan Lima.

7. Prices

All monetary values of expenses are expressed in constant Nuevos Soles of Metropolitan Lima of the first week of October, 1991.

The deflation procedure used indices of monthly consumer prices from the following cities: Metropolitan Lima, Arequipa, Cusco, Cajamarca, Chiclayo, Huancayo, Trujillo, and Puno. The consumer price index developed by Cuánto S. A. was used for Metropolitan Lima, and indices of consumer prices developed by the Regional Offices of Statistics of the Statistical Institute of Peru (INEI) were used for the rest of the country.¹⁴ All the sampling areas were assigned to the closest city.¹⁵

Indices of weekly prices with a base equal to 100 for the first week of October, 1991, were constructed for each city in the process of deflating nominal monetary values from the different sampling areas. The development of these indices used a

¹⁴

The addresses of the sources are: Cuánto S.A., Plaza del Ovalo 203-B, Lima 2, Perú, Fax: 51-14-425460; Instituto Nacional de Estadística e Informática, Av. 28 de Julio 1056, Lima 1, Perú, Fax: 51-14-323104.

¹⁵

See Appendix F for the city whose price index corresponded to each conglomerate.

geometric mean of the monthly percent variation of the index, distributed among the four weeks. The indices were produced using these weekly inflation rates. This procedure was applied to all cities.

Next, with the aim of aggregating and making comparable the monetary values among various sampling areas, the indices of weekly prices calculated for each city were related to the weekly indices for Metropolitan Lima (a spatial index with base: Lima = 100). These indices were used to correct for the differences in prices between Metropolitan Lima and the rest of the cities. In this manner, the deflated aggregate consumption variable is expressed in prices of Metropolitan Lima in the first week of October, 1991.

Because different time periods for reported expenses are used in the questionnaire ¹⁶ some categories of nominal expenses required bi-weekly, monthly, and quarterly price indices. These deflators were constructed on the basis of the indices of weekly prices, depending on the date of the interview.

8. Poverty Lines

For the purpose of estimating the proportion of the Peruvian population living in a state of poverty, the research enterprise Cuántos S.A. defined a poverty line and a line of extreme poverty. These estimates reflect the methodological decisions of the researchers. Some researchers might prefer to perform their own computations.

8.1 Extreme Poverty

Those households whose total per capita expenditures are less than the cost of a Basic Nutritional Basket ("Canasta Básica Alimentaria - CBA"), are said to be in a condition of extreme poverty. (See Appendix E for more information on this basket).

¹⁶

See Table 1 for the time periods of reference for the variables studied.

Table 6: Annual Household¹ Cost of the Basic Nutritional Basket (CBA) and the Basic Consumption Basket (CBC) (in Nuevos Soles)²

Region	CBA Cost	CBC Cost	Decile	Food Expenses/ Total Expenses
Metro Lima	1890	3698.63	4	51.1%
Urban Coast ³	1890	3203.39	5	59.0%
Urban Mtn	1548	2804.35	4	55.2%
Rural Mtn	1548	2230.55	6	69.4%

¹ The definition of household used in this table is a six-member household with two adults and four children.

² In constant Nuevos soles of the first week of October, 1991 (US\$1.0 = 0.86 Nuevos Soles)

³ Does not include Metropolitan Lima.

8.2 Poverty

Those with per capita expenditures less than the cost of a Basic Consumption Basket ("Canasta Básica de Consumo - CBC"), which is equal to the CBA plus additional funds for non-food expenses, are considered to be poor. This basket was calculated by multiplying the cost of the CBA by the inverse of ratio of food expenditures to total expenditures.

To allow for variation in consumption patterns across regions, the chosen ratio of food expenditures total expenditures is the average value of this ratio from the income decile which contains people both above and below the extreme poverty line.

9. Data Files

All of the original data from the 1991 Peru Living Standards Surveys are available for public use. Data for each section of the questionnaire is contained in a separate data file. The filenames for the 1991 data, listed below, begin with "NO" and end with the section numbers from the questionnaires. For example, the filename "NO5E2" is the data from section 5E2 of the questionnaire. The filetype or file extension will be either "dta", "dat", or "ssp" depending on whether the data are in Stata, ASCII, or SAS portable format, respectively.

Table 7: File Names for 1991 PLSS

N00A	N05B1	N05G2	N08D	N13A3	N13E3
N00B	N05B2	N06	N09A	N13B	N13F
N01	N05C1	N07A1	N09B	N13C	N13G
N02A	N05C2	N07A2	N10	N13D1	N13H
N02B	N05D	N07B	N11A	N13D2	N13I
N031	N05E1	N07C	N11B	N13D3	N13J
N032	N05E2	N08A	N12	N13D4	N13K
N04	N05F	N08B	N13A1	N13E1	
N05A	N05G1	N08C	N13A2	N13E2	

Each data file contains a constructed variable named "HID", which is the household identification code and can be used to link the data files together. "HID" is a four to six digit number which is constructed by appending the cluster number, the household number, and the dwelling number together. In the event that there are multiple households within a dwelling, the last digit in "HID" is used to give a unique number to the households within the dwelling. The second to last and third to last digits are used to identify the dwelling number. The first digit(s) identify the cluster number for each household. For example, "HID" = 10121 identifies the first household in dwelling number 12 from the tenth cluster.

Appendix A

How to Obtain the 1991 PLSS Data

The 1991 Peru Living Standards Survey data are the property of the World Bank. They can be obtained by writing to:

Living Standards Measurement Study (LSMS)
Poverty and Human Resources Division
Policy Research Department
The World Bank
1818 H St., N.W.
Washington, DC 20433
U.S.A.

The letter should include a 1-2 page description of the proposed research to be undertaken using the data. The World Bank will then make a quick check of whether similar research has been done before. If the research description is not redundant, the World Bank will release the data, and will notify the researcher to that effect. If the proposed research is similar to work that the World Bank is aware has been done, the researcher will be notified so that he/she may consider whether to revise his/her plans.

There is a nominal fee associated with the data, which are available on diskette, in SAS, Stata (version 2.1), or ASCII files.

The Poverty and Human Resources Division of the World Bank requests copies of all reports and documents resulting from research on the data.

The researcher should further note that once received, the data cannot be passed on to a third party for any reason. Other researchers must contact the World Bank directly for access to these data. Any infringement on this policy will result in the denial of future access to World Bank data.

Appendix B

List of Counterpart Institutions and Contacts

The 1991 PLSS was conducted by Cuanto S.A., a private Peruvian research institute. The World Bank provided 100% of the funding and technical support for the project. The following is a list of contacts at these counterpart institutions.

1. Cuanto S.A.
203-B Plaza del Ovalo
San Isidro
Lima 27 - Peru

Tel: (51-14) 224932/423421
Fax (51-14) 425460

Contacts:

- a) Graciela Fernández Baca de Valdez, Director
- b) Richard Webb, Director (currently at the World Bank and Brookings Institution)
- c) Gilberto Moncada, Director (currently on leave at ILADES, Santiago, Chile)

2. The World Bank

Paul Glewwe, Economist
1818 H, N.W.
Washington, DC 20433
U.S.A.

Tel. (202) 473-1234

Appendix C

List of Supporting Documents

The following documents can be obtained from the World Bank, Poverty and Human Division, at a cost of .05 cents per page for photocopying.

- A. 1991 Questionnaire: "Encuesta Nacional de Hogares Sobre Medición de Niveles de Vida, Octubre-Noviembre 1991". 40 pages. (Free of Charge)
- B. 1991 Interviewer Manual. "Encuesta Nacional de Hogares Sobre Medición de Niveles de Vida (ENNIV 1991): Manual del Encuestador". 67 pages
- C. 1991 Principal Variables and Concepts: Encuesta Nacional de Hogares Sobre Medición de Niveles de Vida (ENNIV 1991): Variables Principales y Conceptos". 20 pages.
- D. 1991 Training Plan: "ENNIV 1991, Plan del Curso de Capacitación para Encuestadoras y Jefes de Brigada". 5 pages.
- E. Occupation Codes: "Códigos de Ocupaciones". 76 pages.
- F. Means Tables of all variables in PLSS 1991 Data.

Appendix D

List of Publications Using the PLSS 1991 Data

The following is a list of publications and research in progress that make use of the PLSS 1991. Copies of all papers and publications resulting from the analysis of LSMS data sets should be sent to the LSMS at the address listed in Appendix A.

- David Abler (Research in Progress)
Migration, a panel study (1985-1991) of activity, earnings and mobility in Lima, Peru.
The Pennsylvania State University
- Instituto Cuánto and UNICEF. 1993. "Perú: Niveles de Vida - Subidas y Caidas ". Instituto Cuánto. Lima, Perú.
- Instituto Cuánto and UNICEF. 1992. "Mujeres y Niños del Perú: Situación Social". Instituto Cuánto. Lima- Peru.
- Rodriguez, José. 1992. (Draft) "La Educación en el Perú". Departamento de Economía, Pontificia Universidad Católica del Perú. Lima, Perú.
- Webb, Richard and Graciela Fernández Baca. 1992. "Perú en Números 1992" (Chapter 13:Living Standards and Poverty-Principal Tables). Cuánto S.A. , Lima - Perú.
- Francke, Pedro. 1992. "El Gasto Público en Educación y la Demanda Educativa: Perú 1990-1992". Universidad Católica del Perú. Lima, Perú. (Tesis de Magister).

Appendix E Basic Nutrition Basket

Metropolitan Lima: The basic basket designed by the National Nutrition Institute ("Instituto Nacional de Nutrición - INAN") was utilized. This basket provides a total of 13,013 calories and 379 grams of proteins for a family of six (two parents and 4 children). It is the equivalent of an average of 2,533 calories and 57.4 grams of protein per adult, with more specific norms by age and sex. ¹⁷

Urban Cost: The INAN basket for Metropolitan Lima, evaluated at average prices for the cities of Chiclayo, Trujillo, and Arequipa, and weighted by the population of each city, provided a cost estimate. The city of Arequipa is located in the mountains, but it was included because of its importance in the southern coast of the country.

Composition of the Basic Nutritional Basket for Lima and the Rest of the Urban Coast

Foods	Quantity Recommended
Powdered milk	2 Litres
Eggs	2 Units
Liver	0.25 Kg.
Jurel fish	0.50 Kg.
Squash	1.0 Kg.
Onion	0.4 Kg.
Tomato	0.2 Kg.
Garlic	0.015 Kg.
Parsley	0.03 Kg.
Pineapple	0.30 Kg.
Orange	0.25 Kg.
Banana	3 Units
White potato	1.0 Kg.
Rice	0.84 Kg.
Bread	19 Units
Cooking oil	0.18 Lt.
Margarine	0.05 Kg.

¹⁷

The family composition assumed in the National Nutrition Institute's ("Instituto Nacional de Nutrición - INAN") minimum consumption basket is the following:

Father: 30 - 49 years old	Child: 04 - 06 years old
Mother: 30 - 49 years old	Child: 07 - 10 years old
Child : 01 - 03 years old	Child: 11 - 14 years old

Urban and Rural Mountains: A basket at the level of the food group, proposed by a colleague in the World Bank, was the basis for the design of the basket for the mountainous regions. The choice of specific products within each food category considered the average per capita family consumption of food items in the rural area, estimated in the National Survey of Food Consumption ("Encuesta Nacional de Consumo de Alimentos 1971-1972 - ENCA")¹⁸. This basket was adjusted for the minimal caloric and protein requirements of a family of six: father, mother, and four children (2,241 calories and 55 grams of protein per person). The average cost was evaluated with average prices in the cities of Huancayo, Puno, Cajamarca, and Cusco, and were weighted by the population of each city.

Composition of the Basic Nutritional Basket for the Mountains

Foods	Recommended Quantity (Kg.)	Foods	Recommended Quantity (Kg.)
Meats		Tubers and Roots	
Sheep	0.045	Yam	0.092
Beef	0.015	"Oca y Olluco"	0.244
Chicken	0.015	Potato	2.400
Organs	0.030	Potato flour	0.122
Other meats	0.045	Other tubers	0.122
Eggs	0.120		
Milk Products		Grains Products	
Fresh milk	0.120	Rice	0.271
Cheese	0.030	Hops?	0.203
Vegetables		Corn flour	0.429
Tomato	0.050	Fresh corn	0.136
Cabbage, cauliflower	0.075	Quinoa	0.068
Squash	0.025	Wheat	0.180
Onion	0.100	Bread	0.600
Carrot	0.050	Noodles	0.136
Fruits		Sugar	
Oranges	0.150	White sugar	0.101
Others (apple)	0.300	Brown sugar	0.259
Legumes		Oils and Lards	
Peas	0.086	Lard	0.188
Beans	0.107	Oil	0.094
Lima beans	0.107		

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See Carlos Amat y León and Dante Curonisy, "La Alimentación en el Perú," Universidad del Pacifico, CIUP, May 1990, Table 3.1, p. 246.

All CBA baskets are designed to satisfy minimal nutritional requirements. It is important to keep in mind that due to a number of factors Peru has witnessed during the last twenty years, such as the accelerated rate of urbanization, the gravity of the economic crisis, especially in agriculture, and socio-cultural changes, the composition of the basket has probably undergone changes. Unfortunately, a more current basket was not available at the time of this study.

Appendix F

Sample by Rural Census Areas, and Urban Population Centers

1.- List of Rural Population Centers and Rural Census Areas (AERs), by Domains of Study

Domain, Departament Conglomerate	Province	District	Cod. City Def. 1/	No. Cong.	No. Dwel.
MOUNTAIN NORTH				10	150
Cajamarca					
001	San Miguel	LLapa	4	1	15
002	Hualgayoc	Bambamarca	4	1	15
003	Chota	Chota	4	1	15
006	San Pablo	San Pablo	4	1	15
008	Cajamarca	Asunción	4	1	15
009	Contumazá	Chilete	4	1	15
010	Santa Cruz	Santa Cruz	4	1	15
004	Cajamarca	Los Baños del Inca	4	1	15
Lambayeque					
005	Ferreñafe	Incahuasi	5	1	15
Piura					
007	Morropón	Chalaco	5	1	15
MOUNTAIN CENTER				16	240
Junín					
031	Huancayo	Chupaca	6	1	15
032	Tarma	Acobamba	6	1	15
Pasco					
033	Pasco	Paucartambo	6	1	15
034	D.A.Carrió	Yanahuanca	6	1	15
Ancash					
035	Huari	San Luis	4	1	15
036	Huari	Huari	4	1	15
037	Huari	Cajay	4	1	15
038	Huaraz	Huaraz	4	1	15
039	Huaylas	Pueblo Libre	4	1	15
014	Yungay	Yungay	4	1	15
041	Yungay	Shupluy	4	1	15
042	Carhuaz	Marcará	4	1	15
043	Huaraz	Olleros	4	1	15
044	Aija	Aija	4	1	15
046	Huaraz	Huanchay	4	1	15

Domain, Departament Conglomerate	Province	District	Cod. City Def. 1/	No. Cong.	No. Dwel.
Lima					
045	Canta	Canta	1	1	15
MOUNTAIN SOUTH				13	195
Cusco					
061	Cusco	Santiago	3	1	15
062	Calca	San Salvador	3	1	15
063	Anta	Zurite	3	1	15
Puno					
064	Puno	Acora	8	1	15
065	Puno	Chucuito	8	1	15
066	Puno	Capachica	8	1	15
067	Chucuito	Ilave	8	1	15
068	Chucuito	Pilcuyo	8	1	15
069	Chucuito	Juli	8	1	15
070	Chucuito	Pomata	8	1	15
071	Chucuito	Zepita	8	1	15
Moquegua					
072	Sanchez Cerro	Puquina	2	1	15
073	Mariscal Nieto	Torata	2	1	15

2.- List of Urban Population Centers, by Domain of Study

Domain, Departament Conglomerate	Province	District	Popul. Center	Cod. City Def.1/	No. Cong.	No. Dwel.
COASTAL NORTH					27	297
Tumbes						
103	Tumbes	Tumbes		5	1	11
Piura						
107	Piura (1)	Piura (1)	Piura	5	4	44
108-109	Sullana	Sullana	Sullana	5	2	22
110	Sullana	Bellavista	Bellavista	5	1	11
111	Morropón	Chulucanas	Chulucanas	5	1	11
112	Talara	Pariñas	Talara	5	1	11
129	Talara	La Brea	Negritos	5	1	11
Lambayeque						
113-118	Chiclayo	Chiclayo(2)	Chiclayo	5	6	66
119	Ferreñafe	Ferreñafe	Ferreñafe	5	1	11
Lalibertad						
120-127	Trujillo	Trujillo(3)	Trujillo	7	8	88
128	Otuzco	Cascas	Cascas	7	1	11
<p>(1) Includes the districts of Piura and Castilla (2 segments in each district)</p> <p>(2) Includes the districts of Chiclayo and José Leonardo Ortiz (3 segments in each district)</p> <p>(3) Includes the districts of Trujillo, Víctor Larco Herrera, El Porvenir and la Esperanza.</p>						
COASTAL SOUTH					4	64
Arequipa						
181	Islay	Mollendo	Mollendo	2	1	16
182	Islay	Cocachacra	Cocachacra	2	1	16
Moquegua						
180	Ilo	Ilo	Ilo	2	1	16
Tacna						
183	Tacna	Tacna	Tacna	2	1	16
MOUNTAIN NORTH					3	48
Cajamarca						
100-101	Cajamarca	Cajamarca	Cajamarca	4	2	32
102	Chota	Chota	Chota	4	1	16

Domain, Departament Conglomerate	Province	District	Popul. Center	Cod. City Def.1/	No. Cong.	No. Dwel.	
MOUNTAIN CENTER					14	210	
Ancash							
143-144	Huaraz	Huaraz	Huaraz	4	2	30	
Huánuco							
142	Huánuco	Huánuco	Huánuco	6	1	15	
Junín							
131-135	Huancayo	Huancayo(1)	Huancayo	6	5	75	
136	Jauja	Jauja	Jauja	6	1	15	
138	Tarma	Tarma	Tarma	6	1	15	
137	Tarma	Acobamba	Acobamba	6	1	15	
139	Yauli	La Oroya	La Oroya	6	1	15	
Pasco							
140-141	Pasco	Chaupimarca	C.Pasco(2)	6	2	30	
(1) Includes the districts of Huancayo, El Tambo and Chilca							
(2) Includes the districts of Chaupimarca and Simón Bolívar							
MOUNTAIN SOUTH					16	240	
Arequipa							
168-176	Arequipa	Arequipa(1)	Arequipa	2	9	135	
Cusco							
161-163	Cusco	Cusco (2)	Cusco	3	3	45	
Puno							
165	Puno	Puno	Puno	8	1	15	
164	Chucuito	Ilave	Ilave	8	1	15	
166-167	San Ramón	Juliaca	Juliaca	8	2	30	
(1) Includes the districts of Arequipa, Cayma, Paucarpata, Socabaya, Yanahuara, Cerro Colorado and Miraflores.							
(2) Includes the districts of Cusco and Santiago.							
METROPOLITAN LIMA					1	137	1,006
Callao							
235-242		Callao		1	8	71	
243		La Perla		1	1	8	
244-245		Bellavista		1	2	14	
246		Carmen de la Legua		1	1	7	
247 y 501		Ventanilla		1	2	17	
Lima							
248 y 504		Puente Piedra		1	2	11	

Domain, Departament Conglomerate	Province	District	Cod. City Def.1/	No. Cong.	No. Dwel.
249		Carabayllo	1	1	10
250-256 y 506		Comas	1	8	68
257-259		Independencia	1	3	30
260-268 y 508		San Martín de Porres	1	10	76
269-270		San Miguel	1	2	17
271-272		Magdalena del Mar	1	2	17
273-275		Pueblo Libre	1	3	26
276-279		Breña	1	4	32
280-281		Jesús María	1	2	14
282-284		Lince	1	3	18
285-286		San Isidro	1	2	9
287-296		La Victoria	1	10	64
297-307		Lima	1	11	74
308-312		Rimac	1	5	36
313-319 y 512		San Juan de Lurigancho	1	8	66
320-323		El Agustino	1	4	28
324-325		San Luis	1	2	15
326-328 y 518		Ate	1	4	27
329-330		Lurigancho (Chosica)	1	2	14
332-335		Santiago de Surco	1	4	23
336-337		San Borja	1	2	11
338-340		Surquillo	1	3	16
341-343		Miraflores	1	3	19
344-345		Barranco	1	2	12
346-350 y 522		Chorrillos	1	6	47
351-354 y 524		San Juan de Miraflores	1	5	36
355-358		Villa María del Triunfo	1	4	35
359-361 y 525		Villa El Salvador	1	4	26
362 y 526		Lurín	1	2	12

1/ Code of a city whose price index was used in the deflation of aggregate consumption. At the date of the study complete indices were available from the INEI from the following cities:

1 Lima Metropolitana	5 Chiclayo
2 Arequipa	6 Huancayo
3 Cusco	7 Trujillo
4 Cajamarca	8 Puno