



In collaboration with Federal Bureau of Statistics

PIHS

Pakistan Integrated Household Survey Project

December, 1990

SUPERVISOR MANUAL

FIELD OPERATIONS

Pakistan Integrated Household Survey

P I H S

TABLE OF CONTENTS

1. OVERVIEW

1.1	Objectives of the Pakistan Integrated Household Survey.....	1
1.2	Methodology of the Survey.....	1
1.3	Organization of the Survey.....	6

2. THE SUPERVISOR'S TASKS

2.1	General Responsibilities.....	8
2.2	Specific Duties of the Supervisor.....	9
2.3	Relationship with the PIHS Management Team.....	11
2.4	Relationship with the Regional Office Administrator.....	12

3. PREPARATION FOR THE SURVEY

3.1	Publicity.....	14
3.2	Selecting Households to be Interviewed.....	14
3.3	Preparing the Questionnaire for Round One.....	17
3.4	Adding Questionnaires for Large Households.....	17
3.5	Preparing the Questionnaire for Round Two.....	18

4. ARRIVAL IN THE PSU

4.1	Explanation of the Survey.....	19
4.2	Recruiting Interviewers.....	19
4.3	Initial Visits to the Households.....	20

5. PROBLEMS ENCOUNTERED IN THE FIELD

5.1	Difficulties in Locating a Household.....	21
5.2	Absence of Respondents.....	22
5.3	Refusals.....	22
5.4	Replacing a Household.....	23

6. VERIFYING AND CODING THE QUESTIONNAIRES

6.1	Verifying the Completed Questionnaires.....	25
6.2	Office Coding.....	25

7. MONITORING INTERVIEWS

7.1	Observing the Interviewer.....	32
7.2	Observing the Respondent.....	33
7.3	Re-interviewing Selected Households.....	35

8. SUPERVISION OF DATA ENTRY

8.1	Responsibilities of the Data Entry Operator.....	37
8.2	Data Entry Checks.....	37
8.3	Management of Computer Hardware.....	40
8.4	Backing up Data and Management of Survey Materials.....	41

ANNEXES

Annex I:	Tables of One, Two, and Three Digit Random Numbers
Annex II:	Standard Two-Digit Occupation Classifications for Pakistan
Annex III:	Standard Two-Digit Industry Classifications for Pakistan
Annex IV:	Reference Period for "Past Rabi Season" and "Past Kharif Season"

1. OVERVIEW

1.1 OBJECTIVES OF THE PAKISTAN INTEGRATED HOUSEHOLD SURVEY (PIHS)

The primary objective of the project is to collect household and community data which can be used to analyze important policy questions, particularly those relating to poverty, income distribution and the impact of social sector investments. Policy studies will be initiated utilizing these data.

Given Pakistan's current levels of poverty, despite high and sustained rates of recent economic growth, there is a need to understand more about the extent of poverty in the country, the impact of existing government and non-government agency programs on the poor, and the appropriate design of future programs. The country's current socio-economic status underscores the importance of undertaking this project:

- * a population growth rate in excess of 3 percent per annum;
- * a fertility rate of roughly 6 to 6.5;
- * contraceptive prevalence of a mere 9 percent;
- * life expectancy at birth of 54 years and infant mortality as high as 200 per 1000 live births in certain regions;
- * an estimated 50 percent of children being malnourished;
- * literacy levels of only 26 percent of the overall population -- some 35 percent of adult males are literate and only 16 percent of adult females according to the 1981 Population Census.

1.2 METHODOLOGY OF THE SURVEY

Sample Design. The PIHS uses a nationally representative sample of 4800 households which is stratified by province (Punjab, Sind, NWFP and Baluchistan) and by urban/rural area. The following table shows the allocation of the sample among these eight strata:

PROVINCE	Households			Sampling Units		
	Rural	Urban	Total	Rural	Urban	Total
Punjab	1248	1216	2464	78	76	154
Sind	672	656	1328	42	41	83
NWFP	336	336	672	21	21	42
Baluchistan	144	192	336	9	12	21
TOTAL	2400	2400	4800	150	150	300

The sample excludes Federally Administered Tribal Areas, military restricted areas, districts of Kohistan, Chitral, and Malakand, and protected areas of N.W.F.P., which constitute about 4 percent of Pakistan's total population.

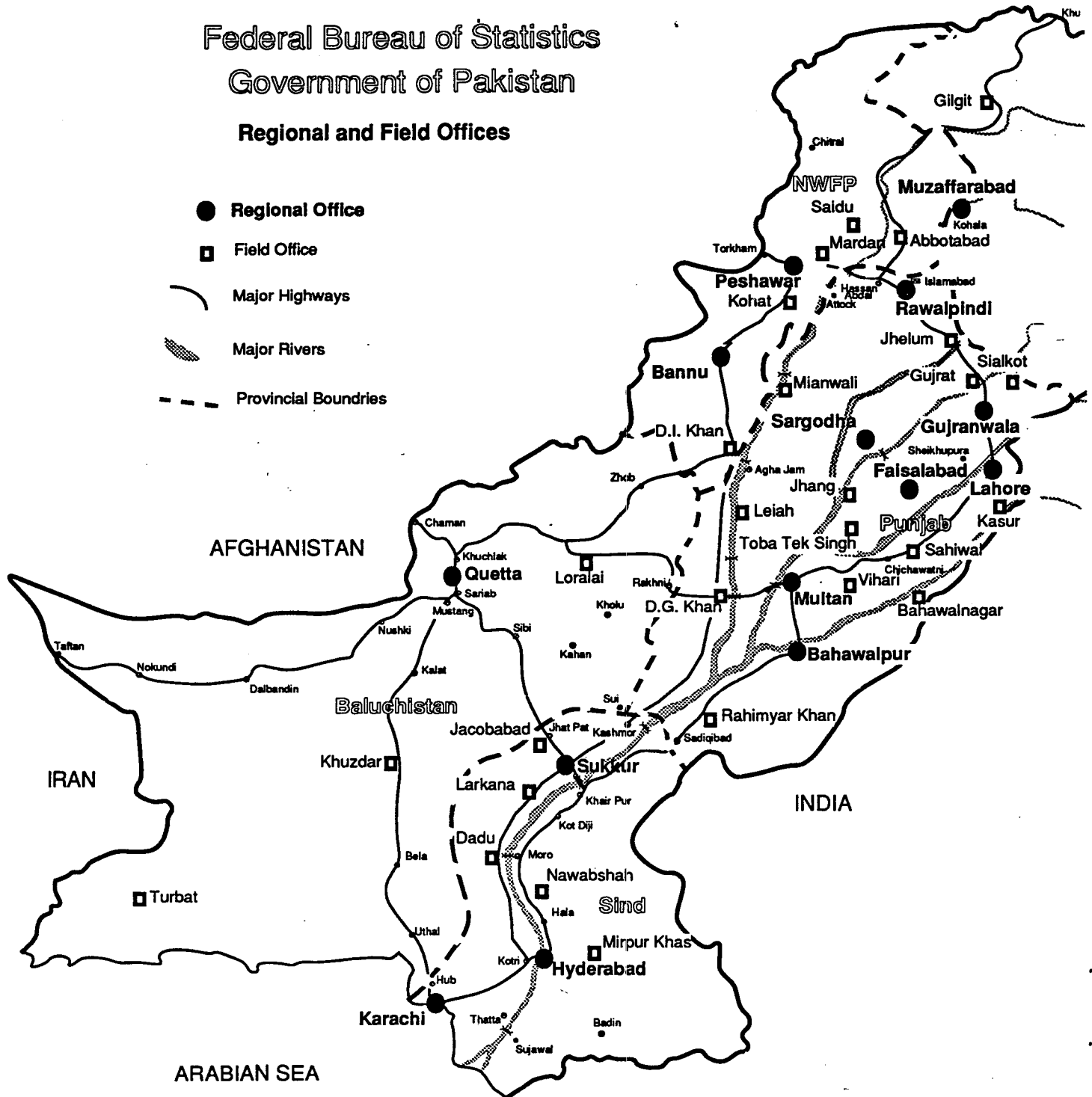
Households are selected using a two-stage, stratified random sample drawn from FBS' urban and rural master sample. In the first stage, a total of 300 PSUs were drawn at random from the master sample with probability proportional to population of the PSU. 150 of the PSUs are located in urban areas and 150 PSUs are located in rural areas. For the second stage, sixteen secondary sampling units (i.e. households) will be selected at random from the master list of households residing in the PSU. The method for selecting households is described in Section 3.1 of this Manual.

Field Organization. PIHS data will be collected by 15 field teams. Each team consists of a supervisor, four interviewers (two males and two females), a data entry operator, and a driver. Each team is assigned a vehicle, a computer and printer for data entry, and specially constructed boards and scales to obtain height and weight measurements for women and children in respondent households.

After PSUs were selected, they were located on a map in order to determine the optimal distribution of the sample across the 15 field teams and the assignment of the field teams to FBS Regional Offices (see attached map). Each team will visit 20 PSUs over the course of the survey, which is scheduled to last for 12 months. Because sixteen households are interviewed in each PSU, each team will interview approximately 320 households during the 12 month survey period.

Federal Bureau of Statistics Government of Pakistan

Regional and Field Offices



Content and Design of the Survey. The PIHS is different in some essential ways from other GOP household surveys, i.e. the HIES, Labor Force Survey and Demographic Survey, etc. First, because it is designed to develop a multi-purpose data base, the PIHS is much longer, broader in scope and has a more extensive coverage of various aspects of household behavior. This include six specific areas:

- a) demographic composition of the household;
- b) access to and utilization of social services (i.e. health, education);
- c) fertility and child and maternal health;
- d) women's time use and contribution to household well-being;
- e) household energy;
- f) income generation and structure of production.

Second, the PIHS aims to provide valuable but currently unavailable information on the status of women in Pakistan and their role in the economy. Efforts are made to obtain information by speaking directly with female household members rather than only relying on information about their activities provided by husbands, sons, or brothers. Given this emphasis on self-reported information, more accurate estimates of women's contribution to household well-being and economic activities will be obtained. In addition, the survey will contribute to a better understanding of social policies which affect women, i.e. determinants of female school enrollments, women's time use, child health and nutrition, fertility and health care utilization.

The design of the household questionnaire reflects this focus on women. The field team includes both male and female enumerators. Separate male and female questionnaires have been developed, which will be administered by the male and female interviewers, respectively. Male and female respondents will typically be interviewed separately. Although self-response is maintained as the standard interview procedure, situations may arise where some exchange of questionnaires between the male and female interviewers may be necessary. For example, women may tend to report health problems of all household members, including adult males, and the male head of household may tend to report education levels and enrollments of all children, regardless of age or gender. Similarly, female members are more likely to be able to provide information on household consumption of own-produced food items while the male head of household is more likely to know about expenditures on food items. Food consumption modules (both purchased and own-produced) are in the female questionnaire, which may have to be passed temporarily to the male interviewer to obtain information purchases.

Another notable characteristic of the PIHS in comparison to other surveys is the heavy use of personal computers for data entry and general data management in the field. While it has become common to use PCs for data management at headquarters, it is seldom done in the field offices. Each team

has a full-time personal computer and data entry operator located permanently at their duty station (i.e. one of FBS' Regional Offices). This allows data to be entered, checked, and corrected within days of the time it is collected and by the individuals who know most about the information (the supervisor and team of interviewers).

A fourth feature of the PIHS which distinguishes it from many other surveys is the inclusion of community, price, and facility questionnaires in addition to the household questionnaire. The household questionnaire describes behavior within the household, while the community, price, and facility questionnaires provide information on the environment or context in which this behavior takes place. Both kinds of information are crucial for understanding the outcome of Government policies.

Structure of Interviews. 4800 households will be interviewed by 15 survey teams stationed permanently at one of FBS' Regional Offices. Twenty PSUs, consisting of sixteen households each, will be visited by each team working over a 12 month period. Two PSU's are visited two times by each team each month, with visits occurring roughly two weeks apart. The two-round (i.e. two visit) survey is intended to minimize interviewer and respondent fatigue, provide a reference point to aid respondent recall, and to allow for computer quality control of the data between the two rounds. Errors in information collected in the first round will be identified by the data entry program, which permits the interviewers to correct the errors when he/she returns to the household during the second round.

Community, Price, and Facility Questionnaires. Community, price, and facility questionnaires will be administered to a group of local council members or other knowledgeable individuals in the community, at the nearest school and public health facility, and in the local market. The data collected will be used to:

- * measure access to infrastructure and other services such as schools, health centers and financial institutions;
- * determine local prices of major commodities, primarily food, and;
- * measure factors reflecting the quality of services in the community, for example, number of boy's and girl's schools, number and gender of teachers in each, existence of boundary walls for girl's schools and staffing of public health clinics.

Instructions for administering the community, price, and facility questionnaires are provided in an annex to the manual. Most of this information will be collected by you, the supervisor, rather than by the interviewers on your team.

1.3 ORGANIZATION OF THE SURVEY

FBS will be responsible for the technical implementation of the project. A multi-level management structure has been set up to supervise the project.

On the policy level, an EXPERTS GROUP will oversee the policy aspects of the project. The Group includes members from the Statistics Division, Planning Division, Finance Division, Energy Wing, Manpower Commission, National Institute of Population Studies (NIPS), Pakistan of Development Economics (PIDE), the Applied Economics Research Centre (AERC) at the University of Karachi, the World Bank Resident Mission, and the Chief Technical Advisor for the National Household Energy Strategy Study (NHESS).

On the project level, there is a MANAGEMENT TEAM responsible for overall survey administration consisting of six members:

- * the Project Manager who is responsible for project administration and relations of the survey team with the rest of FBS and with other Ministries;
- * the Chief PIHS Section who is responsible for planning and executing the survey;
- * three Statistical Officers, two men and one woman, who are responsible for field operations;
- * the Data Processing Specialist who is responsible for ensuring that the supervisors and data entry operators follow the instructions for running the programs and for the efficient use of the micro-computers, as well as managing the data as they are transferred from Regional Offices to Headquarters.

Three local experts have been hired to act as counterparts to specific members of the Management Team: the PIHS Senior Technical Advisor, a Women's Field Expert, and a Computer Expert.

On the field level, each SURVEY TEAM will consist of one supervisor, 2 male interviewers, 2 female interviewers, a data entry operator, and a driver.

- * the Supervisor will oversee, coordinate, monitor, and where necessary correct the work of the field teams. He is also primarily responsible for administering the community, price, and facility questionnaires.
- * the Interviewers will be responsible for collecting the data from the respondent households using the PIHS questionnaire. Anthropometric measurements (heights and weights of children and their mothers) will be done by the Female Interviewers, one of whom will be assigned primarily to do the measurements and the other to assist.

- * the Data Entry Operator will be responsible for entering the data into a micro-computer and checking it for consistency.
- * the Driver will drive for the members of the survey team while the field activities are being carried out.

2. THE SUPERVISOR'S TASK

2.1 GENERAL RESPONSIBILITIES

As the leader of the data collection and entry team and the representative of the Management Unit at the FBS Regional Office, you have a key role in the survey. Your scope of responsibilities cover the following:

(1) Over-all field supervision, coordination and monitoring of data collection activities.

You are the primary person responsible for the quality of information collected in the field. A important part of this task is to coordinate the work of the male and female interviewers, particularly when an exchange of questionnaires between the two becomes necessary. The men or women being interviewed in the household may report information, regardless of the gender distinction in the questionnaire and this should be recorded correctly and accurately. In addition, you may on occasion have to assist the interviewers in locating households and ensuring their willingness to respond to the survey. Your task will be made easier if you maintain good relations with senior officials and other noteworthies in the selected communities.

(2) Monitoring, review and evaluation of the quality of field interviews, completed questionnaires and checking of the data entry printouts

You will routinely observe interviews without giving the interviewer any notice. Based on a set of criteria for evaluating a good interviewer, the supervisor should give immediate feedback on his/her performance. PIHS Form 1: Interviewer Evaluation is provided for this purpose.

Once data are collected, you should check whether the interviewer's recording is legible, skip patterns are followed and the interviewer instructions given in the questionnaire were observed. PIHS Form 2: Questionnaire Verification is provided for this purpose.

You will also revisit households on occasion to verify that the interviewers have visited the household and to cross-check some of the information provided by the household. PIHS Form 3: Interview Verification is provided to help you cross-check certain key questions. It is particularly important to let the interviewers know that data validation will be done.

You should carefully check errors in data detected by the data entry program, and either you or one of your interviewers should revisit the household, if possible, to correct the errors. The

team always has the opportunity to revisit households after the first round of data collection. It may not be feasible to do so following the second round, except in urban areas. It is good practice to find and correct as many errors as possible using the Interview and Questionnaire Verification Forms before finishing the second round of data collection in each PSU.

(3) Management of personnel, equipment and vehicles

In addition to your field management functions, you are also responsible for supervising your support staff (i.e. the data entry operator and the driver). You should ensure that they work efficiently to provide for smooth implementation of data collection activities and be responsible for the proper handling and care of computer equipment and the vehicle.

(4) Exchange of information between PIHS Management and field teams.

As the main channel of communications, the supervisor sees to it that any advice or instructions from the Management Team is relayed to and followed by the field team and that the Management Team is regularly apprised of the progress of data collection activities.

In order to manage the field work effectively, you must have a thorough understanding of the work to be done by each member of the team. You should be able to respond to specific interviewing problems that may arise in the field. Indeed, you may on occasion need to perform interviews yourself if a one of your regular interviewers is ill or otherwise unavailable. Therefore, the supervisor must be familiar with the content not only of this manual but also of the instruction manuals for the interviewers and the data entry operators.

2.2 SPECIFIC DUTIES OF THE SUPERVISOR

One of the primary functions of the supervisor is quality control, that is, ensuring the quality of the data that is collected by the interviewers and entered by the data entry operators. To do this, the following specific tasks are assigned to the supervisor:

1. Publicity. You must supervise the delivery of the letters of introduction and/or specially prepared brochures to the local authorities, to the village chiefs (nambardar) and, in the urban areas, to the households. In rural PSUs, you should explain the purpose of the survey and introduce the members of your team to local authorities before they visit any households. Similar practices should be followed when such individuals can be easily located in urban areas.

2. Assigning Households to interviewers and finding the selected household. You should organize your interviewer team into two sub-teams, pairing one female and one male interviewer on each sub-team. Assign eight of the sixteen households to be interviewed in each PSU to each male/female interviewer team. It may be necessary for you to help the interviewers locate respondent households, either by using maps or by inquiring in the neighborhood. You should be able to do this using the identifying data recorded for each household in the master listing for the PSU. These are the names of the head of the household and father of the head, and, in certain urban areas, street addresses.
3. Preparation of the questionnaires. You must copy the name of the household head, father of head, and street address on each questionnaire before giving them to your interviewers. In addition, you should copy the processing code, which uniquely identifies each household in the survey.
4. Drawing up the household roster. All sixteen household rosters should be completed before going ahead with the first round of the survey in each PSU. This is a good way for interviewers to introduce themselves to the household and schedule later visits to interview various household members. Detailed instruction for completing the rosters are included in the Interviewer's Manual. Typically, male interviewers will collect the information for the household roster from the household head. This information will then be passed to the female interviewer for verification. If the female interviewer finds any inconsistencies or additions to the roster, you should be apprised of these changes. Care should be taken when the roster is cross-checked by the female interviewer that respondents do not get the impression that we do not trust the validity of the information provided by the household head. The survey's concern for accuracy should be emphasized during the interview.
5. Scheduling of household interviews. After all rosters have been completed, the remainder of the first round interviews are conducted during the week. It is primarily the responsibility of the interviewer teams to schedule interviews, although you should encourage them to consult with you if problems arise in completing their assigned questionnaires. It occasionally may be necessary for some members of your team to remain in rural PSUs overnight in order to interview key respondents, particularly during planting and harvest seasons and for PSUs located at a long distance from your duty station.
6. Use of Interpreters. It may be worthwhile to know in advance the dialects that are spoken by your interviewers. If the need for an interpreter arises, you can immediately assign the appropriate interviewer to do the job rather than spend the time searching for an interpreter outside the survey team.

7. Verification of the questionnaire. Upon completion of questionnaire, you should check that it has been correctly filled out using the Questionnaire Verification Form. It may be necessary to ask the interviewer to go back to the household to collect missing information or correct data. If you do this task carefully during the first few weeks of the survey and work closely with your interviewers to make sure they know their job well, problems identified in the PIHS Form 2: Questionnaire Verification should soon be minimal.
8. Observing interviews. You should accompany the interviewers from time to time to observe and evaluate their interview techniques. PIHS Form 1: Interviewer Evaluation is provided for this purpose.
9. Re-interviewing households. In addition to observing interviews, you should re-interview a few households in each PSU. It is not necessary to re-ask all questions in the household questionnaire. Instead, PIHS Form 3: Interview Verification includes a subset of basic questions has been prepared for this purpose.
10. Administering the community, price, and facility questionnaires. You will be the primary person responsible for administering these additional questionnaires, by speaking with knowledgeable persons in the community, visiting local shops and the nearest market, and interviewing staff at local schools and health facilities. Explicit instructions for filling out the questionnaires are included later in this manual.
11. Checking the printouts. After the data for each round have been entered in the computer, the you should compare the printout with the data on the questionnaire. You should also look for any errors made by the interviewers, using the tests for coherence in the data entry program. Mark the errors made by the data entry operator on the computer printouts and the errors introduced by interviewers on the questionnaires. Some of the latter can be corrected by interviewer re-asking relevant questions in Round Two.

2.3 RELATIONSHIP WITH THE PIHS MANAGEMENT TEAM

1. Technical Responsibility and Monitoring

Technical responsibility for the survey rests entirely with the PIHS Management Team. The Team will therefore lay down the general direction of the work and issue instructions for action at the technical level. You will take orders regarding the survey only from the Management Team although these orders may occasionally be passed via Regional Office management.

Each month the field teams will be visited by a member of the Management Team and counterpart staff from the NHESS Project Office to ensure that procedures are being applied properly. This person or persons will monitor every aspect of the teams' activities; in so doing they may visit some of the households that have already been interviewed to go over parts of the questionnaire and thus check up on both the quality of your work and your interviewers. Remember that the quality of your team's work is as much your responsibility as the quality of your own work.

2. Supervisor's Report

At the end of each month you must send to headquarters diskettes containing the entered data from all the household, community, price, and facility questionnaires. In addition, you must prepare a brief report on the two PSUs surveyed during the month. This report should contain:

- * The name and number of the PSU;
- * The Household Selection Form, with a notation of which sixteen households were interviewed;
- * A description of any difficulties, and how they were overcome;
- * A description of which households were replaced, why they were replaced, and a list of the replacement households;
- * A note on the quality of the work of each interviewer, his/her behavior during the interviews, and his/her relationships with other team members and yourself;
- * A report on the work of the data entry operator.

Note that this report need only be brief and should highlight problem areas rather than areas where field activities are proceeding well. Specific forms have been provided for this purpose.

All other materials (i.e. questionnaires, other forms) will be kept at the Regional Offices until the end of the survey.

2.4 RELATIONSHIP WITH THE REGIONAL OFFICE ADMINISTRATOR

While you take instructions only from the PIHS Management Team as far as technical matters are concerned, you will be under the administrative authority of the Regional Office Administrator, who is the representative of the Director-General of the FBS. The Administrator will be responsible for sorting out any administrative difficulties which arise for the team. He will, however, not be permitted to send a team member on leave without consulting the Management Team. Nor will the Administrator have the right to use the team's equipment (vehicle, computer, printer, and other items) for any purpose not directly related to the PIHS. In addition, you are wholly responsible for scheduling the day-to-day field visits of your team. If you

prefer to visit PSUs on Fridays or in the evenings (which may be very important in urban areas), you and your team can arrange to take off a different day of the week. In the event that you finish all interviews in fewer than six days, there is no need for the team to visit the PSU during all six days and there is no need to sit in the Regional Office unless there are PIHS tasks to perform.

3. PREPARATION FOR THE SURVEY

You will be given the list of PSUs your team will visit over the twelve month survey period and an initial schedule for the visits. If each PSU requires two weeks of interviewing and your team is assigned 20 PSUs, some 12 weeks over the year will be unscheduled. This is to allow for holidays, meetings and retraining activities, and other eventualities.

There are three things you must do before the team's arrival in a Sampling Unit: arrange for brochures or letters of introduction which will inform households about the survey, select the households to be interviewed, and prepare the questionnaires for the interviewers.

3.1 PUBLICITY

FBS is preparing a letter that explains the purpose of the PIHS and the cooperation desired from respondent households. In urban areas, it would be desirable to have these letters delivered to the households you plan to interview at least two weeks prior to the proposed interviewing date. You should follow up with a personal visit on the first day you team is working in the PSU. If possible, letters should be delivered to authorities or senior members of the community in rural areas as well as selected households when your team arrives in the PSU. You and your team should meet with these individuals to describe the survey and introduce yourselves on the first day you arrive in the village. In addition, it would be desirable to deliver letters of introduction to the health facilities and schools you plan to visit in rural areas.

3.2 SELECTING HOUSEHOLDS TO BE INTERVIEWED

A total of sixteen (16) households will be interviewed in each PSU. You will select the sixteen households by systematic random sampling from a master list of all households residing in the PSU. PIHS Form 4: Household Selection has been prepared to assist you in selecting the households to be interviewed. An example of the form is given on the following page. You should complete one of these forms for each PSU that your team will visit during the survey. The Household Selection Form will be kept in a file with the completed household questionnaires and the community, price, and facilities questionnaires for each PSU.

Spaces are provided at the top of the Household Selection Form for information which uniquely identifies each PSU. This information will be filled in by PIHS management staff before you receive the forms. This information includes:

- (1) The name of the PSU and other identifying particulars;
- (2) The processing code for the Sampling Unit, which consists of the province, sub-universe, stratum, and PSU codes;

- (3) The date scheduled for the first visit to the PSU.

When you receive the form, you should write your name and supervisor ID code in the space provided.

In addition to this form, you will be given a master list of all households residing in the PSU, as identified in the last listing exercise undertaken by FBS staff.¹ In order to select households from the list, you must first compute values for the "random start" and selection "interval". These figures are computed as follows:

For the selection interval, divide the total number of households in the master list by 24. Write the resulting value in the box marked "interval" on the Form.

For the random start, use your table of random numbers to draw a random number between 1 and the value in the interval box. Write this in the box marked "random start".

The selection technique, called systematic random sampling must be followed precisely to ensure that the sample of households drawn for the PSU is a random representation of all households residing there. Do not substitute a household for one specified by the selection technique except in the special cases noted below.

Selecting 24 Households. Each household in the master list is identified by a serial number assigned by the FBS listing team, which runs from 1 to some maximum value determined by the number of households residing in the PSU. We wish to draw a random sample of twenty-four households from the master list. The first household selected is the one with a serial number equal to the number provided for the random start, that is, the number written in the box labelled "Random Start". For example, if random start number is "6", then the sixth household in the master list (serial number 6) will be the first household selected. Write the identifying particulars of the household in the spaces provided on the Sample Selection Form:

- (1) The serial number from the master list;
- (2) The street name and house number (if available);
- (3) The name of the household head;
- (4) The name of the father of the household head;

This information should be sufficient to allow you to locate the selected household.

¹ A listing of households in all Sampling Units was completed within the last two years.

*** PIHS FORM 4: HOUSEHOLD SELECTION ***

IDENTIFICATION PARTICULARS: _____

--	--	--	--

PROVINCE SUB-UNIVERSE STRATUM PRIMARY SAMPLING UNIT

SUPERVISOR: _____

--	--	--

DATE: _____

TOTAL No. OF HOUSEHOLDS

RANDOM START

INTERVAL

SERIAL NUMBER IN THE SAMPLE	SERIAL NUMBER IN THE LISTING	STREET	HOUSE NUMBER	HEAD OF THE HOUSEHOLD	FATHER
--------------------------------------	---------------------------------------	--------	-----------------	-----------------------	--------

01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

The second household is selected by adding the "interval" value to the number of the household selected first. For example, if the first household selected has serial number 6 and the interval is "10", the second household selected will be the sixteenth in the master list, i.e. serial number 16. The third household is selected in a similar manner: beginning with the 17th household, count down 10 places to the 26th household. The third household selected is the 26th household in the master list. The remaining households are selected in a similar manner, starting from the previously selected household and using the interval value to select the next one until all 24 lines have been filled in on the Household Selection Form. In each case, write the particulars for each selected household on the Selection Form. Note that each selected household now has a listing serial number, copied from the master listing, and a Household Selection Form serial number which runs from 1 to 24.

Only sixteen of the twenty-four households selected on the Form will be interviewed. The remaining eight households are designated as "replacement households". When and how to replace households is discussed in Section 5 of the Manual.

3.3 PREPARING THE QUESTIONNAIRE FOR ROUND ONE

You should carefully prepare the household questionnaires for each PSU before giving them to the interviewers. This involves two tasks:

1. Check that the blank questionnaires have no missing pages or sections.
2. Copy all relevant information from the Household Selection Form onto the cover pages of both male and female questionnaires for the sixteen households selected to be interviewed. This information includes the name of the household head and his father, the street address (if available), and the processing code. The processing code uniquely identifies each household. It consists of the province code, the sub-universe, the stratum, the PSU code, and the Form Serial No. which will henceforth be referred to as the household ID from the Household Selection Form.

Province	Sub-Unv	Stratum		PSU		HH	ID

Codes for province, sub-universe, stratum, and the PSUs are provided in annexes to the Manual.

3.4 ADDING QUESTIONNAIRES FOR LARGE HOUSEHOLDS

If, after visiting the household, the interviewer finds it necessary to list more than 12 persons on the male roster or on the female roster, they will need to use an additional questionnaire to collect information for the household. You should prepare the additional questionnaire(s) (male and/or female, as appropriate) in the same way you prepared the original questionnaires, and specify the number of the questionnaire in the "roster" box just to the left of the processing code on the cover page. The first questionnaire will be marked "1/2", while the second questionnaire will be marked "2/2".

3.5 PREPARING THE QUESTIONNAIRE FOR ROUND TWO

The Round One printouts from the data entry program must be checked before preparing the questionnaires for Round Two. The columns headed INTERVIEWER and OPERATOR on the Summary of Survey Results page must be filled in to reflect any errors or inconsistencies. If there are some questions to be asked again during Round Two, write Code 2, "to be completed," in the INTERVIEWER column for the relevant sections. In the OPERATOR column, write Code 2, "Corrections," if corrections will be made by the interviewers during Round Two or if there are data entry errors in a particular section. Code 1 "satisfactory" should only be used if there are no corrections of either kind (i.e. interviewer or data entry) to be entered in a section.

Next, fill in the ID codes of the following in the boxes provided in the questionnaire:

- * the person best-informed about the household's farming and livestock activities from Section 6 Part A Q.2

Write the ID code of this person in the box provided on the second page of the questionnaires labelled "Summary of Survey Results" and in the box provided on the first page of Section 9, Part A. "Farming and Livestock" (MALE-37).

- * the person(s) best-informed about family enterprises (1st, 2nd and 3rd) from Section 6 Part B.

Write the IDs of this person or persons in the boxes provided on the second page of the questionnaires labelled "Summary of Survey Results" and in the boxes provided on the first page of Section 10, Part A "Non-farm Family Enterprise Activities".

4. ARRIVAL IN THE PSU

In general, you should follow normal practices upon arriving in a PSU on the first day of the survey, keeping in mind that the demands of the PIHS on household member's time will be greater than those of most other surveys. It is your responsibility as team supervisor to do whatever is necessary to ensure that interviewers are well received by respondent households. Whenever possible, you should give advance notice of your arrival in the PSU, although this may not always be possible. In rural areas, you should meet with authorities and other prominent villagers to explain the purpose of the survey, introduce the members of the team, and discuss the survey program for the week. In urban areas, you may need to accompany interviewers on their initial visit to the selected households.

4.1 EXPLAINING THE SURVEY

First, you should introduce yourself and your team of interviewers and say that they are working for the Federal Bureau of Statistics. Next, you should explain that:

- * The Federal Bureau of Statistics, in collaboration with local and international agencies, are conducting a survey of Pakistani families to gain a better understanding of their present living conditions. The survey is thus very important for planners to know how to improve the people's living conditions.
- * The data collected from this survey will be used as the basis for analyzing important social and economic policy issues, such as poverty, access to basic services, and employment. The survey also attaches special importance to knowing more about the role of the Pakistani women in the economy and in the household. This is why a separate questionnaire was designed specifically for the women in the household and why your team includes both male and female members.
- * The village and the families who will be interviewed have been selected at random. Other neighboring villages and households have been selected in the same way.
- * The survey is not concerned in any way with taxes, and all the information recorded will be regarded as confidential and covered by the obligation of statistical secrecy.
- * The survey will take the form of two rounds of interviews. You and your team will return after a week to complete the interviews.

4.2 RECRUITING INTERPRETERS

Prior to the interviews, you should find out what languages are spoken by your team of interviewers. This will facilitate the assigning of interviewers who can do the interpretation in case the need arises.

If there is a need to bring in another person to do the job, the supervisor can either (1) ask the head of household to choose someone or (2) ask the village chief to recruit a few people to serve as interpreters for the week.

The best interpreter is someone chosen by the respondent, since the questions are confidential and the interpreter must be someone the respondent is willing to trust. The supervisor should be aware, however, that there are certain problems in adopting this solution. In the first place, it is difficult to know how good the translation is. The respondent's friend who speaks the dialect may not speak it well enough to translate everything said during the interview, and he will not want to admit it.

Another problem that often arises is that the interpreter chosen by the respondent knows the household's affairs so well that he tends to answer for the respondent without translating the questions. If that happens, the interpreter will have to be reminded, frequently but politely, that the respondent is the person who was chosen to be interviewed and that only his own answers can be recorded on the questionnaire.

4.3 INITIAL VISITS TO HOUSEHOLDS

On the first day of Round One, you shall assign eight households to each male/female team of interviewers. During the remainder of the day, the interviewers are responsible for contacting these households and introducing themselves, collecting the household roster as described in the Interviewer's Manual, and arranging times to re-visit the household during the remainder of the time the team is working in the PSU. You should meet with the interviewer teams to help resolve any discrepancies or inconsistencies in the roster and to verify that respondent households are being cooperative.

5. PROBLEMS ENCOUNTERED IN THE FIELD

It is extremely important that the households interviewed in each Sampling Unit are those listed in the Household Selection Form. The problems that arise most frequently are:

- * There are difficulties in finding a particular household, be it because the information provided was too vague, because the household has moved to another area, or because their dwelling has been destroyed;
- * The appropriate respondents for each section are not available;
- * A household refuses to take part in the survey or to answer the questions in certain sections.

5.1 DIFFICULTIES IN LOCATING A HOUSEHOLD

If the interviewer cannot find one of the households, the supervisor should go with him to the place and ask for information from the neighbors, the village chief or the district head. On the list of households belonging to the sample, there is the name of the head of household, his father's name, and, in urban areas, the street and house number. Your master list for the PSU contains similar information on the selected household's neighbors.

If the interviewer finds a household at a given address but the head of household is different from the one identified, the interviewer must talk with household members in order to ascertain whether it is in fact the same household (the former head having died, for instance) or whether the household previously identified at that address has moved.

- * If it is the same household with a different head, you should record this on the Survey Information Sheet in the box entitled VERIFICATION OF THE QUESTIONNAIRE, ROUND ONE (see illustration).
- * If the household has moved and there is another household in the same dwelling, the interviewer may interview the new household instead, as discussed below. However, before giving permission for this replacement, you must go with the interviewer to the dwelling to verify the situation. You should never allow the interviewer to make the decision to replace a household. If a replacement is made, record the replacement of one household for another living in the same dwelling on the Survey Information Sheet in the box entitled VERIFICATION OF THE QUESTIONNAIRE, ROUND ONE in the space for Remarks.

If the dwelling has been destroyed or abandoned -- and you should always verify yourself that this is the case -- the household should be replaced following the rules set out in Section 5.4.

5.2 ABSENCE OF RESPONDENTS

Each part of the interview is directed to a specific respondent. If the person who is supposed to reply to any part of the questionnaire is not available on the interviewer's first visit, he must inquire when he may return to interview that person. The interviewer must be instructed not to leave the household without scheduling another visit to interview the concerned respondent. If after repeated attempts he/she cannot contact the desired respondent, some other individual can provide information. This should be the exception rather than the rule, and you should pay careful attention to how much substitution is occurring in the interviews.

5.3 REFUSALS

Interviewers may encounter two different kinds of refusal from the household:

- * a total refusal to take any part in the survey, or a refusal to answer questions once the interview has begun. To avoid refusals, the interviewer must be very careful in his first contacts with the household.

The following are among the most frequent reasons for refusal to cooperate:

1. The respondents fear that any information they may reveal on their income will be used for tax purposes. This fear, which is found most commonly among upper income urban households, can be reduced if the interviewers stress certain points:
 - * Any information provided will be kept strictly confidential. Taken together with information collected from other families it will enable planners to obtain an overall view of the position of households, without revealing anything at all about any specific household. The secrecy of the data will thus be maintained.
 - * The survey will enable planners to devise better policies for improving the standard of living of everyone in Pakistan. Households will benefit from providing accurate data which will only be used to help them.
2. The respondents do not wish to have an interviewer in their home for such a long time. The best way of coping with this situation, which is also encountered most frequently in urban households, is for the interviewers to:
 - * make sure that their personal appearance is impeccable;

- * show their badges and papers proving that they are on the staff of the Federal Bureau of Statistics;
- * be extremely courteous toward members of the household. It is essential to follow this precept at all times, even when interviewers are not well received; and
- * offer to return at a time or on a day that is more convenient for the household.

If the interviewer cannot persuade the household to cooperate, you must yourself visit the household and try to persuade it to do so. You may ask whether the interviewer has been polite, and so forth. If the household still refuses to cooperate, a replacement must be found, following the rules set out below.

5.4 REPLACING A HOUSEHOLD

Although your team will only interview sixteen households in each PSU, you have been asked to list twenty-four households on the Household Selection Form. This is because a household may, on very rare occasions, have vacated the dwelling unit or refuse to be interviewed, and thus must be replaced by one of the four additional households listed on the Form. All decisions to replace one of the initially selected sixteen households must be made by you, the team supervisor, and never by one of the interviewers. You should do all in your power to convince a household to be interviewed before deciding to replace it. Further, you must write a brief report about why the household was replaced, using the space provided for "OBSERVATIONS" in the front of the household questionnaire.

When to Use a Replacement Household. You should only use a replacement household when (a) the dwelling unit designated by the street and house number (or, which was occupied by the designated head of household) is vacant, or, (b) if, after repeated attempts to contact the household, the members refuse to complete the interview. If a different household is residing in the designated dwelling unit, you should follow the standard procedure of interviewing the new household. Instruct your interviewers to inform you when this happens, and amend the Household Selection Form accordingly (i.e. cross out the names of the previous head/father of head, and fill-in the new names).

Choosing a Replacement Household. The replacement households are designated by shaded rows: the initial sixteen households have Form serial numbers 1-2, 4-5, 7-8, 10-11, 13-14, 16-17, 19-20, and 22-23. Replacement households have serial numbers 3, 6, 9, 12, 15, 18, 21, and 24. To replace a household, choose the replacement household that is closest on the Form to the household which must be replaced. For example, if the household with Form Serial No. 5 refuses to be interviewed, then replace the household with the household in the shaded row demarcated by Form Serial No. 6. If the dwelling unit previously occupied by the household demarcated by Form Serial No. 19 is empty, choose the replacement household in the shaded row demarcated by Form

Serial No. 18 (no. 20 is closer to no. 19 than to no. 18).

When a household is replaced, you should enter this fact on the Survey Information Sheet for both the male and female questionnaires. In the box entitled VERIFICATION OF THE QUESTIONNAIRE, ROUND ONE for the questionnaires of the household which is being replaced, enter the number of the replacement household alongside the words THIS HOUSEHOLD WILL BE REPLACED BY NO. Next enter the reason for the replacement, using the codes:

- 1 = NOT FOUND
- 2 = REFUSAL

This is all the information that will be entered on the questionnaire for the replaced household.

You must prepare a new questionnaire for the replacement household in the same manner that you prepared the original sixteen questionnaires -- copying identification particulars from the Household Selection Form and filling in the questionnaire processing code. For this reason, you should always carry PIHS Form 4, Household Selection and the master listing with you when you visit a PSU for the first time. In the new questionnaire for the replacement household, write the number of the replaced household in the box entitled VERIFICATION OF THE QUESTIONNAIRE, ROUND ONE, alongside the words THIS HOUSEHOLD REPLACES NO. Note that the data entry operator must enter information from both the replaced and the replacement questionnaires, although the former will contain only identification particulars and initial responses on the first page in the VERIFICATION OF THE QUESTIONNAIRE, ROUND ONE box. All other pages will be blank.

6. VERIFYING AND CODING THE QUESTIONNAIRES

You should review each questionnaire to determine if it was completely and correctly filled out before giving it to the data entry operator. The Questionnaire Verification Form is provided for this purpose. In addition, you must encode certain responses which are described below.

6.1 VERIFYING THE COMPLETED QUESTIONNAIRES

The purpose of this operation is to ensure that the questionnaire is completely filled out; that is to say, that everyone who should have been interviewed has replied and that every section is complete. Verification should be done the day after the questionnaire is completed, before the supervisor leaves the area and before the questionnaires are given to the data entry operator.

PIHS Form 2M: Male Questionnaire Verification and PIHS Form 2F: Female Questionnaire Verification are provided to assist you in verifying the questionnaires. The forms should be filled out after each round of the survey. Examples of these forms are listed on the following pages.

If problems are found in the questionnaires, it should be returned to the appropriate interviewer with instructions to correct them immediately, before leaving the area. The supervisor must keep the verification forms for each questionnaire until the end of the second round. After data for the second round have been entered, the forms will be kept at field office with the questionnaires.

6.2 OFFICE CODING

Most of the responses to the household questionnaire have been precoded. The supervisor is responsible for coding questions with column headings labelled "OFFICE CODE". Specifically, these are found in Section 5 Part B Questions 3, 4, 35 and 36 (primary and secondary off-farm occupation and standard industrial classifications), Section 6 Part B, Q.1 and Section 10 Part A, Q.2 (standard industrial code of each family business). These codes must be entered before giving the questionnaire to the data entry operator after Round One of the survey.

In coding these responses, you should refer to the standard two-digit occupation and industry classification codes used in the Labor Force Survey. These are listed in the annexes of this Manual.

*** PIHS FORM 2M: MALE QUESTIONNAIRE VERIFICATION ***

PROVINCE	SUB-UNIVERSE	STRATUM	PRIMARY SAMPLING UNIT	HOUSEHOLD		

Section	Question	Round One Check	R E S U L T		Notes / Remarks
			Satisfactory	To be redone	
1A		All males over 10 years of age are in the male roster. All females and children 10 years and under are in the female roster. All details (Q.2-Q.9) of the male and female rosters in both questionnaires match.			
1A	9	All persons were correctly classified as members of the household.			
1A	A-B	A cross was written in column A for all members of the household (code 1 in Q.9) and the age in years was copied from Q.5 to column B.			
2		This section was completed.			
3A		A line is filled in for each person in the male roster.			
4C		A line is filled in for all male household members.			
5A		A line is filled in for each person in the male roster.			
5B		A line is filled in for each person in the male roster.			
6A	1	If the answer is 1 (YES), a line is filled in for each male household member. The ID code of the best-informed person is to be transferred to the second page (Summary of survey results).			
6B	1	If the answer is 1 (YES), Q.1-5 for First, Second or Third Enterprise should be filled in. Industry codes of all enterprises must be filled in, and ID codes of best-informed persons must be transferred to the second page (Summary of survey results).			
M7A		This section is completed.			
M7B	1	If the answer is 1 (YES), then Q.2-43 must be filled up.			
M7C	1	If the answer is 1 (YES), then Q.2-16 must be filled up.			
M7D	1	If the answer is 1 (YES), then Q.2-12 must be filled up.			
M7E	1	If the answer is 1 (YES), then Q.2-28 must be filled up.			
M7F	1	If the answer is 1 (YES), then Q.2-21 must be filled up.			
M7I	5	If the answer is 1 (YES), then Q.6-21 must be filled up.			
8		A line is filled in for each household member 15 years and older			

*** PIHS FORM 2M: MALE QUESTIONNAIRE VERIFICATION ***

PROVINCE	SUB-UNIVERSE	STRATUM	PRIMARY SAMPLING UNIT	HOUSEHOLD	

Section	Question	Round Two Check	R E S U L T		Notes / Remarks
			Satisfactory	To be redone	
9A	1	Parts A to E should be completed if (and only if) the answer to this question is YES.			
9B1 9B2 9B3	1	A single box (for NO or YES) should be crossed for each crop in the list. If "Other crops" are reported, their codes must be specified. A line must be completed for each crop with a cross in the YES box.			
9B4	1	If the answer is 1 (YES), the rest of this part should be completed.			
9C	1	If the answer is 1 (YES), Q.2-4 should be filled in.			
9C	7	If the answer is 1 (YES), Q.8-9 should be filled in.			
9D	1	If the answer is 1 (YES), crops and corresponding crop codes should be specified in Q.2, and Q.3 to 5 should be completed.			
9D	6	If the answer is 1 (YES), Q.7-22 should be filled in following skip patterns correctly.			
9D	25	If the answer is 1 (YES), Q.26-30 should be filled in.			
9D	32	If the answer is 1 (YES), Q.33-35 should be filled in.			
9D	36	If the answer is 1 (YES), the rest of this section should be completed.			
9D	37	A single box (for NO or YES) should be crossed for every equipment in the list. A line must be completed for every equipment in the list.			
9E	1	If the answer is 1 (YES), the rest of this part should be completed.			
9F	1	If the answer is 1 (YES), the rest of this part should be completed.			
9G	1	If the answer is 1 (YES), the rest of this part should be completed.			
9H	1	If the answer is 1 (YES), the rest of this part should be completed.			
10A	1	If the answer is 1 (YES), the rest of this section should be completed.			
10B 10C		Every line should have a cross mark on either YES or NO column. For every line with a YES, Q.1-8 should be filled in following skip pattern correctly.			
10D		A line should be completed for every enterprise.			

Section	Question	Round Two Check	R E S U L T		Notes / Remarks
			Satisfactory	To be redone	
13E		Information was asked of all men 14 years and older.			
15A	1	If the answer is 1 (YES), Q.2 and part 15B should be completed.			
15A	3	If the answer is 1 (YES), Q.4 and part 15C should be completed.			
16A 16B	1	If the answer is 1 (YES), Q.2-12 should be filled in.			
17	1	Every line has a cross mark on either YES or NO column. For every line with a YES, Q.2 should be filled in.			

SUPERVISOR: _____

DATE

*** PIHS FORM 2F: FEMALE QUESTIONNAIRE VERIFICATION ***

PROVINCE	SUB-UNIVERSE	STRATUM	PRIMARY SAMPLING UNIT	HOUSEHOLD

Section	Question	Round One Check	R E S U L T		Notes / Remarks
			Satisfactory	To be redone	
1A		Female members and children 10 years and under are in the female roster; males over 10 years are in the male roster. All details of the rosters match in the male and female questionnaires (Q.2-Q.9).			
1A	9	All persons were correctly classified as members of the household in the female roster.			
1A	A-B	A cross was written in column A for all members of the household (code 1 in Q.9) and the age in years was copied from Q.5 to column B in the female roster.			
3A		A line is filled in for each household member 5 years or older on the female roster.			
4A 4B		A line is filled in for each child 5 years or under.			
4C		A line is filled in for all household members in the female roster.			
5A		A line is filled in for each household member 10 years or older in the female roster.			
5B		A line is filled in for each household member 10 years or older in the female roster.			
6A	1	If the answer is 1 (YES), a line is filled in for each household member 10 years and older in the female roster.			
6B		Each business operated by the household is noted in in the female questionnaire, and time inputs of female members and children have been verified.			
6C		A line is filled in for each female member 10 years or older.			
F7A	1	If the answer is 1 (YES), then the rest of this part should be completed. Review carefully all filter questions (Q.7, 17, 25, 26, 37, 48, 59, 67, 74, 82, 94, 103, 112, 120, 129 and 137). They should all be completed, and if the answer to any of them is greater than 0, then the block of questions that follow should be filled in.			
F7B	1	If the answer is 1 (YES), then the rest of this part should be completed. Review carefully all filter questions (Q.2, 12, 19 and 28). They should all be completed, and if the answer to any of them is greater than 0, then the block of questions that follow should be filled in.			
F7C	1	If the answer is 1 (YES), then the rest of this part should be completed. Review carefully all filter questions (Q.2, 12, 20 and 28). They should all be completed, and if the answer to any of them is greater than 0, then the block of questions that follow should be filled in.			

Section	Question	Round One Check	R E S U L T		Notes / Remarks
			Satisfactory	To be redone	
F7D	1	If the answer is 1 (YES), then the rest of this part should be completed. Review carefully all filter questions (Q.2, 14, 21 and 42). They should all be completed, and if the answer to any of them is greater than 0, then the block of questions that follow should be filled in.			
F7E F7F F7G F7H	1	If the answer is 1 (YES), then the rest of these parts should be completed.			
F7I	1	If the answer is 1 (YES), then the rest of this part should be completed. In this case, a single box (for NO or YES) must be crossed for each biomass fuel, and Q.3-5 must be filled up for each fuel with a cross in the YES box.			
F7J	1	If the answer is 1 (YES), then the rest of this part should be completed.			
8		A line is filled in for each household member 15 years and older in the female roster.			

*** PIHS FORM 2F: FEMALE QUESTIONNAIRE VERIFICATION ***

PROVINCE	SUB-UNIVERSE	STRATUM	PRIMARY SAMPLING UNIT	HOUSEHOLD	

Section	Question	Round Two Check	R E S U L T		Notes / Remarks
			Satisfactory	To be redone	
11A 11B	1	Every line should have a cross mark on either YES or NO column. For every line with a YES, the rest of the line should be completed.			
11C	1	Every line should have a cross mark on either YES or NO column. For every line with a YES, one or more items should appear in Q.2, with the corresponding code, and Q.3 to 7 should be completed.			
12A	1	Every line should have a cross mark on either YES or NO column. For every line with a YES, Q.2-9 should be filled in.			
12B	1	If answer is 1 (YES), the rest of this part should be completed.			
12B	2	Every line should have a cross mark in either YES or NO column. For every line with a YES, Q.3-7 should be filled in, following skip pattern correctly.			
12B	3	If the answer is 2 (NO), Q.4 should be filled in.			
13A 13B		Information was asked of each woman 14 years or older.			
13C		Information was asked of each woman who ever married from age 14 to 50 years with maternity experience.			
13D		This section must be completed for each woman with a child 3 years and younger.			
13E		Information was asked of all men 14 years and older.			
14		All lines are filled for children under 5 years and their mothers. Heights and weights measured.			
15D2		Information is included any woman who has married into the household in the last 5 years.			
15D5	1	If the answer is 1 (YES), Q.1 through Q.4 should be completed.			

SUPERVISOR: _____

--

DATE

--	--	--

7. MONITORING INTERVIEWS

7.1 OBSERVING THE INTERVIEWER

At least once a week, you should sit in on interviews conducted by each of your interviewers in order to observe that they are administering the questionnaire correctly. However, you should be very sensitive to cultural norms which might limit your presence during interviews with female household members. In any case, you should never attempt to observe the part of the interview which obtains information on family planning and maternity histories.

When observing an interview, you should not talk to either the interviewer or the respondent: you are there purely as an observer. Introduce yourself to the respondent and explain that you are only observing the interview and will take no part in administering the questionnaire. Inform the interviewer before the interview that he must not ask for advice during the interview and that he should act as though he were alone. It is important to make notes on any questions or concepts that the interviewer has difficulty in asking or in understanding. In short, the interview should give you an opportunity to objectively assess the strengths and weaknesses of the interviewer. Everything must be written down on the spot so that it is not forgotten.

Fill out PIHS Form 1: Interviewer Evaluation immediately after the interview. A copy of the form is included below. The main points to respond to in completing the form are:

- * Comportment of the interviewer. Did he greet everyone before beginning the interview? Did he introduce himself by explaining that he is working for the Federal Bureau of Statistics? Did he explain the objectives of the survey properly, how the household was chosen and that the interview would be completely confidential? What personal impression did he make? Was he polite and patient with the respondents during the interview? Did he thank everyone at the end?
- * How did he ask the questions? Did he ask the questions as they appear in the questionnaire? Did he try to help the respondent think through the answer when he had trouble in responding? Did he accept "I don't know" as an answer without probing?
- * Time spent on the interview. Did he avoid gossiping with people, while still being very polite? Did he ask the questions quickly, without hesitating? It may be worth noting the time at which he began each section.
- * Impartiality. Did he maintain a neutral attitude toward the questions and answers during the interview? Did he volunteer an opinion? Did he appear surprised or shocked or disapproving about any of the answers? Did he suggest answers when asking the

questions?

You should meet with the interviewer to discuss your impressions of the interview you observed. Do not neglect to get the interviewer's views on interview -- where he felt he had done well as well as his shortcomings. Discuss your impressions of the interview with him, making sure to enumerate his strong and weak points and offer advice on how he can perform more effectively.

Keep all completed Interviewer Evaluation forms with the team's files. These may be referred to by PIHS senior management should questions arise regarding data quality.

7.2 OBSERVING THE RESPONDENT

When observing interviews, you should also pay close attention to the respondent and make note of problems or difficulties in the interviewing process, particularly with respect to the following:

- * inappropriately worded questions in the questionnaire,
- * concepts that are unclear to the respondent, or
- * questions that are often not answered because they are too personal or too sensitive.

You should make notes on these points and other problems or issues which arise and need to be referred to the PIHS Management Team for advice or guidance. You can write particular observations and remarks on the page provided in the questionnaire (OBSERVATIONS AND COMMENTS "Remarks by the Supervisor on the First Round). In addition, these and other general issues should be raised when you are visited by a representative of the management team.

*** PIHS FORM 1: INTERVIEWER EVALUATION ***

INTERVIEWER: _____

EVALUATION CRITERIA	RATING	
	Satisfactory	Unsatisfactory
A. Comportment of the Interview		
1. Did he greet everyone before beginning the interview ?		
2. Did he introduce himself by explaining that he is working for the Federal Bureau of Statistics ?		
3. Did he explain the objectives of the survey properly, how the household was chosen and that the interview would be completely confidential ?		
4. Was he polite and patient with the respondents during the interview ?		
5. Did he thank everyone at the end ?		
B. Interview of Respondents		
1. Did he ask the questions as they appear in the questionnaire ?		
2. Did he try to interview the appropriate person in each section of the questionnaire?		
3. Did he accept "I don't know" as an answer without probing ?		
C. Time Spent on the Interview		
1. Did he avoid long discussion of the question with the respondents while still being patient and polite ?		
2. If he received irrelevant or complicated answers, did he/she break in too suddenly ?		
3. Did he rush through the interview thereby encouraging respondents to answer questions quickly ?		
D. Impartiality		
1. Did he maintain a neutral attitude toward the questions and answers during the interview ?		
2. Did he volunteer an opinion ?		
3. Did he appear surprised or shocked or disapproving about any of the answers ?		
4. Did he suggest answers when asking the questions ?		

SUPERVISOR _____

DATE

7.3 RE-INTERVIEWING SELECTED HOUSEHOLDS

Each week, you should visit three households selected at random from the sixteen being interviewed by your team to verify some of the responses obtained by your interviewers. PIHS Form 3: Interview Verification has been prepared which lists key questions to be re-asked in the household (see the following page for an example). Keep in mind that a difference in a response you obtain and that obtained by an interviewer does not necessarily mean that the interviewer is not doing a careful job. Respondents may provide different information at different times and the individual you speak with (usually the head of household) and the individual the interviewer spoke with may not be the same. However, one or two differences in responses indicate the need to follow up with the interviewer regarding possible causes. If you receive dramatically different responses to a number of questions, you must have a thorough discussion with the interviewer regarding why you received different responses.

*** PIHS FORM 3: RANDOM INTERVIEW VERIFICATION ***

--	--	--	--	--	--

PROVINCE SUB-UNIVERSE STRATUM PRIMARY SAMPLING UNIT HOUSEHOLD

SECTION	QUESTIONS	RESULT		COMMENTS
		SATIS-FACTORY	UNSATIS-FACTORY	
2	a) What type of dwelling unit does the household reside in? b) Does the household rent or own the unit?			
3	a) Which members of the household have attended school? How much schooling have they completed?			
4	a) Has anyone in the household been ill recently?			
5	a) Is any member of the household an agriculture laborer? Are they permanent workers, seasonal workers, or casual workers? b) Was any member an employee outside the agriculture sector? What were their occupations? Which industries were they employed in?			
6	a) Does any member of the household work on his/her own account or operate a business? Which member(s)? What type of work do they do?			
7	a) What do you cook your meals on (i.e. open fire, stove, etc.)? b) How do you heat you dwelling during cold months?			
9	a) How much total land is owned by your household? How much land is owned close to the village? How much land is owned far away from the village? b) Which crops did you grow during the last completed rabi and kharif seasons? (probe) If wheat or rice was grown, how many acres of each did you harvest? c) What kinds of agriculture machinery do you own?			
12	a) What kinds of foodstuffs has your household purchased during the past two weeks? Were some of these purchases on udhar or credit?			
13	a) How many children has your wife had? How many boys? How many girls?			
15	a) Do you currently have any loans outstanding? Who did you borrow from?			

SUPERVISOR: _____

--

DATE

--	--	--

8. SUPERVISION OF DATA ENTRY

One of your tasks that is unique to this survey is to monitor and correct errors in the questionnaires detected by the data entry program. Because the survey is conducted in two rounds, you will make at least three checks of errors detected by the data entry program for each household:

- * the first after the data from the first round are entered, involving only Sections 0 to 6, 8, parts of 9, and 14;
- * the second after data from the second round and corrections from the first round are entered, for all Sections from 0 to 17; and
- * a third after the corrections from the second round are entered.

You may have to make other checks if errors persist. However, keep in mind that it is possible for errors to remain in the final data for the household. This is to be expected with a questionnaire as complex as the PIHS. These errors will be taken into account at some later time by the data analysts.

8.1 RESPONSIBILITIES OF THE DATA ENTRY OPERATOR

Data entry involves keying in information from the questionnaires and then running a series of programs to check the information. These programs detect errors or inconsistencies in the data. All data are stored internally in the team's computer. In addition, the data entry operator makes backup copies of all data files on diskettes.

The data entry operator is also responsible for maintaining the microcomputer and printer and storing the questionnaires, diskettes and printouts properly.

8.2 DATA ENTRY CHECKS

Each week, the data entry operator should give you three specific computer-generated documents for each household in the previous week's PSU:

- * a summary of all records that have been entered for the household;
- * a listing of all data entered for the household;
- * a special listing of consistency checks.

You should do the following tasks with each of these documents.

1. Summary of Records Entered

This printout displays all sections entered by the data entry operator for the household, indicating the number of records in each section. The figure below shows a portion of the summary of records entered for a particular household:

HOUSEHOLD 1111111.11 - RECORDS ENTERED	
Form	
SECTION 1, PART A: HH INFORMATION	5
SECTION 1, PART B: PARENTS	5
SECTION 2, HOUSING PART A: TYPE OF DWELLING	1 <-- ERRORS
SECTION 2, HOUSING PART B: HOUSING EXPENSES	1
SECTION 2, HOUSING PART C: UTILITIES AND AMENI	1

You should compare this listing with the questionnaire to verify that the data entry operator entered all records. For instance, the listing above shows 5 records for Section 1A (Household information), meaning that the data entry operator recorded the information for 5 people. Look at the rosters in the male and female questionnaires, to make sure that this was indeed the number of people in this household. If this is not the case, you should give the listing back to the data entry operator for corrections.

If the data entry operator had to force an entry for a particular section, the note "<--ERRORS" appears next to the number of records entered (for instance, Section 2A in the example above). This means that the data entry program found some an error or inconsistency in the questionnaire for that section. In this case, you can find the specific nature of the problem by looking at the appropriate page of the questionnaire: the operator should have circled the incorrect responses with a red pencil on the page. You should then look at the listing of that section in the "Listing of the Complete Household" that the operator will also give you, and verify that he actually entered all data correctly. This will ascertain that the error is indeed in the questionnaire and not due to an error in data entry.

All errors so detected in the first round of the survey should be discussed with the interviewers, so that these questions are re-asked during the second round of interviews.

Any remaining errors in the questionnaires after the second round should also be discussed with the interviewers to avoid repeating them in future interviews. However, since the household will not be re-visited after the second round, interviewers will not be able to correct them in the field. Do not attempt to "correct" these errors yourself: all data in the questionnaire after the last visit to the household are to be recorded without any changes in the computer files, even if some errors remain.

2. Listing of the Complete Questionnaire

This listing is a full representation of all data entered for a household in a format that mimics the shape of the questionnaire. The figure below shows a portion of this listing for a particular household:

HOUSEHOLD 111111.11 - RECORDS ENTERED - 17/11/90

HOUSEHOLD 111111.11 -- SECTION 1, PART A: HH INFORMATION

I	Q	Q	Q	Q	Q	Q	Q	Q
D	0	0	0	0	0	0	0	0
C	2	3	4	5	6	7	8	9

01	1	01	043	1	1	51	03	1
02	1	03	015	5			00	1
51	2	02	045	1	1	01	01	1
52	2	03	013	5			00	1
53	1	03	011	5			00	1

HOUSEHOLD 111111.11 -- SECTION 1, PART B: PARENTS

I	Q	Q	Q	Q	Q	Q	0	Q	Q	Q	Q	Q	Q	1
D	0	0	0	0	0	0	7	0	0	1	1	1	1	14
C	1	2	3	4	5	6	7	A	8	9	0	1	2	4A

01	2			1	2	2	50	1	1	2		1	4	2	45	1
02	1	1	01						1	1	51					
51	1	2		1	5	3	59	1	2			1	3	3	59	2
52	1	1	01						1	1	51					
53	1	1	01						1	1	51					

HOUSEHOLD 111111.11 -- SECTION 2, HOUSING PART A: TYPE OF DWELLING

Q	Q	Q	Q	0	0	Q	Q	Q	Q	Q
0	0	0	0	5	5	0	0	0	0	1
1	2	3	4	Y	M	6	7	8	9	0

3	08	2		10		2		1	2	6	2
---	----	---	--	----	--	---	--	---	---	---	---

You can compare any portion of this listing with the corresponding section in the questionnaire, to verify that data entry was done correctly. Particularly, you can use this listing to know more about the sections appearing with the "<---ERRORS" mark in the "Summary of Sections Entered". The questions with incorrect or inconsistent answers are circled in black in the printout to help you find them more easily. The example above shows an inconsistency between the first two questions in Section 2: the first question (Type of dwelling) was coded "3" (Room in a larger unit), whereas the second question (No. of rooms occupied by this household) was coded 8, suggesting a likely interviewer or data entry error.

3. Listing of Consistency Checks

This printout shows inconsistencies detected by the data entry program among data in different sections of the questionnaire. The listing below provides an example:

```
Household 1111111.11: Consistency tests

---- Error number 1 :
SECTION 03A MISSING FOR INDIVIDUAL 01

---- Error number 2 :
INDIVIDUAL 51, RECORDED AS MOTHER OF 03, SEEMS TOO YOUNG

---- Error number 3 :
SECTION 09A1 NOT ENTERED

3 errors detected in this household
```

You should examine the questionnaire carefully to verify all these cases. Some of them may not be errors, but borderline situations that the data entry program has found suspicious (for example, the program expects mothers to be at least 12 years older than their children, but in rare cases woman may have had her first child at a very young age). If you agree that the comments in this listing are genuine errors, you should mark the relevant responses in the questionnaire, so that they can be corrected by the interviewer in the next visit to the household.

8.3 MANAGEMENT OF COMPUTER HARDWARE

Ensure that the data entry operator has:

- * turned off the computer and printer at the end of each work period;
- * keeps all equipment clean and protected from dust and heat;
- * does not mishandle the equipment;

Further, it is important to ensure that your computer equipment is used solely for entering data and fixing data errors for PIHS questionnaires and not for other tasks at the Regional Office.

8.4 BACKING UP DATA AND MANAGEMENT OF SURVEY MATERIALS

When all data entry and error correction for a PSU has been completed, make sure that the data entry operator makes two copies of all data for the PSU on diskettes. You should store one copy in the Regional Office, along

with copies of all questionnaires filled out for the PSU, and send the second copy to PIHS headquarters in Islamabad.

Annex I: TABLE No. 1 --- One Digit Random Numbers

A	B	C	D	E	F	G	H	I	J
3	9	8	8	9	3	4	4	6	1
6	4	7	7	9	1	5	3	2	6
3	1	9	8	4	6	6	3	9	8
7	2	9	5	8	2	1	6	5	1
4	4	1	4	7	3	1	9	4	8
6	4	7	5	1	1	1	5	1	8
4	2	2	5	8	9	6	7	9	4
9	2	6	5	1	8	5	4	4	9
1	9	4	8	3	9	8	9	8	8
2	8	8	6	8	4	6	7	9	7
6	6	7	4	9	3	4	9	9	7
1	6	1	2	7	2	7	4	4	5
7	5	6	8	9	4	5	5	9	5
1	5	3	9	4	5	3	6	4	3
5	4	3	1	4	9	1	8	6	1
7	5	2	7	9	3	2	3	9	9
3	5	4	9	3	9	8	3	1	2
2	6	6	3	3	2	5	8	2	4
1	7	7	3	1	5	5	3	3	8
8	7	9	4	4	3	9	5	7	5
1	7	7	4	7	2	4	3	3	9
2	9	9	1	7	9	5	6	2	2
1	2	8	1	2	3	2	9	1	8
2	3	4	8	6	7	5	2	6	3
7	9	4	1	5	8	5	7	2	1
8	7	6	4	1	9	1	7	9	8
1	2	7	5	6	2	3	8	9	5
6	6	6	7	3	4	8	4	3	8
9	6	2	7	1	9	8	8	7	7
1	1	2	8	4	4	7	3	1	6
8	8	3	3	7	9	7	1	6	9
3	9	4	1	4	7	7	3	3	9
9	8	2	1	2	8	9	1	9	7
8	7	4	6	2	2	7	5	9	3
4	2	4	2	2	2	7	3	1	4
1	9	7	8	4	6	3	8	3	8
1	9	4	8	8	8	5	3	9	8
1	9	8	6	9	4	4	7	8	5
5	1	1	1	6	3	9	1	8	1
3	1	2	4	2	3	5	6	7	5

Annex I: TABLE No. 2 --- Two Digit Random Numbers

A	B	C	D	E	F	G	H	I	J
78	46	08	78	59	99	97	15	78	20
12	35	13	53	88	11	87	80	82	76
35	01	77	13	07	02	73	72	23	64
18	25	36	15	05	44	57	27	60	43
76	17	02	33	53	10	17	69	87	56
29	04	73	23	24	55	05	02	47	77
93	98	25	73	05	96	54	95	27	13
46	25	33	88	53	17	02	78	86	73
89	39	15	46	98	23	08	17	63	25
47	88	45	54	38	83	31	10	78	43
56	95	78	62	05	98	36	19	49	12
09	64	45	81	38	93	93	11	15	18
19	48	95	93	38	32	08	89	24	90
06	05	76	06	55	42	61	85	69	27
79	11	22	19	72	56	04	43	82	92
10	61	25	17	61	32	26	79	09	60
58	97	62	08	53	73	55	35	85	55
27	88	64	21	89	45	51	56	13	98
28	66	30	31	45	48	68	08	50	90
44	93	71	10	79	85	94	20	29	91
76	85	30	08	63	33	03	84	29	95
72	74	31	31	93	97	62	29	90	76
41	03	43	23	67	25	85	79	48	64
08	46	45	24	55	47	27	82	78	12
13	08	87	90	33	74	92	12	68	19
53	57	16	99	60	16	11	63	15	40
96	20	97	19	18	87	29	27	94	50
62	34	76	46	67	75	14	85	96	08
71	44	35	22	85	12	79	68	33	62
01	24	66	96	80	08	36	65	28	25
92	64	22	91	58	86	21	64	91	44
50	03	95	04	63	04	45	12	08	14
28	83	78	95	20	98	15	97	52	15
83	78	39	95	56	57	59	24	60	03
24	29	77	94	74	66	19	92	82	19
82	16	54	06	84	29	59	24	37	54
36	65	76	79	39	61	88	35	45	71
97	43	09	11	77	68	60	70	34	35
72	99	63	71	34	29	59	06	27	69
60	27	68	16	39	80	88	25	69	65

Annex I: TABLE No. 3 --- Three Digit Random Numbers

A	B	C	D	E	F	G	H	I	J
768	961	556	201	636	423	368	231	880	322
294	168	863	523	642	221	715	813	814	503
280	596	479	351	923	855	069	218	177	301
186	179	443	865	803	346	272	991	351	742
915	356	053	432	162	973	126	951	675	845
701	339	333	568	566	306	287	586	108	359
738	998	038	904	659	100	790	643	939	077
679	791	710	526	176	942	804	717	935	595
605	785	406	659	769	250	149	487	543	556
217	213	670	551	211	460	122	058	866	715
128	989	281	902	255	652	142	966	501	180
567	504	655	256	413	752	397	553	164	459
876	564	757	461	751	735	959	988	924	090
147	013	464	743	603	176	428	010	695	098
602	987	532	114	364	829	968	730	164	094
065	360	362	858	357	113	402	530	554	712
554	494	512	814	716	056	606	291	999	324
845	261	100	970	358	933	664	036	087	538
160	189	819	908	966	144	907	506	685	117
278	932	886	527	609	228	793	347	765	504
632	775	867	707	625	164	587	554	875	354
546	946	612	862	912	402	545	577	567	306
302	881	433	026	186	396	849	186	745	740
075	651	875	998	302	015	450	802	778	641
709	219	892	552	892	839	345	712	846	767
760	505	595	411	336	450	112	261	410	453
763	063	040	146	174	078	956	093	488	328
506	942	270	018	435	785	511	546	631	295
506	777	175	426	548	498	317	739	710	235
235	621	177	843	685	978	858	553	902	176
293	381	359	279	049	091	251	899	120	116
802	178	053	124	767	718	784	137	725	506
421	386	034	109	458	316	550	720	154	418
477	828	059	810	943	554	929	730	182	977
508	381	405	971	905	774	757	360	568	524
922	441	073	732	279	163	220	415	688	519
173	118	285	941	619	663	880	747	187	185
834	932	611	880	502	862	374	153	631	657
805	062	289	313	883	249	213	858	214	780
670	100	921	551	195	737	451	193	806	917

Annex II: TWO-DIGIT CLASSIFICATION OF OCCUPATIONS

Major Group 0/1: Professional, Technical, and Related Workers

- 01 Physical scientists and related technicians
- 02 Architects and engineers, related technicians
- 04 Aircraft and ships officers
- 05 Life scientists and related technicians
- 06 Medical, dental, veterinary and related workers
- 08 Statisticians, mathematician, systems analysts, and related technicians
- 09 Economists
- 11 Accountants
- 12 Jurists
- 13 Teachers
- 14 Workers in Religion
- 15 Authors, journalists, and related writers
- 16 Sculptors, painters, photographers, and related creative artists
- 17 Composers and performing artists
- 18 Athletes, sportsmen, and related workers
- 19 Professional and technical workers not elsewhere classified

Major Group 2: Administrative and Managerial Workers

- 20 Legislative officials and government administrators
- 21 Managers

Major Group 3: Clerical and Related Workers

- 30 Clerical supervisors
- 31 Government executive officials
- 32 Stenographers, typists, and card and tape punching machine operators
- 33 Bookkeepers, cashiers, and related workers
- 34 Computing machine operators
- 35 Transport and communications supervisors
- 36 Transport conductors
- 37 Mail distribution clerks
- 38 Telephone and telegraph operators
- 39 Clerical and related workers not elsewhere classified

Major Group 4: Sales Workers

- 40 Managers (wholesale and retail trade)
- 41 Working proprietors (wholesale and retail trade)
- 42 Sales supervisors and buyers
- 43 Technical salesmen, commercial travelers, and manufacturers' agents
- 44 Insurance, real estate, securities, and business services salesmen and auctioneers

- 45 Salesmen, shop assistants, and related workers
- 49 Sales workers not elsewhere classified

Major Group 5: Service Workers

- 50 Managers (catering and lodging services)
- 51 Working proprietors (catering and lodging services)
- 52 Housekeeping and related service supervisors
- 53 Cooks, waiters, bartenders, and related workers
- 54 Maids and related housekeeping services workers not elsewhere classified
- 55 Building caretakers, charworkers, cleaners, and related workers
- 56 Launderers, dry-cleaners, and pressers
- 57 Hairdressers, barbers, beauticians, and related workers
- 58 Protective service workers
- 59 Service workers not elsewhere classified

Major Group 6: Agricultural, Animal Husbandry, and Forestry Workers, Fishermen, and Hunters

- 60 Farm managers and supervisors
- 61 Farmers
- 62 General farm workers
- 63 Forestry workers
- 64 Fishermen, hunters, and related workers

Major Group 7/8/9: Production and Related Workers, Transport Equipment Operators, and Laborers

- 70 Production supervisors and general foremen
- 71 Miners, quarrymen, well drillers, and related workers
- 72 Metal processors
- 73 Wood preparation workers and paper makers
- 74 Chemical processors and related workers
- 75 Spinners, weavers, knitters, dyes, and related workers
- 76 Tanners, fellmongers, and pelt dressers
- 77 Food and beverage processors
- 78 Tobacco preparers and tobacco product makers
- 79 Tailors, dressmakers, sewers, upholsterers, and related workers
- 80 Shoemakers and leather goods makers
- 81 Cabinetmakers and related wood workers
- 82 Stone cutters and carvers
- 83 Blacksmiths, toolmakers, and machine tool operators
- 84 Machinery fitters, machine assemblers, and precision instrument makers (except electrical)
- 85 Electrical fitters and related electrical and electronics workers
- 86 Broadcasting station and sound equipment operators and cinema projectionists

- 87 Plumbers, welders, sheet metal and structural metal preparers and erectors
- 88 Jewelry and precious metal workers
- 89 Glass formers, potters, and related workers
- 90 Rubber and plastics products makers
- 91 Paper and paperboard products makers
- 92 Printers and related workers
- 93 Painters
- 94 Production and related workers not elsewhere classified
- 95 Bricklayers, carpenter and other construction workers
- 96 Stationary engines and related equipment operators
- 97 Material handling and related equipment operators, dockers, and freight handlers
- 98 Transport equipment operators
- 99 Laborers not elsewhere classified

Annex III: TWO-DIGIT CLASSIFICATION OF ECONOMIC ACTIVITIES

Major Division 1: Agriculture, Hunting, Forestry, and Fishing

- 11 Agriculture and hunting
- 12 Forestry and logging
- 13 Fishing

Major Division 2: Mining and Quarrying

- 21 Coal mining
- 22 Crude petroleum and natural gas production
- 23 Metal ore mining
- 24 Other mining

Major Division 3: Manufacturing

- 31 Manufacture of food, beverages, and tobacco
- 32 Textile, wearing apparel, and leather industries
- 33 Manufacture of wood and wood products, including furniture
- 34 Manufacture of paper and paper products, printing and publishing
- 35 Manufacture of chemicals and chemical petroleum, coal, rubber, and plastic products
- 36 Manufacture of non-metallic mineral products, except products of petroleum and coal
- 37 Basic metal industries
- 38 Manufacture of fabricated metal products, machinery and equipment
- 39 Other manufacturing industries

Major Division 4: Electricity, Gas, and Water

- 41 Electricity, gas, and steam
- 42 Water works and supplies

Major Division 5: Construction

- 50 Construction
- 51 Building
- 52 Streets, highways, and bridges
- 53 Irrigation and hydroelectric industries
- 54 Sports projects
- 55 Docks and communications
- 56 Sewers, water mains, and drains
- 57 Pipelines
- 58 Other construction activities

Major Division 6: Wholesale and Retail Trade and Restaurants and Hotels

- 61 Wholesale trade
- 62 Retail trade
- 63 Restaurants and hotels

Major Division 7: Transport, Storage, and Communication

- 71 Transport and storage
- 72 Communication

Major Division 8: Financing, Insurance, Real Estate and Business Services

- 81 Financial institutions
- 82 Insurance
- 83 Real estate and business

Major Division 9: Community, Social, and Personal Services

- 91 Public administration and defence
- 92 Sanitary and similar services
- 93 Social and related community services
- 94 Recreational and cultural services
- 95 Personal and household services
- 96 International and other extra-territorial bodies

Major Division 0: Activities Not Adequately Defined

- 0 Activities not adequately defined

**Annex IV: REFERENCE PERIOD FOR "PAST RABI SEASON"
AND "PAST KHARIF SEASON"**

Interviews taking place	"Past Rabi Season"		"Past Kharif Season"	
	Begins	Ends	Begins	Ends
January, 1991	Oct, 89	June, 90	April, 90	Nov, 90
February, 1991	Oct, 89	June, 90	April, 90	Nov, 90
March, 1991	Oct, 89	June, 90	April, 90	Nov, 90
April, 1991	Oct, 89	June, 90	April, 90	Nov, 90
May, 1991	Oct, 89	June, 90	April, 90	Nov, 90
June, 1991	Oct, 90	June, 91	April, 90	Nov, 90
July, 1991	Oct, 90	June, 91	April, 90	Nov, 90
August, 1991	Oct, 90	June, 91	April, 90	Nov, 90
September, 1991	Oct, 90	June, 91	April, 90	Nov, 90
October, 1991	Oct, 90	June, 91	April, 90	Nov, 90
November, 1991	Oct, 90	June, 91	April, 91	Nov, 91
December, 1991	Oct, 90	June, 91	April, 91	Nov, 91