



In collaboration with Federal Bureau of Statistics

# PIHS

Pakistan Integrated Household Survey Project

December, 1990

## DATA ENTRY MANUAL

### INSTRUCTIONS FOR K.P.V.O.S

Pakistan Integrated Household Survey

P I H S

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## 1. INTRODUCTION TO P.I.H.S

### 1.1 Objectives:

The ultimate objective of the economy of a country is to deliver goods and services to the people of the country. The Government of a country, being one the most important agents in the economy, has a very important role to play in this regard. Either through direct investment in certain sectors of the economy or through its policies towards other sectors, government action plays an important role in offering people access to good health, education, employment, as well as a wide range of other goods and services.

The diverse composition of a country's population makes the task of determining the efficacy of a particular policy or program more complex for the government. Often, the actions of the government have varies, and at times opposite, effects on different members of the country. Selection of a particular policy by the government therefore involves careful analysis of the costs and benefits of each possible action. To do so, the government needs information on the material welfare of its people, and on how different actions are likely to affect different groups.

The Pakistan Integrated Household Survey (PIHS) is one such tool through which this type of information can be obtained. It is designed to provide Government of Pakistan policy makers and researchers with a linked household and community database that can then be used by them to analyze policy initiatives that affect the material welfare levels and living standards of households in Pakistan. One of the main objectives of the project is to help the government identify and assess different poverty alleviation measures. In a broad context, the project aims at improving the linkages between data collection and end users of the information through improving the ability of the Federal Bureau of Statistics to respond to policy questions in a timely manner.

The PIHS household and community questionnaires are modeled after questionnaires developed by the Living Standards Measurement Study (LSMS) carried out by the World Bank in a number of other developing countries. These questionnaires have been modified to better address the situation in Pakistan through joint consultation between the World Bank, the Federal Bureau of Statistics, Pakistani researchers, and project donors.

Field work for the survey is expected to commence on January 5th, 1991, and is scheduled to finish at the end of December, 1991 when the questionnaires have been completed for all selected households in different parts of Pakistan.

## 1.2 Staffing for the survey:

The Pakistan Integrated Household Survey will be conducted by a management team based at the Federal Bureau of Statistics (FBS) office in Islamabad, and fifteen data collection and entry teams based at the regional offices of the Federal Bureau of Statistics. In order to get the results out quickly, it was decided to decentralize the data entry operations, which, for previous surveys, had been done at one central location only.

This decentralization involved installing a microcomputer in each of the regional offices for the immediate entry of data from all questionnaires completed by each team. The decision to decentralize will naturally mean increased responsibility for the survey teams based in the regional offices.

The P.I.H.S. management team consists of six members: a Project Director, a Chief, three Statistical Officers, and a Data Processing Manager. The team is headed by the Project Director who is responsible for administering the survey. He directs the work of the team, and makes the necessary contacts for the smooth running of the project. He is assisted in his duties by the Chief PIHS Section, and by the three Statistical Officers.

The Data Processing Officer is responsible for designing the data entry software and data processing programs. He ensures that the supervisors and data entry operators follow the instructions for running the programs and operating the microcomputers properly.

The fifteen data collection and entry teams shall consist of six members each, and will be provided with a vehicle that shall be fully committed to its use throughout the survey period. Each team shall be headed by a Statistical Officer, and shall consist of 2 male Statistical Assistants, 2 female Statistical Assistants, 1 key punch and verifying operator (KPVO), and 1 driver.

The Statistical Officer is the team leader, and is responsible for supervising, monitoring and, if necessary, correcting the work of the statistical assistants and the KPVO. He also oversees the team's equipment, vehicles and funds, and this is the management team's representative at the regional office.

The four statistical assistants, two male and two female will interview households to collect data under the supervision of the Statistical Officer in accordance with the set timetable. The key punch and verifying operator is responsible for entering the data collected on the microcomputer.

### 1.3 Sampling frame:

The sampling frame for P.I.H.S. has been developed by the Federal Bureau of Statistics. 16 households shall be interviewed in each selected primary sampling unit (PSU). In all, some 300 primary sampling units will be visited during the 12 month period of the survey, 150 in rural areas and 150 in urban areas.

The fifteen teams shall be based in the following areas: Peshawar, Bannu, Rawalpindi, Faisalabad, Sargodha, Lahore (two teams), Gujranwala, Multan, Bahawalpur, Sukkur, Hyderabad, Karachi (two teams), and Quetta. On average, each team shall visit about 20 primary sampling units (PSUs) during the 12 months of field work. Thus, about 4800 households shall be covered by the teams during the course of the survey (16 households per PSU per team x 20 PSU x 15 teams).

### 1.4 Organization of the survey:

Each field team is expected to cover 2 PSUs every month. While the nature of the assignment for the team is such it will involve extensive field work for most members, the key punch and verifying operators will always remain at their respective regional offices, and they will key-in collected data while the survey is still in progress. The work-plan for each team is expected to be as follows:

#### WEEK 1:

|           |  |
|-----------|--|
| Rest of   | First visit PSU A. Carry out Round 1 for the |
| the team: | 16 selected households of PSU A.             |
| KPVO      | .....Same as Week 5.....                     |

#### WEEK 2:

|           |  |
|-----------|--|
| Rest of   | First visit PSU B. Carry out Round 1 for the   |
| the team: | 16 selected households of PSU B.   |
| KPVO      | Enter data for Round 1 of PSU A. Obtain printout<br>of results of Round 1 by end of the week |

#### WEEK 3:

|           |   |
|-----------|---|
| Rest of   | Second visit PSU A. Carry out Round 2 for the   |
| the team: | 16 selected households of PSU A. Check KPVO<br>inconsistencies and omissions detected during<br>data entry of Round 1. Enter data for Round 1<br>of PSU B. Obtain printout of results of Round 1<br>by end of the week. |

**WEEK 4:**

Rest of  
the team:  
KPVO

Second visit PSU B. Carry out Round 2 for the  
16 selected households of PSU A. Check  
inconsistencies and omissions detected during data  
entry of Round 1.

Complete data entry of Round 2 for PSU A  
covered by the team during the previous week.

**WEEK 5:**

Rest of  
the team:  
KPVO

.....Same as Week 1.....

Complete data entry of Round 2 for PSU B  
covered by the team during the previous week.

Schematically, the work plan would be as follows:

**WORKPLAN FOR THE FIELD TEAMS:**

|                                 | WEEK 1           | WEEK 2           | WEEK 3           | WEEK 4           | WEEK 5           |
|---------------------------------|------------------|------------------|------------------|------------------|------------------|
| Rest of<br>the team             | ROUND 1<br>PSU A | ROUND 1<br>PSU B | ROUND 2<br>PSU A | ROUND 2<br>PSU A |                  |
| Key punch and<br>ver. operators |                  | ROUND 1<br>PSU A | ROUND 1<br>PSU B | ROUND 2<br>PSU A | ROUND 2<br>PSU B |

## **2. STRUCTURE OF THE QUESTIONNAIRE:**

### **2.1 Sections:**

The P.I.H.S questionnaire is divided into 17 sections, each of which covers a separate aspect of household activity. The titles of the sections are as follows:

1. HOUSEHOLD INFORMATION
2. HOUSING
3. EDUCATION
4. HEALTH
5. WAGE EMPLOYMENT
6. FAMILY LABOR
7. ENERGY
8. MIGRATION
9. FARMING AND LIVESTOCK
10. NON-FARM ENTERPRISE ACTIVITIES
11. NON-FOOD EXPENDITURES AND INVENTORY OF DURABLE GOODS
12. FOOD EXPENSES AND HOME PRODUCTION
13. MARRIAGE AND MATERNITY HISTORY
14. ANTHROPOMETRICS
15. CREDIT AND SAVINGS
16. TRANSFERS AND REMITTANCES
17. OTHER INCOME

### **2.2 Subsections:**

Each section is further divided into subsections A, B, C, etc. For instance, **SECTION 2: HOUSING** is further split up into:

- |         |                         |
|---------|-------------------------|
| PART A: | Type of dwelling        |
| PART B: | Housing expenses        |
| PART C: | Utilities and amenities |

A complete list of the subsections contained in each section as follows:

|  |                   |
|--|-------------------|
| <b>SECTION 1: HOUSEHOLD INFORMATION:</b>                               | <b>( 3 PAGES)</b> |
| Part A: Household roster   | ( 2 pages)        |
| Part B: Information on parents   | ( 1 page)         |
| <b>SECTION 2: HOUSING:</b>   | <b>( 3 PAGES)</b> |
| Part A: Type of dwelling   | ( 1 page)         |
| Part B: Housing expenses   | ( 1 page)         |
| Part C: Utilities and amenities  | ( 1 page)         |
| <b>SECTION 3: EDUCATION:</b>   | <b>( 5 PAGES)</b> |
| Part A: Literacy and training  | ( 1 page)         |
| Part B: Formal education   | ( 2 pages)        |
| Part C: Interruption of education                                      | ( 1 page)         |
| Part D: Vocational and technical training                              | ( 1 page)         |
| <b>SECTION 4: HEALTH:</b>  | <b>( 4 PAGES)</b> |
| Part A: Diarrhea   | ( 1 page)         |
| Part B: Immunizations  | ( 1 page)         |
| Part C: Other illnesses  | ( 2 pages)        |
| <b>SECTION 5: WAGE EMPLOYMENT:</b>                                     | <b>( 9 PAGES)</b> |
| Part A: Employment in agriculture                                      | ( 2 pages)        |
| Part B: Employment outside agriculture                                 | ( 5 pages)        |
| Part C: Pension, social security and unemployment                      | ( 1 page)         |
| Part D: Overseas employment  | ( 1 page)         |
| <b>SECTION 6: FAMILY LABOR:</b>  | <b>( 5 PAGES)</b> |
| Part A: Family labor inputs on own farm or land rented in/sharecropped | ( 1 page)         |
| Part B: Non-farm self-employment                                       | ( 1 page)         |
| Part C: Female time use  | ( 3 pages)        |
| <b>SECTION 7M: ENERGY (MALE QUESTIONNAIRE):</b>                        | <b>( 9 PAGES)</b> |
| Part A: Electricity usage and appliance ownership                      | ( 2 pages)        |
| Part B: Natural gas and appliance ownership                            | ( 1 page)         |
| Part C: LPG and appliance ownership                                    | ( 1 page)         |
| Part D: Kerosine oil and appliance ownership                           | ( 1 page)         |
| Part E: Firewood usage   | ( 1 page)         |
| Part F: Dung cake  | ( 1 page)         |
| Part I: Other fuels usage  | ( 1 page)         |
| Part M: Attitudes/behavior   | ( 1 page)         |



|   |                   |
|---|-------------------|
| <b>SECTION 7F: ENERGY (FEMALE QUESTIONNAIRE):</b>             | <b>(24 PAGES)</b> |
| Part A: Electricity usage and appliance ownership             | ( 6 pages)        |
| Part B: Natural gas and appliance ownership                   | ( 2 pages)        |
| Part C: LPG and appliance ownership                           | ( 2 pages)        |
| Part D: Kerosine oil and appliance ownership                  | ( 2 pages)        |
| Part E: Firewood usage  | ( 3 pages)        |
| Part F: Dung cake   | ( 2 pages)        |
| Part G: Charcoal usage  | ( 1 page)         |
| Part H: Coal usage  | ( 1 page)         |
| Part I: Other fuels usage                                     | ( 1 page)         |
| Part J: Stoves  | ( 1 page)         |
| Part K: Cooking habits and implements                         | ( 1 page)         |
| Part L: Fuel switching  | ( 1 page)         |
| Part M: Attitudes/behavior                                    | ( 1 page)         |
| <b>SECTION 8: MIGRATION:</b>                                  | <b>( 1 PAGE)</b>  |
| <b>SECTION 9: FARMING AND LIVESTOCK:</b>                      | <b>(26 PAGES)</b> |
| Part A: Landholding and tenure                                | ( 3 pages)        |
| Part B1: Rabi crop production and distribution                | ( 3 pages)        |
| Part B2: Kharif crop production and distribution              | ( 3 pages)        |
| Part B3: Orchard crops  | ( 2 pages)        |
| Part B4: Sugarcane  | ( 1 page)         |
| Part C: Assistance and credit                                 | ( 1 page)         |
| Part D: Expenditure on agriculture inputs                     | ( 6 pages)        |
| Part E: Expenditures and income from agriculture services     | ( 2 pages)        |
| Part F: Livestock ownership and production                    | ( 1 page)         |
| Part G: Hired labor on own farm                               | ( 2 pages)        |
| Part H: Income from processing and sales of own-farm products | ( 2 pages)        |
| <b>SECTION 10: NON-FARM ENTERPRISE ACTIVITIES:</b>            | <b>(10 PAGES)</b> |
| Part A: General characteristics of the enterprise             | ( 3 pages)        |
| Part B: Operating expenses                                    | ( 3 pages)        |
| Part C: Ownership of assets                                   | ( 3 pages)        |
| Part D: Revenues  | ( 1 page)         |

|   |                   |
|---|-------------------|
| <b>SECTION 11: NON-FOOD EXPENDITURES AND INVENTORY</b>                |                   |
| <b>OF DURABLE GOODS:</b>  | <b>( 3 PAGES)</b> |
| Part A: Daily expenses  | ( 1 page)         |
| Part B: Annual expenses   | ( 1 page)         |
| Part C: Inventory of durable goods                                    | ( 1 page)         |
| <b>SECTION 12: FOOD EXPENSES AND HOME PRODUCTION:</b>                 | <b>( 4 PAGES)</b> |
| Part A: Food expenses   | ( 2 pages)        |
| Part B: Home production   | ( 2 pages)        |
| <b>SECTION 13: MARRIAGE AND MATERNITY HISTORY:</b>                    | <b>( 6 PAGES)</b> |
| Part A: Maternity history for all women 14 years and older            | ( 1 page)         |
| Part B: Family planning   | ( 1 page)         |
| Part C: Maternity history for ever married women who have given birth | ( 2 pages)        |
| Part D: Infant feeding practices                                      | ( 1 page)         |
| Part E: Men's marriage history  | ( 1 page)         |
| <b>SECTION 14: ANTHROPOMETRICS:</b>                                   | <b>( 1 PAGE)</b>  |
| <b>SECTION 15: CREDIT AND SAVINGS:</b>                                | <b>(10 PAGES)</b> |
| Part A: Assets and liabilities position                               | ( 1 page)         |
| Part B: Borrowing and outstanding loans                               | ( 2 pages)        |
| Part C: Lending and outstanding loans                                 | ( 1 page)         |
| Part D: Property  | ( 1 page)         |
| Part D1: Personal and investment property                             | ( 1 page)         |
| Part D2: Dowries  | ( 1 page)         |
| Part D3: Stocks, shares, bonds and other securities                   | ( 1 page)         |
| Part D4: Bank deposits and postal savings                             | ( 1 page)         |
| Part D5: Bisi or saving committees                                    | ( 1 page)         |
| <b>SECTION 16: TRANSFERS AND REMITTANCES:</b>                         | <b>( 2 PAGES)</b> |
| Part A: Remittances and transfer expenditure                          | ( 1 page)         |
| Part B: remittances and transfer income                               | ( 1 page)         |
| <b>SECTION 17: OTHER INCOME:</b>                                      | <b>(1 PAGE)</b>   |

### 2.3 Round 1 and Round 2:

The questionnaire is designed to be administered in two visits to each sample household. Apart from avoiding the problem of interviewing household members in one long stretch, scheduling two visits also allows the teams to improve the quality of the data collected. The data entry program that will be used for P.I.H.S. is also designed to detect inconsistencies in the data entered, and this allows the teams to check on possible errors during the second visit to the household.

During the first visit to the household (Round 1), the enumerators will cover sections 1-6,8, part of 9, and section 14 and will fix a date with the designated respondents of the household for the second visit. During the second visit (Round 2) which will be held two weeks after the first visit, the enumerators will cover the remaining portions of the questionnaire and resolve any omissions or inconsistencies that were detected during data entry of information from the first part of the survey.

### 2.4 Male and female questionnaire sub-parts:

The PIHS questionnaire is divided into two parts (Male and Female) which are to be administered to the male and female members of the household respectively. Sections such as SECTION 3: EDUCATION, which require information on male as well as female members of the household, are included in both parts of the questionnaire. Other sections such as SECTION 2: HOUSING and SECTION 12: FOOD EXPENSES AND HOME PRODUCTION, which concern data at the aggregate household level, are included in either the male questionnaire or the female questionnaire depending upon which member of the household is likely to know more about that particular item.

However, it is important to note that the division of the questionnaire into the male and female portions has been undertaken solely to facilitate gathering of data in the field. Male and female enumerators can interview respondents of different sexes separately when visiting each household, and thus obtain information pertaining to household members of both sexes directly from the individuals concerned. From the data entry point of view, it is important to note that data from the male and female questionnaires of a particular household is to be considered as parts of the same data file. When entering data, extreme care must be taken to ensure that for each household in a particular primary sampling unit, the two parts of the questionnaire (i.e the male and female portions) are correctly matched together.

A list of the sections included in the male and female portions of the questionnaire is as follows:

#### MALE QUESTIONNAIRE

|                           |           |
|---------------------------|-----------|
| Survey information        | ( 1 PAGE) |
| Summary of survey results | ( 1 PAGE) |

|   |                 |
|---|-----------------|
| Observation and comments                        | ( 1 PAGE)       |
| SECTION 1: Parts A and B                        | ( 3 PAGES)      |
| SECTION 2: Parts A, B and C                     | ( 3 PAGES)      |
| SECTION 3: Parts A, B, C and D                  | ( 5 PAGES)      |
| SECTION 4: Part C                               | ( 2 PAGES)      |
| SECTION 5: Parts A, B, C and D                  | ( 9 PAGES)      |
| SECTION 6: Parts A and B                        | ( 2 PAGES)      |
| SECTION 8:                                      | ( 1 PAGE)       |
| SECTION 9: Parts A, B, C, D, E, F, G and H      | (26 PAGES)      |
| Respondents for second round                    | ( 1 PAGE)       |
| SECTION 7M: Parts A, B, C, D, E, F, I and M     |                 |
| SECTION 10: Parts A, B, C and D                 | (10 PAGES)      |
| SECTION 11: NIL                                 |                 |
| SECTION 12: NIL                                 |                 |
| SECTION 13: Part E                              | ( 1 PAGE)       |
| SECTION 15: Parts A, B, C, D, D1, D3, D4 and D5 | ( 9 PAGES)      |
| SECTION 16: Parts A and B                       | ( 2 PAGES)      |
| SECTION 17:                                     | ( 1 PAGE)       |
| ANNEXURE A: Occupation and industry codes       | ( 1 PAGE)       |
| ANNEXURE B: Geographic, crop and other codes    | ( 1 PAGE)       |
| Instructions for the roster                     | ( 1 PAGE)       |
| <b>T O T A L :</b>                              | <b>90 PAGES</b> |

## FEMALE QUESTIONNAIRE

|   |            |
|---|------------|
| Survey information  | ( 1 PAGE)  |
| Summary of survey results                                     | ( 1 PAGE)  |
| Observation and comments                                      | ( 1 PAGE)  |
| SECTION 1: Parts A and B                                      | ( 3 PAGES) |
| SECTION 2: NIL  |            |
| SECTION 3: Parts A, B, C and D                                | ( 5 PAGES) |
| SECTION 4: Parts A, B and C                                   | ( 4 PAGES) |
| SECTION 5: Parts A, B and C                                   | ( 8 PAGES) |
| SECTION 6: Parts A, B and C                                   | ( 5 PAGES) |
| SECTION 8:  | ( 1 PAGE)  |
| SECTION 14:   | ( 1 PAGE)  |
| Respondents for second round                                  | ( 1 PAGE)  |
| SECTION 7F: Parts A, B, C, D, E, F, G, H, I,<br>J, K, L and M | (24 PAGES) |
| SECTION 9: NIL  |            |
| SECTION 10: NIL   |            |
| SECTION 11: Parts A, B and C                                  | ( 3 PAGES) |
| SECTION 12: Parts A and B                                     | ( 4 PAGES) |
| SECTION 13: Parts A, B, C and D                               | (14 PAGES) |
| SECTION 15: Parts D2 and D5                                   | ( 2 PAGES) |
| SECTION 16: NIL   |            |
| SECTION 17: NIL   |            |
| ANNEXURE A: Occupation and industry codes                     | ( 1 PAGE)  |
| ANNEXURE B: Geographic, crop and other codes                  | ( 1 PAGE)  |
| Instructions for the roster                                   | ( 1 PAGE)  |
| T O T A L :   | 81 PAGES   |

### **3. DUTIES OF THE KEY PUNCH AND VERIFYING OPERATOR**

The key punch and verifying operator (KPVO) has four basic duties:

- entry of data from the questionnaires
- printouts of data entered and inter-record checks
- transfer of data to diskettes, and diskette verification
- handling of the equipment and documentation.

#### **3.1 Entry of data:**

The entry of data consists of putting all data from the questionnaires into the computer, and running a number of computer checks so that errors that are detected can be corrected. The clean data is then transferred onto diskettes and sent to Islamabad. Since the success of the survey depends on the quality of the data, it is important that a number of checks be made to ensure that the data is stored safely, and that its high quality is maintained throughout the course of the survey.

The statistical officer as head of the team, is responsible for overseeing and supervising the collection, entry, and documentation of data obtained during the survey, as well as handling of computer hardware and other equipment. The KPVO should submit the following to the statistical officer every week:

- A two-part printout per questionnaire. In all, 16 such printouts should be submitted each week (i.e one per household). Each printout consists of:
  - a) one part listing all sections entered, and a summary of the sections entered for each questionnaire set.
  - b) a second part giving the results of the inter-record checks
- 3 diskettes (the "first backup" diskette, the "second backup" diskette, and the "third backup" diskette).
- 16 sets of the questionnaires.

Data from the Community-level questionnaires will be entered in Islamabad.

#### **3.2 Printouts of data and inter-record checks:**

a) The printout of all data entered: This printout consists of all data entered in each section of the household. In this printout, inconsistent fields are circled in dark ink. In principle, the errors and inconsistencies

shown should not result from data entry, since errors are detected during entry, and it is the job of the KPVO to correct them by rechecking the questionnaire. The KPVO should enter data that the program flags as incorrect only when the data are given as such in the questionnaire.

A summary is listed at the end of this printout. This summary consists of the complete list of sections entered for a given household. For each section the number of records entered is listed along with a symbol indicating whether or not that section contains incorrect records.

b) The results of the Inter-record checks: This part gives the results of the comparisons made between the different parts of a section, or between different sections of the questionnaire. For example, as far as the ages and relationship of individuals in the Household Roster is concerned, there may be contradictions between the data given for two people. Someone's mother may be given as younger than that person, or may not be shown as female, or there may be contradictions in the data provided for spouses, etc. All this will be indicated in this part of the listing.

### 3.3 Transfer of data and diskette verification:

When data entry for a particular PSU has been completed, three copies of the data entered should be made on floppy diskettes (the first, second, and third backup diskettes), and these diskettes should be given to the statistical officer. These copies can be made using the option "Back-up a PSU" of the General Menu.

If necessary, new diskettes should be formatted using the option "Format a new diskette" before transferring data to them.

### 3.4 Handling of the equipment and documentation:

Care of computer hardware and documentation consists of a) properly maintaining the microcomputer and the printer and b) properly storing the questionnaires, diskettes and printouts.

a) Care of the computer: In general, the computer and printer should be protected from dust and heat. Make sure that the doors and windows are always closed. In addition, you should also make sure that both the computer and printer are:

- turned off and unplugged after the end of the work session
- protected by the special covers designed for them.
- kept impeccably clean
- used normally, i.e., not maltreated

b) Management of documents: The documents you will handle are the printouts, diskettes and questionnaires. These should be put in order by PSU and, within a given PSU, by household number. In particular, you should ensure that filing of the above is meticulous, as this will make retrieval easier.

Sending diskettes to Islamabad: Whenever a complete PSU has been entered, you should hand over the printouts, the diskettes, and the questionnaires to the statistical officer. The statistical officer will then send the following documents to the survey management team:

- the "first backup" and "second backup" diskettes
- the latest printouts produced after the data were entered in Round 2.
- the 16 sets of questionnaires for the PSU
- the community questionnaire(s).

For the PSU in question, the regional office will retain only the third backup diskette; the other printouts will be brought back to Islamabad by the management team following supervision missions.

### 3.5 Relationship with others:

The KPVO is part of a team comprising five other members, and should try to maintain good working relations with other members of the team.

a) Statistical officer: The statistical officer is the leader of the team, and as such, the KPVO should respect him and follow his instructions. One of the duties of the statistical officer will be to help the KPVO with his work, and make sure that the KPVO is following the instructions of the survey management team. The statistical officer will submit regular reports to the management team. If any problems arise, the KPVO should consult the statistical officer first for assistance. If he is unable to resolve the problem, he will bring the matter to the head of the regional office or the management team, depending on its nature.



The KPVO should contact someone else only when the statistical officer is away and the matter cannot await his return. This may occur, for example, when the computer is down or the KPVO is ill. In such instances, the KPVO should first inform the head of the regional office and then inform the management team directly immediately. The best person to contact is the Data Processing Manager, but you can speak to any member of the management team.

b) FBS Regional Office Chief: The Chief of the regional office is the representative of the Director General of the Federal Bureau of Statistics in the region, and as such the KPVO should respect him. Normally, the KPVO will not have any direct relations with him, and instead the statistical officer in-charge of the team will be in contact with him. The KPVO should deal with the Regional Head only in the event of an urgent problem when the supervisor is away. In that instance, as mentioned above, the KPVO should inform him and ask how to alert the management team in Islamabad directly.

c) Other staff at the Regional Office: Strictly speaking, the KPVO will have no working relations with other staff of the regional office. However, all concerned are employees of the Federal Bureau of Statistics and work at the same regional office. The KPVO should therefore try to maintain courteous and cordial relations with all people at the office.

### **3.6 Pace of work:**

Each KPVO should enter 16 half-questionnaires per week (i.e 16 male and 16 female questionnaire parts), in addition to making any corrections for questionnaires already entered. This is critical. If this pace is not kept up, the entire survey will be held up because the statistical officers need to have the results from the computer checks before continuing the survey for a PSU already surveyed.

Thus, the minimum average is 4 half-questionnaires entered per day. However, the KPVO should enter more to meet any contingency. Regardless of the problems that arise, the KPVO should do his or her utmost to enter the 16 half-questionnaires for the weekly PSU.

Below is a typical schedule for the first four weeks for a typical team:

| WEEK | PSU | HOUSEHOLD  | WORK   | RESULTS  |
|------|-----|--|--|--|
| 1    | A   | A01/A02/A03/A04<br>A05/A06/A07/A08<br>A09/A10/A11/A12<br>A13/A14/A15/A16 | Entry of data<br>from Round 1                                | 16 printouts<br>1 diskette<br>16 questionnaires  |
| 2    | B   | B01/B02/B03/B04<br>B05/B06/B07/B08<br>B09/B10/B11/B12<br>B13/B14/B15/B16 | Entry of data<br>from Round 1                                | 16 printouts<br>1 diskette<br>16 questionnaires  |
| 3    | A   | A01/A02/A03/A04<br>A05/A06/A07/A08<br>A09/A10/A11/A12<br>A13/A14/A15/A16 | Corrections<br>from Round 1<br>Entry of data<br>from Round 2 | 16 printouts<br>3 diskettes<br>16 questionnaires |
| 4    | B   | B01/B02/B03/B04<br>B05/B06/B07/B08<br>B09/B10/B11/B12<br>B13/B14/B15/B16 | Corrections<br>from Round 1<br>Entry of data<br>from Round 2 | 16 printouts<br>3 diskettes<br>16 questionnaires |

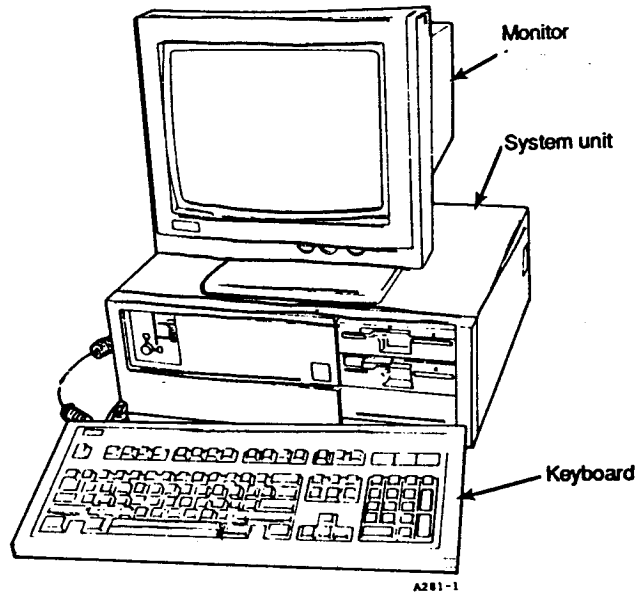
#### 4. USING THE MICROCOMPUTER

##### 4.1 Introduction to the equipment:

Each team shall be provided with an AST Premium 286 computer and a Tandy DMP 442 dot matrix printer for the PIHS. The set provided consists of the following parts:

- Monitor
- System Unit
- Keyboard
- Printer

The System Unit consists of a 40 MB Hard Disk, a 5.25" floppy drive, and a 3.5" floppy drive.



#### 4.2 Monitor:

The monitor screen of the AST 286 is monochromatic, meaning that only one color is used. The screen has 25 lines and 80 columns. To adjust the screen, the brightness and contrast knobs shown below can be adjusted until the desired intensity is obtained.

The power switch shown can be used to turn the monitor on or off. The AST monitor obtains its power supply from the system unit. The power switch on the monitor should always be kept in the depressed position (i.e on). This way, the monitor is automatically turned on when the system unit is activated.

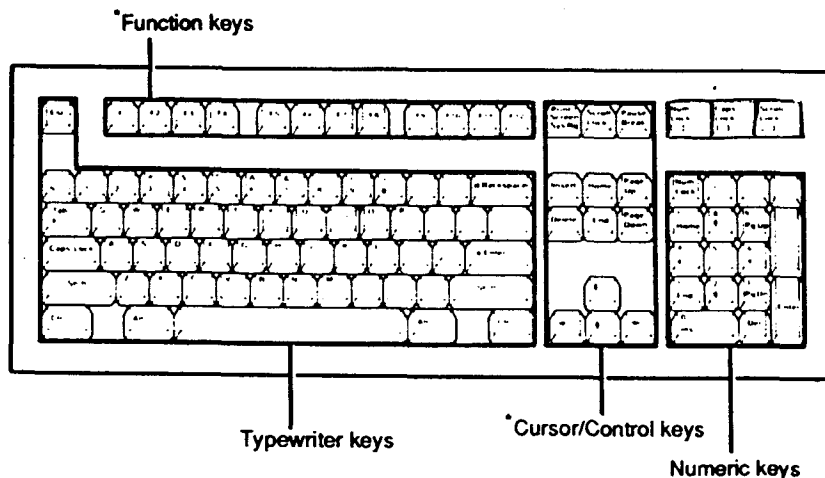
#### 4.3 Keyboard:

The keys on the keyboard can be grouped into the following categories:

- Typewriter keys: The keys are arranged like a standard typewriter keyboard and are used for text entry.
- Function keys: These keys can be programmed to perform complex operations.
- Cursor control keys: These keys move the cursor. In order to move backwards or forward while within the data entry program, use the UP ( ) or DOWN ( ) key respectively.
- Numeric keys: These keys provide a calculator key pad when <Num Lock> display light is on. When <Num Lock> display light is off, these keys function like the cursor control keys.

The height of the keyboard can be raised by sliding the adjusters under the keyboard toward the outer edges of the keyboard, and allowing them to snap up.

The keyboard used with the AST 286 is illustrated below:



#### 4.4 System Unit:

The system unit is the heart of the computer and controls the entire apparatus. The main unit can be turned on or off using the switch located on the right side of the unit. This switch should be turned off at the end of every session. If, for some reason, the computer needs to be restarted during a session, then the RESET switch located towards the left of the front panel can be pressed to reboot the system.

In addition to the 40 MB hard disk installed inside the system unit, the AST 286 used for the PIHS also has 5.25" and 3.5" floppy drives. The upper drive is called drive A while the lower drive is called drive B. The hard disk inside the unit is called drive C.

When the disk drives are in use, the small lights in front of them light up. These drives should never be opened when the lights next to the drive are on. Similarly, when the computer is turned on or off using the switch on the side or the RESET switch, the diskettes in drives A and B must be removed. If this is not done, the computer will fail to start.

To insert a diskette in drive A, place a 5.25" diskette in the drive and gently push it all the way in. The knob above the drive should then be turned down. To remove the diskette, the knob should be turned back up, and the diskette will automatically slide out. While handling these diskettes, the uncovered portion of the diskette should never be touched, or otherwise the data stored on the diskette will be damaged.

To insert a diskette in drive B, place a 3.5" diskette in the drive and gently push it all the way in. The switch under the drive is pushed out when the diskette is in place. The diskette can be removed by pushing this knob back in.

#### 4.5 Turning on the computer:

To turn on the computer, follow the steps outlined:

1. Make sure that the switches to the voltage stabilizer, the system unit, and the printer are in the "off" position.
2. Plug in the voltage stabilizer to the main power supply and turn "on" the power supply to the voltage stabilizer. Check to see if the needle on the front of the stabilizer is at the 220V mark.
3. Check to see if the system unit and the printer are properly plugged in and are receiving current from the UPS.
4. Make sure that there are no diskettes in drive A and in drive B.

If everything is properly connected, then turn on the system unit.

The system, i.e. the program which operates the computer, is then automatically brought up. This program is stored on the hard disk of the computer. The printer can then be turned on.

The following Menu will appear on the screen:

Select an option and press `<—>`, or press `<Esc>` to stop"

Run data entry program  
Format a new diskette  
Back-up a PSU  
See the contents of a diskette

By lining up the prompt against the various options, different tasks can be performed. Details pertaining to each of the above tasks are outlined in the later chapters. By pressing the Esc key, the following prompt is displayed:

C:\DATAENTR>

This prompt indicates that the computer is using the hard disk C inside the system unit, and is presently in the directory DATAENTR. In order to return to the General menu, type menu at the prompt and press the Enter key.

#### 4.6 Turning off the computer:

To turn off the computer, follow the steps outlined:

1. Turn off the printer.

2. Turn off the system unit.
3. Turn off the voltage stabilizer.
4. Turn off the main power supply and remove the plug from the power socket.

## 5. DATA ENTRY PROGRAM

### 5.1 Definitions:

In order to clarify what follows, it is necessary to explain some terms that will be used in this chapter.

Section: As pointed out in Chapter 1, one of the objectives of the PIHS Project is to measure the living standards of different households in Pakistan. To that end, the field teams will collect data from the households on a wide range of topics such as housing, education, health, employment, etc.

The questionnaire is thus broken down into several elements, each providing data on one of the specific aspects of living standards mentioned earlier. Each of these elements is called a section. As outlined in Chapter 2, the PIHS questionnaire is divided into 17 sections.

Subsections: Some sections of the questionnaire are very complex.

For example, to understand the activities of a member of the household, data must be obtained on:

- his main work during the last 7 days
- his secondary work during the last 7 days
- his main work during the last 12 months
- his secondary work during the last 12 months
- his job history
- his other activities, etc.

In order to understand the activities of a household, this detailed information must be obtained for each member of the household, and the sections of the questionnaire that concern such detailed information are often quite complex. Such complex sections have been divided into several parts called subsections. The list of subsections of the different sections is provided in Chapter 2.



Pages of a subsection: There may be so many questions in a subsection that they do not all fit on one page. A subsection page is each page on which several questions from the subsection are printed. For example, in the PIHS Questionnaire, Section 3 Education has four subsections:

- Part A: Literacy and training
- Part B: Formal Education
- Part C: Interruption of education
- Part D: Vocational and technical training

Parts A, C, and D have one page each, but Part B has two pages.

Subpage: Some pages of the questionnaire are organized in such a way that some of the subsections on them could actually have been transferred to other pages. However, they were kept in their present form to facilitate the work of the interviewers using the questionnaire. This is the case, for example, with page 2 of Section 9, Part D. A subpage is a part of certain pages such as page 2 of Section 9, Part D.

Screen: A screen holds all of the data for a section, subsection, page or subpage, which are displayed at a given time on the monitor while using the data entry program.

Household number                      Section

HOUSEHOLD: 1111111.11              SECTION 1, PART A: HH INFORMATION              ID CODE: 01

2 SEX:                      1 MALE

3 RELATIONSHIP WITH HEAD:              01 HEAD

4 AGE IN YEARS:              065

5 MARITAL STATUS:              1 MARRIED

6 SPOUSE LIVE AT HOME?:              1 YES

7 ID CODE OF SPOUSE:              51

8 TIME AWAY IN MONTHS:              01

9 MEMBER OR NOT?:              1 YES

Question number -              Description of question.

Field

The breakdown of the questionnaire into sections, subsections, pages, and subpages is very convenient for locating a given place in the questionnaire. However, this involves many terms which can be cumbersome to use. To simplify matters, all of them shall be referred to as "sections," which will be followed by their number.

For example:

SECTION 6 designates section 6. This is a section.

SECTION 1A designates section 1, Part A. This is a subsection.

SECTION 9B1 designates page 1 of section 9, subsection B. This is a page.

SECTION 9D2A designates subpage A of page 2, section 9, subsection D. This is a subpage.

This concise means shall be used to describe sections, subsections, pages and subpages. For the screens, an identical method is used:

Section 6 corresponds to screen 6

Section 1A corresponds to screen 1A

Section 9B1 corresponds to screen 9B1, etc.

## 5.2 Accessing a Screen for Data Entry:

By choosing the option "Run data entry program" from the General Menu, the KPVO can access the data entry program that will be used for PIHS. On starting:

- The program prompts the KPVO to enter his password. The KPVO should enter the password that has been assigned to him.
- The program then asks for the identification code of the household on which the KPVO would like to work. The code on the cover of the questionnaire should be entered. The KPVO should take care to avoid making mistakes in entering the code. If an incorrect code is entered, then the operator may accidentally enter information in the wrong file. If an incorrect code is entered, the operator should press the Esc key and start again.

After the identification code of the household has been entered, the following menu appears:

#### MAIN MENU

- 1 Enter data
- 2 Display a section
- 3 List a section
- 4 Inter-record checks
- 5 Summary of all records entered
- 6 Complete listing of the household
- 7 Erase the household

By selecting any of the numbers from 1-7, the KPVO can perform different activities.

In order to enter data for a particular household, the KPVO should press 1 to select Enter data. The next level is reached, and the following menu is displayed:

#### PARTS OF THE QUESTIONNAIRE

- 00 SURVEY RECORD
- 01 HOUSEHOLD INFORMATION
- 02 HOUSING
- 03 EDUCATION
- 04 HEALTH
- 05 WAGE EMPLOYMENT
- 06 FAMILY LABOR
- 07 ENERGY
- 08 MIGRATION
- 09 FARMING AND LIVESTOCK
- 10 NON-FARM ENTERPRISES
- 11 NON-FOOD EXPENDITURES
- 12 FOOD EXP. AND HOME PRODUCTION
- 13 MARRIAGE AND MATERNITY HISTORY
- 14 ANTHROPOMETRICS
- 15 CREDIT AND SAVINGS
- 16 TRANSFERS AND REMITTANCES
- 17 OTHER INCOME

If the KPVO selects the Household Information Record by entering 01, the next level is reached. As noted earlier in Chapter 2, Part 2.2 Subsections,

Section 1 has two parts: Part A and Part B.

The following menu will appear on the screen:

|   |
|---|
| <p style="text-align: center;">S E C T I O N   1 :   H O U S E H O L D   I N F O R M A T I O N</p> <p style="text-align: center;">A:   H O U S E H O L D   R O S T E R<br/>B:   I N F O R M A T I O N   O N   P A R E N T S</p> |
|---|

If the Household Roster Record is selected by entering A, the program will proceed to the screen for Section 1A where data on the section can be entered.

### 5.3   Returning to the Main Menu:

If the Esc key is pressed, the program moves to the level immediately above, i.e. the preceding level.

For example, to return to the General Menu from the screen for Section 1A, the KPVO should:

- Press the Esc key to return to the menu for Section 1
- Press the Esc key again to return to the menu for the Parts of the Questionnaire.
- Press the Esc key again to return to the Main Menu.
- Press the Esc key again to return to the screen for entering the Household Code.
- Press the Esc key again to return to the screen for entering the password.
- Press the Esc key again to exit the data entry program and to return to the General Menu.
- Press the Esc key to exit the General Menu and to return to the DOS where the following prompt is displayed:

C:\DATAENTR>

The KPVO can return to the General Menu by typing: " menu "     at the prompt and pressing the Enter key.

#### 5.4 Special keys for data entry:

The following table outlines some special keys for data entry:

##### Functions of special keys

| KEY                                | FUNCTION   |
|------------------------------------|--|
|                                    | Makes it possible to move to fields further down, or back in the screen  |
| Tab<br>-->I                        | After the data are entered in all fields of the screen:<br>Makes it possible to go to fields farther down on the screen to make corrections, if any.   |
| Shift +<br>Tab<br>I<--<br>Num Lock | Makes it possible to go back to preceding fields on the screen to make corrections, if any.<br><br>Press once to use the numeric keypad located on the right-hand side of the keyboard. Press a second time to switch off that function. To use the numeric keypad once again, press a third time. When the system is turned on, this function is automatically activated. |
| Ctrl                               | If used in combination with the "End" key, all fields from the point in the field where the cursor located until the last field on the screen will be filled with trailing blanks.<br><br>This key can be used in two ways:  |
| Enter<br><---'                     | 1. If in a field where fewer characters have been input than allowed by the length of the field, and if the field is not the last one on the screen, this key can be used to move to the next field.<br><br>2. When all of the fields of the screen have been entered, this key can be used to record the data entered.  |
| Esc                                | When in a given screen, this key can be used to go back to an immediately preceding one. For example, when the KPVO is at the menu for parts of the questionnaire, pressing this key will move the program back to the Main Menu.  |
| F10                                | This key can be used to make an entry of "DK"  |

### 5.5 Entry of data into a field:

As defined earlier, a field is a basic space on the screen that holds the data from the questionnaire. When data are about to be entered in a field, the cursor will always be at the top of the field. At this point, the program is ready to receive data to store in that particular field. When the end of the field has been reached, the cursor automatically moves to the beginning of the next field. In some cases, the data entered may not take up the whole field. For instance, in Section 9A2, Question 3, the field for RAINFED has four digits. However, it may be that the household being entered has 2 acres of land only. In such a case, to get to the next field, the KPVO should enter the amount of land owned, and then press the Enter key. The cursor will then move to the next field.

### 5.6 Entry of data into a screen:

A screen consists of one or more fields. Entering data into a screen therefore means putting information in all of its fields, from the first to the last. As soon as the field is displayed, the cursor moves to the beginning of the first field. As noted above, the KPVO can move from one field to the other either by filling out the field completely, or by pressing the Enter key when the data for a particular field has been entered. In this way, data for all the fields can be entered until the last field on the screen. The exception is when all fields in the screen are blank from a given field forward, i.e. there are no data to be entered in them. Instead of going through the tedious procedure of filling all these fields with blanks, the KPVO can instead simultaneously press the Ctrl and Esc key. The cursor then automatically moves to the first field of the screen.

Once data has been entered in all fields of the screen, the cursor returns to the beginning of the first field of that screen. The program is now in the correction mode. In other words, the KPVO can go to fields further down on the screen or back to higher ones in order to make corrections if necessary. The Tab ( --> ) or Shift + Tab ( <-- ) keys can be used to move down to a field, or back up to a field, respectively.

After data entry and corrections have been made, the KPVO should press the Enter key. The system will now run the programmed checks between the fields.

If there are any errors, the system will point them out.

If there are no errors, the system will post the record.

## 5.7 Correction of errors:

Errors within a field: Errors within a field are indicated by the system as the data entry proceeds. The following table shows the possible errors that can be made in the fields, and how the system points them out.

| ERROR   | SIGNAL  |
|---|---|
| Alphanumeric data is entered in a numeric field.                | A "beep" will sound, and "?" signs will appear all along the length of the field, blinking and alternating with the erroneous data that has been entered. |
| An invalid code is entered in an alphanumeric field.            | Same as above   |
| An invalid date is entered in a date field.                     | Same as above   |
| A figure below the lower limit of the numeric field is entered. | A "beep" will sound, and " " signs will appear all along the length of the field, blinking and alternating with the low number that has been entered.     |
| A figure above the upper limit of the numeric field is entered. | A "beep" will sound, and " " signs will appear all along the length of the field, blinking and alternating with the high number that has been entered.    |

If there is an error in a field, the system returns the cursor to the beginning of that field after having indicated the error. To make corrections, the KPVO should look for the data for that field in the questionnaire to recheck the data entered. If the error is a result of incorrect entry of data on the part of the KPVO, he or she should re-enter the data and continue.

If it is not the KPVO's mistake, i.e., if the data was entered exactly as was shown on the questionnaire and the system indicates an error, the KPVO should press the Enter key. On the last line of the screen the system will display the following blinking message:

"Enter your password if sure:"

At that point, the KPVO should re-enter the password. The field thus corrected will start to blink and the cursor will move to the following field.

If there are other such errors, the KPVO should proceed in the same way. At the end of the screen the system will emit a slow, melancholic and plaintive tune and will post the record as shown, with the blinking fields.

Errors within the screen: As pointed out earlier, when the KPVO has finished entering the data for a screen, the system cross-checks between fields. If any inconsistencies are detected between the fields, the system indicates them by sounding a "beep" followed by the simultaneous blinking of all inconsistent fields.

The error message appears at the bottom of the screen, and the cursor moves to the beginning of the first field.

To make corrections, the KPVO should examine the fields one by one, comparing them with the data in the questionnaire. If the KPVO finds an error that was committed while entering data, he or she should correct it and then press the Enter key again.

If other errors are flagged, the KPVO should repeat the process.

If the error is not the fault of the KPVO, he or she should press the Enter key. On the last line of the screen, the system will display the following blinking message:

"Enter your password if sure:"

At that point, the KPVO should re-enter the password. The system will play slow music and post the record, with the blinking fields.

#### 5.8 Posting of data:

As was pointed out earlier, after the data have been entered in all the fields of a screen the cursor will go to the first field of the screen. The KPVO can then correct any errors in data entry. If there are no such errors to correct, the KPVO should press the Enter key. The system will then make the consistency checks between certain fields of the screen.

If there are any errors, the system will point them out. If there are no errors, the system will post the record. At this time it plays a lively tune and copies the data that has just been entered in the fields of the screen onto the hard disk C.

As explained earlier, the KPVO may have to post a screen with erroneous data. In such a case the system plays a slow and melancholic tune, then copies the data that has been entered in the fields of the screen onto the hard disk C with the blinking fields.

After the record has been posted, an identical but empty screen will appear. the KPVO can then continue to enter the other lines of the questionnaire, if any.

When no more lines of data have to be entered in the section, the KPVO should press the "Esc" key. The system will then go to the immediately preceding level, where the KPVO can select the section he or she wishes to enter next.



### **5.9 Deletion of erroneous records:**

To delete an erroneous record, the KPVO should proceed as follows:

- bring up on the monitor the contents of the section that includes the record, using the "Display" activity (option 2) on the Main Menu.
- move the cursor from one record to another by pressing the space bar (the long key at the bottom of the keyboard).
- to delete a record, move the cursor to the record in question, and press the Del key.
- when the program asks for the password, enter the code. The program will then delete the record and show the newly amended section.
- when finished, press the Esc key.

## 6. PRINTOUTS OF THE RESULTS OF DATA ENTRY

As pointed out earlier in Chapter 3, the KPVO should submit a two-part printout per questionnaire to the statistical officer every week. This printout consists of the following:

- 1) A listing of the sections entered.
- 2) Results of the inter-record checks.

### 6.1 Listing of sections entered:

A listing of the sections entered consists of the printout of the data that has been entered for a particular household. A listing of the data entered can be obtained in two ways:

If only the listing for a particular section is required, this can be done by selecting "Listing" (option 3) from the Main Menu. The menu listing the parts of the questionnaire will appear. By following the instructions given in Chapter 5 on how to access a particular screen, the KPVO can obtain a listing of the data entered for a particular section for the household.

If the listing of the data entered for all sections is required, this can be done by selecting "Complete listing of the household" (option 6) from the Main Menu. The system then searches for the data that has been entered for that particular household, and compiles this data in the desired form. This process can take some time. As the system compiles the listing, the name of the section for which data is being compiled is displayed on the screen. After the compilation of data has been completed, the system displays the following menu:

Your listing is in a disk file

|                    |                      |
|--------------------|----------------------|
| Do you want to ... |                      |
| 1                  | See it in the screen |
| 2                  | Print a hard copy    |

In order to obtain a printout of the results of the listing, the KPVO should prepare the printer, i.e., turn it on if it is off, and position the paper properly. By selecting "Print a hard copy" (option 2) from the menu, the KPVO can obtain a printout of the listing for the household. In this printout, all data entered for a household is listed, section by section. The fields circled in dark ink on this printout are those which were blinking on the screen at the time of data entry.

A typical printout of the listing for a section is as follows:

IDCODE 2222222.22 -- SECTION 1, PART A: HH INFORMATION

I 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 | 050 | 1 | 1 | 51 | 01 | 1 |
| 02 | 1 | 03 | 027 | 1 | 1 | 52 | 00 | 1 |
| 03 | 1 | 03 | 025 | 2 |   |    | 00 | 1 |
| 04 | 1 | 03 | 019 | 5 |   |    | 01 | 1 |
| 05 | 1 | 03 | 016 | 5 |   |    | 06 | 1 |
| 51 | 2 | 02 | 045 | 1 | 1 | 01 | 00 | 1 |

At the end of the printout, a summary of the sections entered for that particular household is listed, which also indicates which screens contain forced entries.

## 6.2 Results of the inter-record checks:

The inter-record checks between sections are run by the system after all the sections for a household have been entered. These checks ensure that the data are consistent.

Start-up of checks: To start the inter-record checks between sections, the KPVO must:

1. Ready the printer, i.e., turn it on if it is off, and position the paper properly.
2. Return to the Main Menu and select: Inter-record checks (option 4).

The system then begins checking. The operation can take a long time, but this is normal. The KPVO can follow the progress of the checks because the number of the section being checked is always displayed on the screen.

After the checks have been executed, the system displays the following menu:

Your listing is in a disk file

Do you want to ...

- 1 See it in the screen
- 2 Print a hard copy

To print a copy of the results of the check, the KPVO should select 2. The system will then print the result of the inter-record checks.

Results of inter-record checks: A typical printout of the inconsistencies that are detected as a result of the inter-record checks is as follows:

Household 2201321.04: Consistency tests

----- Error number 1 :

SECTION 08 MISSING FOR INDIVIDUAL 01

----- Error number 2 :

SECTION 03B2 MISSING FOR INDIVIDUAL 02

----- Error number 3 :

SECTION 03D MISSING FOR INDIVIDUAL 02

----- Error number 4 :

SECTION 04A PRESENT FOR INDIVIDUAL 02

WHO IS 27 YEARS OLD

----- Error number 5 :

SECTION 09B2C ENTERED

IN SPITE OF QUESTION Q01A IN SECTION 09A1

----- Error number 6 :

SECTION 09B3A ENTERED

IN SPITE OF QUESTION Q01A IN SECTION 09A1

----- Error number 7 :

SECTION 09D09 ENTERED

IN SPITE OF QUESTION Q01A IN SECTION 09A1

----- Error number 8 :

SECTION 12B1 NOT ENTERED

8 errors detected in this household

The KPVO should check the questionnaires for the household with identification code 2201321.04 to see if the errors pointed out by the system are a result of incomplete entry of data on the part of the KPVO. If so, the KPVO should enter the sections that had been omitted, and then carry out the inter-record

checks once again..

The KPVO sometimes stops entering information before he has finished all of a particular round (for example, because it is Teatime or the end of the working day). In such case, the fact that inter-record checks indicate that some sections are missing is not a cause for concern. However, if the KPVO believes he has finished entering all information, and inter-record checks indicate missing sections, then this indicates some sections were erroneously skipped during data collection or data entry.

The KPVO should hand in the printout to the statistical officer. In the case that the printout has been obtained after the first round of the survey, the statistical officer will instruct the statistical assistants to obtain the necessary information during the second visit to the household. If the printout has been obtained after the second round of the survey, the statistical officer will then send it to the management team in Islamabad.

## **7. TRANSFER OF DATA TO DISKETTES**

### **7.1 Importance of keeping backups:**

Each PSU has 16 households. When data entry of a particular household in the PSU is taking place, this data is automatically stored in a directory called "Househol". In the event that some problem arises in the computer and this data cannot be accessed, all the work done by the KPVO could potentially be lost. In this case, data entry for the household, or the PSU, would need to be repeated, and much time would be lost as a result. It is therefore very important to make backups of the data entered on a regular basis.

At the end of every day, the KPVO should transfer data entered for households in the PSU to diskettes so that a backup of the data is available. Similarly, when data entry for a particular PSU has been completed, the KPVO should transfer data entered for the PSU to diskettes. This backup can be made using the option "Backup a PSU" of the General Menu. If data is being transferred to a new diskette, the new diskette first needs to be formatted. This can be done using the option "Format a new diskette" of the General Menu.

### **7.2 Formatting a diskette:**

Formatting a diskette is making it ready to receive data. No new diskette can be used if it has not been previously formatted. A used diskette can also be formatted.

The KPVO should format a diskette before entering the first 16 households of a PSU in order to use it to make backups every day of the data entered, and at the end of the data entry for a particular PSU so that the first, second, and third backup diskette can be made. To format a diskette, the KPVO must go to the General Menu, and select the option: "Format a new diskette". The system will then guide the KPVO onward.

The important point to remember when formatting a diskette is that all data on the diskette are erased when a diskette is formatted. Extreme care must therefore be taken that a diskette on which data is stored is not unnecessarily formatted.

### 7.3 Making a Backup of data on diskette:

Data entered for a particular PSU can be transferred to a diskette using the option: "Backup a PSU" of the General Menu. The system will then guide the KPVO onward as to how to transfer data entered on to the diskettes. The KPVO should use a separate diskette for each PSU. A backup of the day's work should be made daily on diskette.

At the end of every two weeks, data entry for a given PSU should be complete. At this point, the data entered for the households in the PSU needs to be transferred to diskettes, and submitted to the statistical officer along with the printouts. The statistical officer will then send these diskettes to Islamabad. At the end of entry of data on a given PSU, the data on the households of the PSU should be transferred to three diskettes.

- the first diskette should be labeled the first backup for the PSU
- the second diskette should be labeled the second backup for the PSU
- the third diskette should be labeled the third backup for the PSU

The KPVO will thus have three copies of data for each PSU. The first and second backup diskettes should be sent by the supervisor to Islamabad at the end of every month, while the third backup should be kept at the Regional Office.

In order to keep track of the data stored on each diskette, it is important to label the diskettes properly. Below is an example of the label that must be affixed to each diskette to identify its origin and contents:

|               |   |
|---------------|---|
| Week starting | 2nd Feb. 1991 and 16th Feb. 1991                    |
| Team:         | Urban Lahore  |
| PSU No:       | 4114121   |
| Households:   | 01,02,04,05,07,08,10,11,13<br>14,16,17,19,20,22,23. |
| KPVO:         | Mr. Mohammad Khan                                   |
| Round 1:      | 6th Feb. 1991                                       |
| Round 2:      | 19th Feb. 1991                                      |

Proper identification of diskettes is very important, especially after the survey has been in progress for some time. If the diskettes have not been labeled properly, then it becomes very difficult to identify which PSU the data pertains to.

#### **7.4 Contents of the diskette:**

In order to see what data are stored on a particular diskette, the KPVO can use the option: "See the contents of a diskette" from the General Menu. The list of files stored in the diskette is displayed, and the KPVO can thus verify if the data that he has transferred has actually been stored on the diskette.