

MANUAL OF INSTRUCTIONS  
FOR ECONOMIC INVESTIGATORS  
IN ICRISAT'S VILLAGE LEVEL STUDIES  
(Revised)

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## I. INTRODUCTION

Village Studies are one of the most efficient ways to understand the farming systems in rural areas and also help in identifying the socioeconomic constraints faced by the farming community. The objectives of village studies may differ according to the needs of the researchers and thus its methodology. There are three basic questions related to the village studies (i) why the village studies, (ii) how to conduct village studies, and (iii) for whom i.e. client group.

In case of ICRISAT the major objective of village studies was to understand the socioeconomic, agro-biological, institutional constraints to agricultural development in Semi-Arid Tropical (SAT) areas. The information gathered from the village studies help in generating prospective technology which are feasible and acceptable to the farmers. Secondly, the village studies locations may also help in testing and modifying the technologies generated by ICRISAT. Hence, the objectives of ICRISAT village studies were limited in scope and its size. It was main consideration of the village studies to confine at few locations but for a longer period to study the dynamics of changes in the farming system. Compared to traditional village studies initiated in India during mid-sixties, which were purely socioeconomic in nature, ICRISAT's village studies were designed to suit multi-disciplinary research work where agro-biological and social scientists can work together in the real farm situation.

### 1.1 ORGANIZATION

This report contains detailed information about the need for village studies, method of selection of areas/villages, types and instruments for data collection and coding.

### 1.2 SAMPLING PROCEDURE

#### Selection of Districts

Since the main purpose of the Village Level Studies (VLS) was to understand the traditional farming system in different agroclimatic zones hence, five districts representing major agroclimatic zones within the SAT of India were purposively selected. Basic factors considered for selection of districts were soil types, pattern of rainfall, and relative importance of crops like sorghum, pearl millet, pulses and groundnuts - crops in which ICRISAT is primarily interested. A detailed list of variables considered for selecting the district is given in Appendix I. District selection was also influenced by the availability of a nearby Agricultural University/Research Station from where planning and logistical assistance could be obtained. Other things being equal, distance from Hyderabad was also a factor considered in District selection, as it was felt important that the senior staff of the Economics Program be able to regularly supervise and stay in the villages. The five

districts selected were Mahbubnagar in Andhra Pradesh, Sholapur and Akola in Maharashtra, Sabarkantha in Gujarat and Raisen in Madhya Pradesh.

#### Selection of Talukas/Tehsils

For selection of villages, the first step was selection of a taluka in each of the selected districts. There is a real possibility of fairly large inter-taluka(1) differences within a district; these differences often become obscured when district averages are presented. To guard against the consequences of such a possibility and also to take full advantage of availability of taluka-level data, the following procedure was adopted for taluka selection.

Relevant taluka-level details (Appendix I) of all the districts adjoining the selected district and/or showing broad similarities to the selected districts were compiled and compared. The taluka within the selected district reflecting the situation of the majority of the talukas in the region (comprising the districts considered) was finally selected. Thus the selected talukas represent the situation of a broad homogeneous region rather than the administrative district in which it happens to be located.

Taluka-wise, details were collected from district census hand books, district statistical reports, and unpublished records of the Indian Bureau of Economics and Statistics. The variables selected broadly represented the natural and man-made resource base and their utilization patterns in the talukas and included density of population, extent of literacy, density (number per hundred hectares of net sown area) of cultivators, agricultural laborers, cattle, buffaloes, sheep and goats, iron and wooden ploughs, electric pumps plus oil engines, number of tractors per 1000 hectares of net sown area, percentage of forest area, barren and uncultivable lands and net sown area to total geographical area, cropping intensity, extent of net sown area irrigated, contribution of different irrigation sources, average rainfall and rainfall intensity, percentage shares of wheat, rice, sorghum, pearl millet, chickpea, pigeonpea, cotton, groundnut, total cereals and total pulses to the gross cropped area, and proportions of villages of different size.(2)

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(1) Taluka or Tehsil is a subdivision of district for purpose of revenue administration.

(2) Details about average size of land holding were proposed for consideration but the required taluka-level data were not readily available for many talukas and could not be done except for Mahbubnagar and its adjoining districts. Similarly, comparison of talukas in terms of communication and educational facilities, extent of electrification, etc., could not be done for want of comparable data for all talukas.

By looking at the numerical values of each of the characteristics, various class-interval ranges were set up. On the basis of these classifications, frequency distributions of the forty variables (Appendix II) across talukas were derived. The frequency-distribution tables were used to determine the modal class ranges wherein the majority of the talukas fell. Talukas of selected districts which fell within the modal range class of values of a particular variable were considered as representative of the region as far as the variable under question was concerned. Talukas were thus examined for their representativeness with respect to each of the considered variables (or characteristics qualifying the majority of the talukas in the region). Two or three talukas which scored the highest (i.e. qualified for maximum number of features characterizing the majority of the talukas in the region) were chosen; one of these was then selected as the final choice. Before final selection, it was ensured that the selected talukas qualified on the basis of crucial variables like net sown area, average rainfall, extent of irrigation, and proportions of important crops. When more than one taluka was found to qualify for selection, their position was more closely examined before final selection. In some cases two talukas were selected.(3)

#### Selection of Villages

For selection of villages within the selected taluka/talukas, the predominant characteristics of the latter were kept in mind. In other words, a village (or villages) was chosen to represent typical characteristics of the taluka (in terms of cropping pattern, land-use, irrigation, etc.). In order to select the village truly representing the traditional situation, those having special programs or more than normal support or resource transfers from outside, or those located nearer towns and highways, were not considered. Some 12 to 20 villages were visited for each of the villages finally selected. At this stage, the work of village selection was facilitated by informal cooperation of the staff of local Government, and research stations of the universities. The study benefited from the close knowledge of the workers at these stations in regard to the regions. The help from scientists working in these organizations and officials from the district agricultural departments and Zilla Parishads was of very useful.

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(3)Choice of two rather than one taluka was dictated by the procedure used for selection of villages. In cases where two villages satisfying the specific criteria could not be located within the same taluka, an additional taluka (of those selected) was chosen to facilitate selection.

## Selection of Households

Total 40 respondent households were selected to ensure representation of all categories of households - labor, small farmers, medium farmers, and large farmers. For labor households a random selection of 10 households was made amongst those who operated less than 0.2 ha of land, and hired out as laborers as their main occupation and source of income. In the case of farm households, (Cultivators/farmers) the purpose was to give proper representation to small, medium, and large farmers. In view of the different land-man ratios, the wide variation in average size of operational landholding, and land-productivity differences among the selected villages, it was not desirable to have a common criterion for classification of farm-size groups in all villages. In each village 30 households from the cultivator group and 10 households from labor group were randomly selected hence sampling fractions are not same for these two groups. In analysis this has to be taken into account. The number of households and sampling fractions are given in Table 2.

The criteria for defining farm-size categories was determined by the size composition of landholdings in each village. To ensure equal representation of different size groups, the cultivator group was first divided into three size strata with identical number of households and from each strata ten households were randomly selected. This implies equal sampling fractions in each size group and for analysis purposes the cultivator sample is a sample with uniform sampling fractions among the three farm-size groups. Stratification was done primarily to reduce the probability of shared samples with respect to size. The ranges of operational landholdings comprising the three size categories using above procedure are presented in Table 3.

### 1.3 FIELD WORK

#### Selection of field investigators

Prior to regular field work for studies, persons with a rural background and post-graduate degrees in Agricultural Economics or equivalent experience, and who originating from same linguistic regions where field work was to take place, were selected as investigators. They received several weeks training prior to being permanently assigned to selected villages. Their work was initially supervised through periodical visits by senior ICRISAT Economics Program staff. At the later stage after completing a considerable period of time (4-5 yrs) the investigators posted in the villages were replaced by another investigators having similar qualifications and academic background. Both the old and the new investigator stayed in the village for a whole cropping year. The previous investigators were transferred to headquarter to actively participate in research work and help in analyzing data are collected from village studies.

#### 1.4 INSTRUMENTS FOR DATA COLLECTION

Information regarding farming, transactions, employment etc. from each respondent household is collected with the help of a designed work sheet and then transferred on to code sheet. Some of the information collected annually once in a year normally in the beginning of cropping year i.e. July and others at a regular interval of 2 to 3 weeks. (List of schedules are given in Table 4): Each schedule except VLS-A, VLS-M, and VLS-Z has a separate coding sheets where raw data are transferred in coded form for computerisation. The data in VLS-C, E, F, G, N, P are collected in one General Endowment Schedule (work sheet), but transferred in respective code sheets designed for each schedule.

#### 1.5 BUILDING RAPPOROT WITH RESPONDENT

The success of village studies and quality of data depend to a great extent on the rappsorts of the village investigators with the villagers in general and the respondents in particular. There is no specific rules to guide the investigators to build up rappsorts. Investigators use their own style and methods. But their involvement in village meetings, regular contacts with the people, school teachers and village officials certainly help them in building good rappsort. In villages factionalism and group rivalries, casteism and many other social tension prevail but the investigator should not incline to any particular group or caste. His frequent visits to the houses and fields of respondents irrespective of caste and status make them feel one of the resident of the village. While asking information specially when farmer is hesitant to disclose the facts before third person investigator should not insist for that. Investigators should also avoid asking sensitive question directly. Before starting interview some introductory talk about the crop condition, well-being of the respondents help in increasing personal relationship. However, few relevant points are to be kept in mind while interviewing the households.

1. Questions should be specific and clear.
2. Convenience of the respondent should be considered.
3. Interview should not be taken in hurry and in mechanical manner.
4. Be economic in time but do not miss the information.
5. Investigator should be well prepared in asking the questions in a planned way but interview should not be long and repetitive.
6. Assertive questions should be avoided.
7. Interview should be started with some chit chat and even in the middle of interview some pause is necessary. Always keep the pen or pencil ready for noting down observations are not

necessary. Relaxing with the respondent and offering some entertainment like tea, bidi, etc. to engage him is advisable.

8. Cross questioning in a manner that the respondent does not feel bored increases the accuracy of data.
9. Customary tradition of respect in the village should be observed.
10. Questions should be asked regularly to avoid a long pause.
11. Any sensitive question should not be asked in the beginning of interview and to keep reading the faces/reaction of the respondents is better.
13. Read the face as a psychologist and use your own tactics.
14. Visit quite often all categories of respondents as well some other people of the village as a courtesy without any schedule or work sheet.

However, it was felt that the investigators should use their own method keeping these guidelines in mind and maintain good rapport with villages through participating in their social functions and festivals.

#### 1.6 FREQUENCY AND METHOD OF DATA COLLECTION

Regular and timely interview is the most important thing for increasing the quality of data. Investigators are expected to collect data approximately at the interval of 2 to 3 weeks and to transfer on code sheet. On an average 4 respondents can be interviewed every day preferably in the early hours or in the late evening when the respondents are relatively free. Taking interview in hurry is not advisable. Each investigator is supposed to send a monthly progress report indicating the status of work and developments in the village. Any specific farm activity or interesting observation is written in the progress report. Besides regular data collection the investigator should maintain a diary to note down observations regarding attacks of pests and diseases, climate, frost, etc in daily diaries. He must maintain a proper record of all the communications with a duplicate copy of all the observation notes/information sent to the headquarter.

First-hand information collected in the work sheet should be in detail and legible to clarify any doubts in coding or getting additional qualitative information.

#### 1.7 TYPE OF DATA COLLECTION

Information about various aspects of traditional farming practices and household economies are collected through 12 specifically designed work sheets/schedules (Table 2). The investigators interview sample

household every two to three weeks interval to elicit information for these schedules.(4) The data to be collected include details of asset position and endowments of the sample household, including land, livestock, farm implements, irrigation equipment, farm buildings, and consumer durables. Cultivation details, covering input-output data for each crop or crop mixture on a sub-plot basis, time allocation and utilization of family labor, details of bullocks utilization, extent of involuntary unemployment and wage employment. All household transactions, including income, expenditure, savings, debt, credit, gifts (with partner and place information); village price and wage rates during different months; annual inventory of food grains, fodder and other materials, including inputs; kinship relationship and social exchanges; risk attitude and adjustment to risk; diet, nutrition, and health details, etc., are recorded.

Besides regular socioeconomic data collection data on various agro-biological aspects of traditional farming, as required by scientists at ICRISAT, are also collected from farmers' fields. These observations cover areas like the incidence of shootfly, midge fly, striga, etc., in the case of sorghum; incidence of downy mildew, ergot, and smut in pearl millet; incidence of wilt and sterility mosaic in pigeonpea; nodule counting on pigeonpea, chickpea, and groundnut; weed counts; crop-rotation information; and crop cutting surveys for yield estimation of major crops of the areas. The scientists concerned train the investigators for collecting these agro-biological information. Besides Farming systems scientists conducts onfarm verification trials in these study villages.

In the case of annual inventories, all macro-economic data are regularly collected on work sheets with intervals of 15 to 20 days. Data on the work sheets are transferred to 80-column coding sheets specifically prepared for each schedule. This reduces the usual time lag between data collection and their presentation in a form convenient for processing by computer. The complete procedure of data management is given in flow figure 2.

Collection of agro-biological information from farmers' fields leads to a better understanding on the part of the farmers for the purpose of these studies which in turn helps in sustaining their interest in regular data collection. This also helps in strengthening the interdisciplinary approach to research at ICRISAT.

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(4) In some cases, the more literate members of selected households may be asked to keep a record of all farm and family transaction details during the period intervening two rounds in note books supplied to them. This facilitates the accuracy of data. A literate person may visit illiterates every 2 to 3 days and record information in diary form to help the investigator in obtaining a more accurate picture.

The data collection is continuous and it is possible to add new items to the enquiry as and when needed by any group of researchers in order to confirm or quantify certain hypotheses. Because of the continuous presence of well trained and qualified investigators in the village, it is easy to record changes in the village economy - in terms of wages, work patterns, consumption patterns, crop situations, etc - during different parts of the year or following particular events such as a mid-season dry spell, elections, untimely heavy showers, opening of a public relief works, and so forth.

A number of measurements - such as area of plots/subplots (in all cases), crop yield, weight of fodder bundles, and cart-loads of manure (on a sub-sample) - are collected both on the basis of farmers' reported values and on the actual measurement. This helps in assessing the possibility of consistent biases in reported data as against measured data.

## 1.8 CODING SYSTEMS

Both types of alphabetic and numeric codes are used for identifying individuals, farmers' fields, products, and inputs. Some times mixed codes are also used. It has been tried to avoid same code though occur in different fields (columns.) Hence, several codes are necessary to describe an individual, a plot, or a capital item. The codes fall into two broad classes:

- (i) Schedule-specific codes are used in specific fields (columns) of one schedule only. Most of these codes occur in Individual Schedule C and Plot Schedule D and describe a person or a plot more specifically. Account numbers occur only in the Transaction Schedule.
- (ii) Common Codes occur in two or more schedules. Among these, the household and village identifiers occur in all schedules. For every item which has a code, the code is identical for all schedules. For example, CA is bajra (local variety) and is used for bajra as an output, bajra as a seed, bajra received as a wage, bajra used for consumption, and bajra flour.<sup>(5)</sup> (However, in the case of pulses and rice, separate codes exist for the grains and the dal (milled product) or for paddy and milled rice). The code LK for a goat is used for the inventory, sales, purchases, and consumption of goat meat. KD for carpentry is used to designate a carpentry enterprise in the transaction schedule as well as for purchases or sales of carpentry products.

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<sup>(5)</sup>Bajra is the local Indian name for pearl millet. Throughout this manual local names will be used. In the coding list for Chapter 3, common names are also given.



The system has been set up in such a way that for all stockable or capital items (except land) a given code can denote only one item (CA can mean only local bajra, IA can mean only carbofuran, D can mean only urea and I can mean only farmyard manure). Hence all physical endowments and stocks, except land, are coded in a single file combining information from Schedules E,F,G and N.

A given one- or two-letter combination can, however, also be a plot code and any one-letter or one-digit code can also be a specific code. This does not give rise to a confusion because the field designation where it occurs clearly identify it as a plot code or carrier of other information. Letters I and O have not been used as codes for any item as they are easily mixed up with number one or zero.

#### 1.9 REPLACED SAMPLE HOUSEHOLD AND FAMILY DIVISION

If a sample household migrates permanently, a substitute household is randomly selected from the same group of household in the village. But when a household migrates temporarily, no substitute household is selected. All the information from temporarily migrated household continue to be collected with a note in remark columns in any round a household is not available in the village. There is no observation in VLS-C but a line is coded with the household identification and date keeping other columns blank.

For division of household (splitting of family), all members not belonging to the subgroup (splitted family) of the leading household member (father, eldest son, etc.) are coded as leaving the sample household, with appropriate recording in VLS-C. Land holdings and other capital assets that are divided are adjusted accordingly and information in other schedules are collected for the main family as the sample household.

#### 1.10 SPECIAL CODING WITH SIGNALLING VALUE

There are some special coding procedures with signalling value in computer processing. These are:  
Crop failure - It is coded as N or P operation with zero output in field 32 and or 33 in VLS-Y schedule.

## II. VLS-C-HOUSEHOLD MEMBER SCHEDULE

### C-1 ORGANIZATION OF SCHEDULE

This schedule is designed to collect demographic, educational, and related details about sample household is recorded. This schedule contains 68 numbered fields which are intended to be computerised. The first 9 fields are identification and are uniform in practically all the schedules.

### C-2 IDENTIFICATION

C-2.1 Card code (Field 1) refers to VLS-C schedule

C-2.2 Village code (Field 2) refers to name of village under study.

Village	Code
Aurepalle	A
Dokur	B
Shirapur	C
Kalman	D
Papda	J
Kanzara	E
Kinkheda	F
Boriya	G
Rampura	H
Rampur Kalan	K

C-2.3 Land holding class (Field 3) refers to original land holding class defined in the beginning of study based on operational holding. These codes are changed every year based on the operational land holding of the sample households but the range for farm size classification remains the same.

Farm size class	Code
Labor	0
Small farm	1
Medium farm	2
Large farm	3

C-2.4 Household number (Field 4, 5). Each sample household in each village has a code number as under:

Farm size class	Code
Labor household	1-10
Small farmer	30-39
Medium farmer	40-49
Large farmer	50-59

In case a household is replaced due to some reason another replacement is selected randomly from the original list of household collected in the village. To identify these household a separate code is given to them.

Replaced households	Code
Labor households	60-69
Small farmer	70-79

Medium farmer	80-89
Large farmer	90-99

### C-2.5 Year code (Field 6)

Year when data are collected is coded as under:

Year	Code	Year	Code
1975-76	5	80-81	0
76-77	6	81-82	1
77-78	7	82-83	2
78-79	8	83-84	3
79-80	9	84-85	4

### C-2.6 Date of interview (field 7-9)

Date of interviewing the sample household is recorded in three digit as per calendar supplied in the appendix. It can easily be calculated as for example if the interview date is 2nd July, the figures to be coded is 184 (which is calculated as total 31 days of January + 29 days of February + 31 days of March + 30 days of April + 31 days of May + 30 days of June + 2 days of July) (see Appendix III).

## C-3 HOUSEHOLD MEMBER DETAILS

Individual Member code (Field 10-11)

Each member of the family is assigned a numerical value as under:

Members	Code
Family members residing in the village	1-49
Family members residing outside the village	50-59
Attached laborers and permanent servants (full time)	60-79
Attached laborers and permanent servants (part time)	80-99

(Note: The decision maker is regarded as the head of household and is given member code 1).

### C-3.1 Relationship with head (Field 12)

Relation of individual member of the family with the head of the household is recorded in these fields.

Relation	Code	Relation	Code
Self	1	Daughter	5
Spouse	2	Grandchild	6
Parents	3	Other relatives	7
Son	4	Non-relatives	8
		(excluding servants)	
		Non-relatives	9
		(servants etc.)	

### C-3.2 Sex (Field 13)

Sex	Code
Male	M

Female F

C-3.3 Age (Field 14-15)

Age in completed years at the time of interview is recorded. For a child below one year zero is written.

C-3.4 Marital status (Field 16)

Marital Status Code		Marital Status Code	
Unmarried	U	Divorced	D
Married	M	Separated	S
Widowed	W		

C-3.5 Education code (Field 17)

Education level	Code	Education level	Code
Illiterate	1	Diploma course	6
Read and Write	2	Graduation	7
Upto Primary School	3	Post-graduate and above	8
Upto Middle School	4	Technical Degree	9
Upto High School	5	(Medical, Engineering, Agriculture etc.)	

C-3.6 Education Termination Year (Field 18-19)

The year when the person finished his/her education is written in actual years in two digits. For one who is still going to school/college etc. zero is written.

C-3.7 Main and Subsidiary occupation (Field 20 and 21)

Main occupation is from which a person derives the highest proportion of his income. To get an idea of this it is noted that which of the occupations he will retain if he is asked to keep only one job.

If there are more than one subsidiary occupations, it is mentioned in the remark column.

(Note - Some income sources such as pensions or other transfers are not occupations but still are recorded here).

Occupation	Code
Cultivation	A
Agricultural labor	B
Casual Labor (nonfarm)	C
Livestock rearing/grazing	D
Trading/Shopkeeping/Moneylending/Toddy selling etc.	E
Rural Crafts (carpentry, blacksmithy, pottery, weaving, goldsmithy, etc.)	F
Other traditional caste occupations-- (religious service, sweeping, toddy tapping etc.)	G

Attached labor, permanent servants	H
Transport of equipment hiring capacity	J
Profession/service, i.e. regular income job (jobs of Patwari, Village Level worker, Teacher, etc.)	K
Remittance, pension, interest on past savings, income from property (including renting of land and buildings), etc.	L
Domestic work	M
School/College going	N
Others	Z

C-4 ADDITIONAL DETAILS ABOUT FAMILY MEMBERS RESIDING OUTSIDE (Field 22-25)

Members living outside include only people who do not have a household where they are staying now. This primarily applies to students and temporary migrants who work outside for a limited period. The individual field details are:

C-4.1 Place of work (Field 22)

In the worksheet the name of the place where a person is actually residing is recorded. But in the schedule the place of residence are indicated by the codes as under:

Place	Code	Place	Code
Within own Taluka/Tehsil	1	Within own country	4
Within own districts	2	Outside the country	5
Within own State	3		

C-4.2 Purpose (Field 23)

Reasons for living outside is recorded with codes as under:

Purpose	Code
For business	1
For service	2
For education	3
Domestic reasons	4
Other reasons	5

C-4.3 Frequency of Visits (Field 24)

To get an idea how often the person visits the village is coded as:

Frequency	Code
More than once a month	1
Once a month	2
More than once a year	3
Once a year	4
Once in 2-3 years	5

#### C-4.4 Remittances (Field 25)

Details of remittances received by the family from the outmigrant or money sent to him for his education is coded as:

Source	Code
Family receives remittances	1
Family sends money	2
Money neither sent nor received	3

C-5 ADDITIONAL DETAILS FOR ATTACHED LABORERS (permanent servants, etc.) (Fields 26-37 for full-time worker/Fields 38-49 for part-time worker).

Separate fields are used for recording details of full-time and for part-time laborers or servants.

#### C-5.1 Period of Employment (Fields 26-27/38-39)

The period when a laborer has been working is recorded in completed months. If the laborer is traditionally attached to the household it is recorded as zero.

#### C-5.2 Nature of Employment (Fields 28-40)

To know the nature of employment whether it is seasonal or regular, full-time or part-time it is coded as under:

Nature of employment	Code
Seasonal (employed for a particular season)	1
Regular (employed full-time on yearly basis)	2
Casual (employed for a specific period and job)	3
Regular part-time (for specific job e.g. cleaning of the cattleshed etc.)	4

#### C-5.3 Other commitments (Fields 29/41)

In this field reason for attachment of labor to the household such as indebtedness, or traditional bondage etc. are coded as:

Reasons	Code
Due to past debts	1
Due to current debts	2
Due to any other commitments	3
Due to 'Jajamani' system	4
No prior commitment	5

#### C-5.4 Hours of work (Field 30-31/42-43)

In these fields normal average hours of work per day done by the labor on employers' house is recorded.

#### C-5.5 Wages (Fields 32-37/44-49)

In these fields wages per month received by the servants or attached laborer is recorded. If the payment is made on an annual basis, the monthly rate can be estimated and noted down in Rupees per month. If

wages are paid in kind in a lump sum at the time of harvest (i.e. under 'Jajamani' system) it is written in the remark column.

#### C-6 DEGREE OF DISABILITY (Field 50)

If an individual suffers from any permanent disability and is unable to work due to old age, disease etc. the degree of disability is recorded as:

Degree of disability	Code
Can do any farm or domestic work	1
Can do only domestic work	2
Can do light farm work e.g. watching	3
Can do only light domestic work (e.g. sweeping, child care etc.)	4
Cannot do any farm or domestic work (completely disabled)	5

(Note: Code 5 is also used for small children who are not disabled but too young to do any work).

#### C-7 CHANGES IN HOUSEHOLD MEMBERS (Field 51)

Whenever, a household member leaves or enters the family permanently due to any reason, it is recorded in field 51 as:

Changes	Codes
Persons left the household (including married out)	1
Person died	2
New member entered due to birth	3
New member entered due to marriage	4
Permanent servant left household (due to termination of contracts, etc.)	5
Permanent servant came in (due to new contract)	6
Member reentered the household (on return from education, or reunion of the fragmented household, etc.)	7
Others	8

Migrant laborers are not recorded as leaving households permanently. However, death, birth, family partition, additions or subtractions due to marriage, and hiring or dismissing of permanent servants is recorded.

#### C-8 CASTE (Fields 52-54)

The caste of the household is coded in field 52-53 and the ranking of the caste is recorded in field 54. The caste rank in field 54 is prepared by the Social Anthropologist and is based on, over all social, religious, and economic standing in the village. A slightly greater weight was given to religious rank. (V.S. Doherty).

Further caste is ranked based on (Jere R. Behrman) the rank ordering of sample household castes. This system takes into account the relative frequency with which households of different castes appear in the sample. It is a two digit rank ranging between 0 to 99 and is coded in fields 63-67.

Another caste rank was prepared (J.G. Ryan) based on the individual rank listing of caste codes for sample castes. These ranks were based on inspection of descriptive data on occupation and socioeconomic condition of individual castes, reported by field investigators. It is recorded in field 68.

C-9 SCHOOLING YEAR (Field 55-56)

The actual number of years an individual family member studied is recorded in these fields.

C-10 RELATIONSHIP (Field 57 to 62)

Relationship of individual family member with the head of the household is recorded in the field 12 but, it becomes very difficult to know who is the son/daughter of whom and who is the husband and wife. Therefore, to get the idea of interrelationship these fields are used. In field 57, 58 and 59-60 member numbers of mother and father of the concerned individual are recorded respectively. In fields 61-62 the number of spouse of the concerned member is recorded.



### III. VLS-EFGN/P- GENERAL ENDOWMENT SCHEDULE

This is a broader group of five schedules which are normally collected once a year in the beginning of July. These schedules are coded separately under different names as under:

Name of schedule	Code
Animal Inventory Schedule	E
Farm Implement Inventory Schedule	F
Farm Building Inventory Schedule	G
Stock Inventory Schedule	N
Credit and Debt Schedule	P

#### PURPOSE AND SCOPE

These schedules are designed for collecting information about the resources at the beginning and at the end of the reference period of field work. Besides, it includes information on rather sensitive issues such as foodgrain stocks, financial assets/liabilities, etc. They are coded on a common code sheet for E,F,G,N, and P, but VLS-P information is processed into a separate computer file.

#### VLS-E ANIMAL INVENTORY SCHEDULE

This schedules includes information about the number and type of livestock, and their value in the beginning of the cropping year.

#### VLS-F FARM IMPLEMENTS INVENTORY SCHEDULE

This schedule contains information about all major implements and minor farm machineries. For major implements and machineries number and value are recorded. For minor implements, where several types of tools are involved, it is sufficient to record their total value. However, in the remarks column typewise number and other description of the minor farm implements, dairy implements, implements for handicrafts, etc. are written. Where the space provided for 'Remarks' proves inadequate, the details on the reverse side of the schedule (and worksheet too) can be used.

Some craftsmen in the village, such as carpenters, own implements which are connected with their crafts; the value of these implements is recorded under 'Implements for Handicrafts' in VLS-F.

#### VLS-G FARM BUILDING

In this schedule only the information about farm buildings are coded. Total area in square feet (Unit Code S) covered by the courtyard, including residential house, animal shed, open area and values are recorded. Item Code 'QA' is used for the total value of land plus structures, although that code is listed only as "Residential House." More information on buildings is available from the VLS-G worksheets.

#### VALUATION OF ASSETS

Details about buildings, livestock, implements, etc., are collected by visiting the house of the respondent. While recording the value of assets such as machinery the partnership in ownership and the respondent's share is also recorded. While writing the value of buildings, prevailing prices of land in the village locality, prices of materials, etc., are considered. Also, the values may be confirmed

from one or a group of knowledgeable persons in the village. For implements, machines, and animals it is relatively easy to know the values and to estimate them consistently.

#### CODES USED FOR VLS-E AND VLS-F AND VLS-G

All the livestock, consumer durables, farm machineries and equipment etc. are classified in separate broad group. The first letter refers to the broad group while second letter refers to specific type of assets under that broad categories. For example, L refers to livestock, Q for consumer durables, E for equipment, M for machines, and R for production capital.

#### HINTS FOR COLLECTING SENSITIVE DATA

Some of the information specially financial assets/liabilities are the most sensitive items and it is advisable to ask them in the last or when the investigator develops a good rapport with the respondents. One should not unduly insist on getting the details if the farmer refuses to give them. In case details collected are incomplete or partially correct, it should be indicated in the remarks column.

The another most sensitive item is foodgrain stocks. But accurate information about stocks is essential. Hence the investigator should try to:

- Collect details about these items in the later part of the interview, when the respondent has understood the purpose of collecting stock data.
- An indirect approach rather than blunt, direct questioning on stock position.
- Ask if the family has started eating new grains (i.e. products of the current year crop). If yes, then it is asked since when? If since November, then it is asked how he managed up to November; if it was his old stock which sustained him, then one should ask about his approximate monthly requirement. Once this estimate is available then it can be estimated backward to get the stock position as on July 1.
- If the respondent managed with purchased/borrowed grains, then it is advisable to ask him if used to purchase/borrow every month or if he purchased/borrowed in bulk before July. If he purchased foodgrains in installments after July 1, then the data are already in VLS-L. If he purchased the total stock before July 1, then get the position as on July 1.

This type of questioning can be used for different foodgrains and fodder items. Some farmers may be willing to give straightforward answers about stocks as on July 1, and then it is not necessary to ask indirect and roundabout questions. To repeat the stock position of each of the items as on the day of interview is also recorded. This facilitates cross-checking.

The above mentioned methods are only hints, and finally, the investigator may evolve his own methods depending upon the situation.

Next to foodgrains information about other items such as fodder stocks and farm inputs such as fertilizers are also necessary. Details about these stocks may be collected before getting details of

foodgrains. With the help of answers to the questions about stocks and monthly requirements, supplemented by information collected through informal talks, the investigator is able to collect details of approximate annual requirements of these items.

#### STRUCTURE OF VLS-E,F,G,N,P CODE SHEET

The structure of this combined code sheet is broadly similar to other VLS schedules. However, there are a few schedule specific codes.

The code sheets are divided into four parts as follows:

#### N-1 IDENTIFICATION DETAILS (Field 1-9)

In these fields same details are recorded as in other schedules. The only difference is that while recording data (by recall) for July 1, 1975, the day code is written 183 in Field 7-9 which indicates the position of assets on a particular day every year.

#### N-2 CURRENT (PHYSICAL) STOCKS (Field 10-25)

Under these fields the quantity, value, etc. of stocks of foodgrains, fodder, farm inputs, fuel, building material, etc., as well as durables on hand are recorded. These items are indicated by codes in field 10-11 (for two-digit codes) and field 12 (for one-digit codes). The codes for different items are given under the following headings:

- Foodgrains;
- Fodder/food item (and fuel item) resulting from crop byproducts;
- Animal products;
- Handicraft items;
- Farm inputs;
- Building material;
- Consumer durables;
- Animal products.

In VLS-N schedules following codes are used in respective fields.

Item codes for Buildings Construction etc. (Field 10-11)

Items	Codes
Bricks/Stones	YB
Tin sheets	YT
Asbestos sheets	YA
Bamboo	YM
Rope	YR
Other wood materials	YZ
Diesel oil	YE
Kerosene	YK

#### N-3 SOURCE OF STOCKS (field 25)

In field 25 the source of stocks are recorded as under:

Source	Codes
Home produced	1
Borrowed	2
Purchased	3

Gift	4
Kind wages	5
Others	6

N-4 ANNUAL REQUIREMENTS

In Field 26-31 household's approximate normal requirements (in physical terms) of foodgrains, fodder, etc. for the whole year is recorded.

This is an important question by which one can get a person's own estimate of need rather than measured consumption. The requirements question can be linked in with questions about available stocks on day of interview or July 1.

In case it is difficult to record a meaningful quantity --e.g., clothing for the household -- the requirements in money terms only can be written. Requirements by breaking down an item such as clothing into number of dhotis, number of shirts, etc. needed per person is useful. But only usual needs, not extras required for special occasions are recorded. Values are recorded in field 32-37.

P-1 FINANCIAL ASSETS AND LIABILITIES (Field 38-54)

In these fields details about indebtedness, credit, insurance policies, deposits, etc. are recorded. The same fields are used for recording details of debt incurred and loan extended. Hence some of the fields may be applicable in one case and nonapplicable in others. For instance, source (field 46) is relevant in the case of loan taken from someone or repayment of loan made to someone. Loans taken from cooperatives, moneylenders etc., or repayment made to them are indicated in 'Source' (field 46). However, if the respondent himself is a moneylender, then to whom the loan was given or from whom repayment is received is not a relevant item, hence nothing is recorded in the source column. Similarly, interest rates are not applicable for recording information about life insurance policies. Codes used for recording these information are:

(Field 38)

Item	Code
Savings	S
Deposits	D
Life Insurance	C
Credit outstanding	L
Other financial assets	Z
Debt(outstanding, including interest accrued)	B
Accumulated areas of land revenue	R
Accumulated areas of other dues	A
Other liabilities	Y

P-2 PURPOSE OF LOAN TAKEN

It is useful to know the purpose for which loan was taken. But many times actual purpose is not clearly known then the class code of the purpose can be written. For instance, if purpose of loan is purchase of foodgrain for consumption, its purpose code may be given as 71.

If the loan was taken for consumption purposes and it is difficult to separate how much was for food (71) and how much was for clothing (73), the purpose can be coded 7 as a class code for consumption class.

P-3 PARTNER (Field 46)

This is same as 'source' in other schedules but here the following codes are used:

Source	Code
Government (FCI, FPS, Panchayat Samithies etc.)	1
Commercial bank	2
Cooperative	3
Private moneylender	4
Regulated market	5
Private shop	6
Miller	7

INTEREST (Field 47-48)

Actual interest rate (percentage) per month (not per year) is recorded but quite often it is difficult to obtain and hence it can be avoided also.

P-4 PERIOD OF LOAN OUTSTANDING (Field 49-51), and PERIOD OF LOAN OVERDUE (Field 52-54)

The period of a loan is recorded in two separate fields for making the distinction between 'outstanding' (field 49-51) and 'overdue' (Field 52-54).

The loan becomes outstanding from the day it is extended and remains so up to its agreed date of repayment. If the loan remains unpaid after the agreed date, it is considered 'overdue.' For example: If a farmer took a loan of Rs. 500 on July 1, 1975, to be repaid by July 1, 1976, the whole of the period from July 1, 1975 to July 1, 1976, or up to any date during this period is considered as the period of the loan outstanding. If the loan is not repaid by July 1, 1976, but continues up to December 1, 1976, is regarded as a period of the loan overdue.

LIVESTOCK (Class Code 'L')

Livestock	Code
Bullocks	LA
Cow	LB
Young Cattle (under 3 years)	LC
He buffalo	LD
She buffalo	LE
Young buffalo (under 3 years)	LF
Horse	LG
Donkey	LH
Goat	LK
Sheep	LM

Pig	LP
Poultry birds	LQ
Others	LZ

(Note: Same codes are used for meat of these animals coded in account 72 in VLS-L Schedule)

ANIMAL PRODUCTS (Class Code 'A')

Item	Code
Milk	AM
Ghee	AG
Other milk products like curd, etc.	AP
Dung cakes	AC
Dung, manure	AD
Skin, hide, bones	AS
Wool, goat hair, etc.	AW
Eggs	AY
Other animal products	AX
Fish	AF

CONSUMER DURABLES (Class code 'Q')

Item	Code
Residential house	QA
Furniture items	QB
Cooking and other kitchen utensils	QC
Radio	QD
Cycle, motorcycle	QE
Sewing machine	QG
Fan	QH
Jewelry	QJ
Clothing	QK
Others	QZ

FARM EQUIPMENT AND IMPLEMENTS (Class Code 'E')

Implement	Code
Desi plough	EA
Modern plough	EB
Desi seed drill	EC
Modern seed drill	ED
Blade harrow	EF
Modern harrow (such as disk harrow)	EG
Blade/Tooth hoe	EH
Leveller	EJ
Persian wheel	EK
Mote	EL
Pipe line (in feet)	EM
Manual sprayers and dusters	EN
Chaff cutter	EP
Sugarcane crusher	EQ

(bullock-operated)	
Oilseed crushing	ER
equipment (bullock-operated)	
Minor farm implements	ES
Implements for dairying	ET
Implements for handi- crafts, etc.	EV
Bullock cart	EY
Others	EZ

MAJOR FARM MACHINERY (Class Code 'M')

Item	Code
Tractor--50 H.P. and above	MA
Tractor--35-50 H.P.	MB
Tractor--13-35 H.P.	MC
Two-wheel tractor, cultivator	MD
Harvester	ME
Thresher	MF
Oil engine (multipurpose)	MG
Electric Motor (multipurpose)	MH
Oil pump	MJ
Electric pump	MK
Sprayer/duster (power-operated)	ML
Power-operated sugarcane crusher	MN
Power-operated mills	MP
Other power-driven machines	MZ

PRODUCTION CAPITAL (Class code 'R')

Item	Code
Dryland	RA
Wet land	RB
Well	RC
Tank	RD
Cattleshed	RE
Cattleyard	RF
Storage facility	RC
Others	RZ

FODDER AND FUEL (Class Code 'Z')

Item	Code
Rough dry fodder	ZA
Fine dry fodder	ZB
Green fodder crops	ZC
Grass and other dr fodder	ZD
Cakes (Cakes used as concentrates)	ZF

Gur (Jaggery)	ZG
Oil	ZH
Mineral and minor feeds	ZJ
Crop by-product not used as fodder but as fuel etc.	ZK

FUEL

ANIMAL ENTERPRISE INPUT AND COST

(These expenses are recorded in VLS-L Account 15)

Item	Code
Veterinary	1
Breeding service	2
Use of public pasture	3
Use of other public facilities	4
Taxes, rent on grazing land, etc.	5
Grazing fee	6
Others	7



IV. VLS-K LABOR, DRAFT ANIMAL AND MAJOR MACHINERY UTILIZATION  
SCHEDULE

K-1 PURPOSE AND SCOPE

The purpose of this schedule is to record the utilization which the family makes of the resources under its control. This includes: labor of family members (more than six years of age except permanently disabled);

- labor servants hired on a monthly or longer term basis (whether for part-time or full-time. For example, laborers engaged specifically for cattleshed cleaning or household help, working only part-time;(6)
- owned bullocks;
- owned tractors and power tillers (other machinery not included).

The schedule contains 57 fields where employment and wages regarding farm work, off-farm - nongovernment work and off-farm Government work is recorded for individual family member.

K-2 IDENTIFICATION (Field 1-9)

These nine fields are same as in other schedules and describes the name of schedule, village, land holding class, household number, year and day of interview;

K-3 RESOURCE CODE (Field 10-11)

The codes are the two-digit codes indicating classes of resources as under:

HUMAN RESOURCES (Class Code 'H')

Resource	Code
Family male laborer	HA
Family female laborer	HB
Family child laborer	HC
Attached laborer/permanent servant (male) - full-time	HD
Attached laborer/permanent servant (female) - full-time	HE
Attached laborer/permanent	HF

---

(6)Note that in this schedule permanent servants are treated as part of the household resources, while on the cultivation schedule they are treated as hired laborers.

servant (child) - full-time Attached laborer/permanent	HG
servant (male) - part-time Attached laborer/permanent	HH
servant (female) - part-time Attached laborer/permanent	HJ
servant (child) - part-time	

K-4 INDIVIDUAL NUMBER (Field 12-13)

At the time of collecting data in VLS-C, VLS-E, and VLS-F, a list of all the household members, owned bullocks pairs, and tractors, individual numbers are given to each and same numbers are used in this field. These numbers to each individual are coded as under:

Member	Code
Family members residing in the village	1-49
Family members residing outside	50-59
Attached laborers and permanent servants (full-time)	60-79
Attached laborers and permanent servants (part-time)	80-99

Number bullocks, other draft animals, and tractors 1, 2, for each class.

K-5 MIGRATION AND OTHER REASONS FOR NOT WORKING (Field 14)

In this field the reasons for not working or details of migrations are coded.

Reason	Code
Sick	1
Out of station	2
Holiday	3
Involuntary unemployment (i.e. when a person did not get a job even though he tried)	4
Voluntary unemployment (i.e. when he chose not to work)	5
Left permanently (This information is recorded in VLS-C also with codes as discussed elsewhere)	6
Bullocks remaining idle	7
Temporary migration	8
Information about individual not available (This code is not to be used by investigator but only in checking)	9

(Note: If a person has two reasons for not working e.g., a holiday on which he went out of station, record the reason which comes first

in code list.]

#### K-6 EMPLOYMENT DAYS, HOURS, AND WAGES (Field 15 to 53)

In these fields total employment days and total wages are recorded. Besides to get an idea of the average working hours a rough working hours per day is also recorded.

Farm work includes all work done for another farmer, even if it relates to constructing his house or marketing, etc.

Off-farm nongovernment work includes all work for private nonfarmer employers, regardless of its nature.

Off-farm government work includes all work for any government scheme.

In these fields employment and wages of permanently employed persons are not collected, but only of those entering daily employment.

Number of employment days, average working hours per day and total wages received in cash and kind from the employment are recorded. The total wage figures can be added and transferred directly into VLS-L schedules.

If wage payments are deferred, still their value in VLS-K in the total wage columns at the time the work was done is to be recorded. However, in VLS-L, deferred wages must be treated as a loan to the employer at the same time as they are earned.

#### K-7 INVOLUNTARY UNEMPLOYMENT (Field 54-55)

A laborer may get employment in the daily wage market on a given day if he/she works for a daily wage or piece rate counted daily. But he may be voluntarily unemployed if he looked for a job but refused work at the wage rate offered. However, if excess rains stop workers from getting a job, it is involuntary unemployment. The question thus should be specifically asked:

On how many days since the last visit (interview) did you try to find a job but failed to find one at the usual wage rates during this season?

A person is then considered involuntarily unemployed when he/she seeks employment and fails to get this at any wage. If such a person after failing to get a job goes back to his own field and tries to do some of his own farm work he/she is still treated as involuntarily unemployed. For example, a person tries to get a day's employment with some landlord or at a rural works site but fails to get it. As he/she is unemployed (against his wish) he tries to keep himself busy with some other work (e.g. mending the fence or doing some nonessential activity in his farm or at his house). This work would not have been done had he/she got the job, or it would have been done in nonworking hours or on another day. Thus, for all practical purposes, he/she is involuntarily unemployed. By working on nonrequired activities in his/her farm or house he/she is only pretending to be employed. He/she could be best described as having disguised unemployment. However, here it may not be necessary to make a distinction between involuntary unemployment and disguised unemployment. Hence such cases are treated under involuntary unemployment.

[Note: Separate questions for involuntary unemployment and wage employment should be asked. They may not usually add up to the number of days between the rounds since some days may be voluntary unemployment, working on own farms, holidays, market days, etc.]

#### Non-participants

A person who does not participate in the daily labor market is one who receives zero entries (always or in most rounds) in the involuntary unemployment and the wage employment columns. It is not necessary to code them in the coding sheet.

#### K-8 FRACTIONS OF DAYS

A series of half days of employment is added up to full-day equivalents and rounded to the next integer (except when the fraction is less than one day where entries like 0.5 are possible).

#### K-9 WORK ON OWN FARM (Field 56-57)

The number of days worked on own farm is recorded in these fields. Quite often it happened that a farmer spent only few hours for many days on his own farm and to record number of days may create confusion. Hence, it is better to write total hours of work on own field divided by 8 to get standard days of work done.

The total number of working days may increase the number of days in the reference period of interview if days of employment, days of work on own farm is added, because a farmer may decide to do some work on his own farm if he fails to get work in the daily labor market.

#### K-10 OTHER ACTIVITIES (Field 58-66)

The information about employment and involuntary unemployment etc for individual family member is recorded in the fields 15 to 53 but they may participate in other activities also. Hence, these information are recorded in the field 58-66.

#### Activities (Field 58-59)

If refers to activities other than recorded in the fields 15 to 53 and coded as under.

#### OTHER ACTIVITIES (one digit code)

Activity	Code
Religious services	A
Shopkeeping	S
Handicrafts	K
Trading	T
Ceremonial and social functions (including political activities)	E
Miscellaneous	Z

#### HANDICRAFTS AND OTHER ACTIVITIES (Two digit codes)

Activity	Code
----------	------

Weaving	KA
Leather work	KB
Pottery	KC
Carpentry	KD
Blacksmithy	KE
Rope making	KF
Basket making	KG
Beedi making	KH
Shopkeeping	KJ
Trading	KK
Toddy tapping	KL
Dung gathering/ processing and selling	KM
Neem seed collecting and selling	KN
Food/Fruit gathering and selling	KP
Wood gathering and selling	KQ
Goldsmithy	KR
Livestock rearing	KS
Gur preparation	KT

Place of work (Field 60)

The place of work is recorded as

Place of Work	Code
Own farm/house	0
Other farm/house	1

Days of work (Field 61-62)

In these fields total number of standard days worked for major activities are recorded. Standard days of work is estimated by adding the total hours of work and dividing by 8 (assuming 8 hours as the normal working hours).

Wages (Field 63-64)

Total wages received in value terms during the reference period is recorded.

## V. VLS-Y PLOT AND CULTIVATION SCHEDULE

This schedule is designed to record operationwise input-output data for each plot constituting the operational holding of a farmer. It also includes the important characteristics of each plot (sub-subplot) such as soil type, ownership, irrigation status, land value and revenue rate.

### Y-1 ORGANIZATION OF THE SCHEDULE AND COMPUTERIZATION

Schedule Y contains 39 numbered fields which are intended to be computerized and a few unnumbered fields which will remain in the original records for reference if ever necessary. Obviously the unnumbered fields or any additional pieces of information can be added to the schedule as required.

The first 16 fields are plot characteristics which do not change during a crop year while fields 17 to 39 contain information which accrues within a crop year.

While entering data into computer the first 16 fields should be entered automatically along with each line (record) of the fields 17 to 39 so that each record contains this set of plot characteristics.

### Y-2 VILLAGE CODE (field 1)

Village		Code	Village		Code
Aurepalle	-	A	Dokur	-	B
Shirapur	-	C	Kalman	-	D
Kanzara	-	E	Kinkheda	-	F
Boriya Becharji	-	G	Rampura	-	H
Papda	-	J	Rampura Kalan	-	K

### Y-3 SCHEDULE CODE (field 2)

Refers to name of schedule Y which is already printed in the code sheets. This is different than the pattern in other schedules where card code (schedule name) is entered in field 1 or column 1.

### Landholding Class (field 3)

Refers to original landholding class as the selected households were classified in the beginning of survey in the first year. Every year the households are recategorized and the revised landholding class are provided in the additional field.

Household Category	Code
Laborer	0
Small farmer	1
Medium farmer	2
Large farmer	3

### Y-4 HOUSEHOLD NUMBER (field 4)

Each selected respondent in every village is given a code number as under:

Landholding class	Code
Labor households	1 to 10
Small farmers	30 to 39
Medium farmers	40 to 49
Large farmers	50 to 59

In case a sample is replaced (which is normally done in the beginning of the year) the separate codes are used.

Replaced households	Code
Laborers	60 to 69
Small farmers	70 to 79
Medium farmers	80 to 89
Large farmers	90 to 99

#### Y-5 PLOT CODE (fields 5, 6, and 7)

Main plots are coded with one-letter codes such as A, B, C, etc. Subplots receive two-letter codes such as AA, AB, AC, etc. These subplots refer to subplots of main plot, A. Sometimes even the subplots are further divided into small plots and they are coded as AAA, AAB, AAC, etc. These plots refer to part of main plot A and subplot AA. Similarly, sub and subplots for second plot 'B' and others are also coded in the same way except the first letter B remains same and BA, BB refers to subplots of B (in case of subplot the first letter remains same for the concerned plot and the second letter varies from A to Z. But in case of sub-subplots first two letters remain same and the third letter varies from A to Z). Using the alpha codes such A,B,C, etc., have limitations if a sample household has more than 26 main plots. In these cases the 27th plot onwards is coded as Z1, Z2, Z3 and so on which indicates 27th plot (26+1), 28th plot (26+2) and so on.

#### Y-6 AREA OF THE PLOTS (fields 8, 9)

The total area of the concerned main plot/subplot/sub-subplots is written in acres in field 8 but in field 9 actual area cropped is written (this may be same as total area or even less if some portion of the plot is not cultivated due to grasses, stones, trees, etc.).

#### Y-7 IRRIGATED AREA (field 10)

The actual irrigated area rather than irrigable area is recorded in field 10.

#### Y-8 IRRIGATION SOURCE (field 11)

Irrigation source refers to means of irrigation i.e. tank, wells, canals, etc. The modes of irrigation such as pumpsets etc., if used

can be traced from the use of implements entered in field 25.

Source	Code
Tank	1
Canal	2
Well with electric motor	3
Well with oil engine	4
Well with traditional device	5
Others	6

Y-9 SOIL TYPE (field 12)

Soil type refers to depth and color of the soil based on the observation of the field investigators. The codes used are:

Soil type	Code
Deep black	1
Medium black	2
Medium to shallow black	3
Deep red	4
Shallow red	5
Gravelly	6
Problem soil (Saline soil, etc.)	7
Sandy soil	9
Others	8

Y-10 OWNERSHIP STATUS (field 13)

Ownership status refers to the tenurial rights of land a household enjoys. The codes are given on the following page. These codes can be grouped under:

Ownership status	Code
Owned by the household	A
Taken on lease basis (fixed cash rental)	B
Taken on sharecrop basis	C
Owned but leased-out on fixed cash rent or sharecrop basis	D

Y-11 VALUE OF LAND (field 14)

Per acre estimated value of the plot in 'Rs. 100' are recorded based on the information obtained from either patwari or some knowledgeable person in the village. While recording the values of the plot potential sale value of the plot considering location of plots, irrigation, topography ect. are considered.

Y-12 REVENUE RATE (field 15)

Revenue rate is recorded on a per acre basis or for the whole area of



main plot rather than just cropped area. This information can be collected either from the Patwari or farmer himself. In some areas 'pass books' for their holdings are provided to the farmers which give correct idea of the land revenue of each main plot. In the work sheets all the details about land revenues, betterment levy, other land taxes related to the plots are collected. But while recording in this schedule per acre value of land revenue is recorded.

Y-13 NUMBER OF RECORDS PER PLOT AND RECORD SERIAL NUMBER (Fields 16 and 17)

These fields are added simply to facilitate computer checking of completeness of data. Field 17 (record serial number) simply numbers the lines (or records) which have been filled in for any plot, subplot or sub-subplot for which a separate Y schedule exists, starting with number one for the first line or record. The total number of records per field is then entered into the numbered field "Number of records per plot" on the left hand side of the Y schedule.

Ownership Status	Code
Initially owned and operated	A
Initially leased-in	B
Initially taken on sharecrop basis	C
Initially owned but leased or sharecropped out	D
Added by purchase*	E
Added by leasing or sharecropping in	F
Added by gift succession, government land distribution, etc.*	G
Created by subplotting	H
Reappeared by reaggregation	K
Taken back from leaseholder or sharecropper to operate himself	L
Subtracted by sale*	P
Subtracted by leasing or sharecropping out	Q
Subtracted by succession, family division, or due to government ceiling laws	R
Subtracted by cancelling previous lease or crop agreement	T
Carried over from last year under identical item code	S

\* Such status changes also lead to an entry as a purchase/sale or capital gain/loss in the Transaction Schedule (VLS-L).

Y-14 YEAR AND DAY (field 18, 19)

Schedule Y contains two digits into which the reference year is recorded as under:

Cropping Year	Code	Cropping Year	Code
1979-80	79	1982-83	82
1980-81	80	1983-84	83
1981-82	81	1984-85	84

The day of interview refers to approximate day of operation in the concerned plot rather than day of interview. This is recorded as per the calendar supplied in Appendix III. It can easily be calculated. For example, if any operation was done on 10th of January the day code is written as 010 while any operation done on 10th February it is coded as 41 (31 days of January + 10 days of February).

Y-15 SEASON CODE (field 20)

The season code refers to the period in which a crop/crop mixture occupies the land for the major part of the season. But sometimes it is difficult to decide the season if a crop is sown quite early or late due to monsoon. The season can be decided based on planting dates. If a crop is planted early June to August it should be treated as kharif crop irrespective of harvesting date. Similarly, if any crop is planted after September and harvested before March/April it should be treated as rabi crop. The crop planted after rabi in the month of March or April or after that is treated as summer crops.

Examples:

1) Unirrigated pearl millet is always a kharif crop. It is planted after the first rains and harvested at the end of the monsoon season in all areas of India.

2) Pigeonpea, cotton and castor bean are usually planted at the onset of the monsoon but harvested after the rains, sometimes as late as March. Nevertheless they are classified as kharif crops.

3) Sorghum or chickpea grown on residual soil moisture in the post-monsoon season are rabi crops, even if (as for HYV sorghum) the planting date may be during the last month of the rainy season.

4) Irrigated groundnuts or paddy may be sown in February or early March. They will be coded as summer crops because the summer season is the first season where they occupy the major portion of the season.

5) Sugarcane will be coded according to the above rule as well.

6) Orchards or other crops which occupy the field for more than a year are identified as perennial crops.

In some instances of overlapping irrigated crops the investigator should use his best judgment.

All operations (from field preparation to threshing) which correspond to a particular crop or crop mixture obtain the same season code, despite the time in which they actually occur.

For example, if a kharif crop, such as mungbean, is harvested for later threshing, and if field preparation starts for rabi sorghum, then that field preparation is coded as rabi but the late threshing of mungbean is coded as kharif. Where situations are complex, season codes may be assigned at the end of the crop year only, according to the plot map.

Season	Code
Monsoon or kharif season (roughly covering period of June to October)	K
Postmonsoon or rabi season (roughly covering period of November to February)	R
Summer season (roughly covering period of March to May)	S
Perennial crops	P

#### Y-16 OPERATIONS (field 21)

Refer to the code list for specific farm activities. In the unnumbered field the name of operation is written (not inputted in computer) but the concerned code of the operation is recorded in field 21. These operations are mainly plot specific farm operations starting from field preparation to threshing. Marketing of the product is not included because always they are not plot specific operations.

The details of codes for various farm operations are:

Cultivation Operation	Code
Field preparation (including field cleaning, preparation of beds for irrigation, presowing, plowing and puddling)	A
Minor repairs of bunds, fencing, etc.	B
Manuring (including use of FYM, organic manures like oil cakes, sheep penning, tank silt, etc.)	C
Fertilization (using chemical fertilizers for top dressing)	D
Sowing	E
Resowing (in case of poor germination or crop failure farmers resow the plot)	F
Transplanting/planting	G
Weeding and thinning	H
Interculturing	J
Plant protection (using of pesticides/insecticides)	K
Irrigating crops	L
Watching	M
Harvesting (including transport from field to threshing floor)	N
Harvesting main product (if done)	P

separately)	
Harvesting by-product (if done separately)	Q
Harvest processing (including drying, de-husking, threshing, winnowing, cleaning, etc.)	R
Nursery raising (including all operations regardless of location in field or hours)	S
Vegetable gardening (including all operations regardless of location in field or hours)	T
Orchard cultivation (including all operations regardless of location in field or hours)	U
Supervision/Management	X
Others (including fencing)	Z

Y-17 LABOR AND BULLOCK LABOR USE (fields 22, 23, 24)

In this schedule types of laborers or bullocks are listed on consecutive lines for any operation and distinguished by codes in field 22. These are:

Type of labor	Code
Owned bullocks/buffaloes	OB
Hired bullocks/buffaloes	HB
Exchange bullocks/buffaloes	EB
Family male	FM
Family female	FF
Family child	FC
Hired male	HM
Hired female	HF
Hired child	HC
Exchanged male	EM
Exchanged female	EF
Exchange child	EC
Male regular servants	RM
Female regular servants	RF
Children regular servants	RC

In contrast to earlier procedure we now introduce codes for exchange labor and male regular farm servants. Values of the resources used are recorded in Rupees for the total number of hours. For family owned or exchanged resources, and for regular farm servants in the inputted values are recorded on the basis of current village specific market prices.

Y-18 INPUTS AND MACHINERY USE (fields 25, 26, 27, 28, 29)

Both one and two digit codes are entered in field 25 and one digit codes are right adjusted. The instructions for recording the quantity and value of all the inputs are given in the following paragraphs.

Machinery: In field 25 codes for use of modern machinery and implements such as pumpsets (diesel or electric), tractor, sprayers, dusters, threshers are recorded. Desi plows and other desi implements are not recorded since they are reflected in the operation and bullock use itself. In field 27 actual time spent for any operation in hours is recorded with the unit H in field 26. Actual values of hired

machinery and implements used are written in field 28 but the values of the owned machinery and implements used are recorded on the basis of prevailing village specific rental prices.

Fertilizer: Fertilizer codes are recorded in field 25. Quantity of fertilizer is recorded in kg in field 27 with the unit in field 26. The value of fertilizer is written on the basis of prevailing market rate if it was purchased at the time of application. But if the farmers had purchased earlier the actual value is recorded. (The total value of fertilizer used is written not the price per unit of fertilizer.)

Organic manure: Organic manures such as groundnut cakes, castor cakes, and other cakes are recorded in kilograms. Farmyard manure and tank silt are recorded in cartloads on the worksheets but are converted to quintals and entered in codesheet field 27. Manuring through sheep and goat penning is recorded in animal number x days = animal day number in field 27 with units N (as number) in field 26. The value for these manures is recorded as the actual value of cash or kind payments made for this purpose in field 28. In case of owned sheep and goats the approximate value may be entered on the basis of some observations of sheep and goat penning in the village. Green manure is recorded by its code number 5 without mentioning quantity and value.

#### 1. Fertilizers

Type of Fertilizer	Code
--------------------	------

##### (i) Nitrogenous Fertilizers

- Ammonium Sulfate	A
- Calcium Ammonium Nitrate	B
- Ammonium Sulfate Nitrate	C
- Urea	D

##### (ii) Phosphatic Fertilizers

- Super Phosphate (single)	E
- Super Phosphate (triple)	F

##### (iii) Potassic Fertilizers

- Muriate of Potash	G
- Sulfate of Potash	H

##### (iv) Compound Fertilizers

- Diammonium Phosphate	J
- Ammonium Nitrate Phosphate	H

##### (v) Complex Fertilizers

- 22 : 22 : 11	L
- 18 : 18 : 10	M
- 15 : 15 : 15	N
- 14 : 28 : 14	P
- 17 : 17 : 17	Q
- 11 : 11 : 11	R
- 14 : 35 : 14	S
- 28 : 28 : 0	T

- 6 : 12 : 6 U
- micronutrients X
- Others Z

## 2. Organic Manure

Type of Manure	Code
- Farm-yard manure	1
- Groundnut cake	2
- Castor cake	3
- Other cakes	4
- Green manure (take down the activity only, no units)	5
- Tank silt	6
- Penning of sheep/goats (in animal day number = Animals x Days)	7
- Other manures (e.g. pig excreta, night soil, etc.)	8
- Cultures (e.g. Azotobacter, Rhizobium)	9

## 3. Pesticides/Insecticides

Usage Class	Name	Code
Insecticide- seed dressing	1. Carbofuran	1A
	2. Ceresan/Agrosan	1B
Insecticide- contact	1. BHC 10%	2A
	2. BHC 50%	2B
	3. DDT 50%	2C
	4. Sultaph/Sulphur (dust)	2D
	5. Heliothox (dust)	2E
	6. Sumithion	2F
	7. Thiodon/Endosulfan	2G
	8. Endrin	2H
	9. Ambithion (mixture Malathion/Fenitrothion)	2J
	10. Cythion/Malathion	2K
	11. Carbaryl 50%, Seven 50%	2L
Insecticide- Systemic	1. Dimicron	3A
	2. Rogor	3B
	3. Parathion (dust)	3C
	4. Zolone	3D
	5. Nuvan	3E
	6. Nuvacron	3F
	7. Thimet	3G
Insecticide- contact/systemic	1. Lipcomby	4A
	2. Metacipcomby	4B
Fungi-seed application	1. Ceresan W.P.	5A
	2. Agrosan G.N.	5B
Fungicide-foliar application	1. Dithane M-45	6A
	2. Dithane-Z-78	6B
Fungicide-seed/	1. Thiram (TMTD)	7A

soil application	2. Brassicol 75 WP (PCNB)	7B
Fungicide-seed/ foliar application	1. Sultaph/Sulphur (dust)/ Sulphur W.P.	8A
	2. Copper oxychloride/ Blitox 50/Cuprex	8B
	3. Henosan	8C
	4. Streptocycline	8D
Rodenticide	1. Zinc Phosphide	9A

Note: Sulphur (dust) is used both as an insecticide (code 2D) and Fungicide (code 8A). Hence make sure of its actual use (as 2D/8A) while recording the information.

Irrigation: For irrigation quantities of water are not recorded but the hours of pumpsets used are recorded in field 27. In case bullocks are used instead of pumpsets it is recorded in field 22 as the 'L' operation. The hours of use and values are recorded in field 23 and 24 respectively.

Seeds: Crop codes are used for recording seed type in field 25 but in unnumbered field 'name of inputs' the name of variety should be entered rather than simply local and hybrid/high yielding. Quantity actually used as seed is recorded in kgs rather than seed rate per acre. When crops are sown for fodder purposes, crop specific code are used under input column but at harvest time product is written as ZC or ZA. For recording seed quantities in a crop mixture actual quantity used of each component of the mixture should be written not the converted standard per acre seed rate.

Pesticides: Pesticides codes are two-digit codes but in VLS-Y only one-digit codes are used in field 25 as under:

Pesticide Group	Code
Insecticides - seed dressing	1
Insecticides - contact	2
Insecticides - systemic	3
Insecticides - constant/systemic	4
Fungicides - seed application	5
Fungicides - foliar application	6
Fungicides - seed/soil application	7
Fungicides - seed/foliar application	8
Rodenticide	9

The plant protection materials are grouped for coding in the VLS-Y schedule in field 25 but its name should be written in unnumbered column for inputs and also in the worksheets.

Unit (field 26)

Refers to unit of measurement of different inputs used in crop production. Units of measurement are:

Input	Unit of Measurement	Code
Seeds, fertilizer	Kilograms	K



Groundnut cakes, castor cakes, other cakes	Hundreds	C
Farmyard manures and tank silt	Quintals	Q
Human and bullock labor	Hours	H
Machine use	Hours	H
Pesticides/insecticides (liquid)	Litres	L
Pesticides/insecticides (powder)	Kilograms	K
Goat and sheep penning	Animal day number	N

Quantity (field 27). Actual quantity of all the inputs except human and bullock labor is recorded. In case part of inputs are owned/house produced and part of it is purchased it is recorded separately in two lines. While recording the quantity of seeds used for some crops like sugarcane, chillies, onions, etc., the number of seedlings/sugarcane sets are written in 100 units not in kgs.

Value (field 28). Inputed values of all home produced/owned inputs used are recorded on the basis of current village specific market prices. In case of purchased/hired inputs actual value is recorded.

Source (field 29). Source of inputs used are recorded according to following codes:

Source	Code
Home produced/owned	1
Borrowed	2
Purchased/hired	3
Gifts	4

#### Y-19 OUTPUTS (field 30-33)

Main products usually are grains, vegetables, or fruits. Sometimes few crops are grown for fodder purposes and seedlings. In those cases the main products are fodder and number of seedlings. The quantities for main products like grain, vegetables are recorded in kg, for fruits in number of 100 units, and for fodder in quintals.

In field 30 the crop specific code is written for grain, vegetables and fruits but in case crops are grown solely for fodder it is recorded as ZA or ZC.

Farm Products, Food Items and Animal Products Codes  
(To be used for inventories, seeds, production, transactions, and consumption)

#### CEREALS (Class Code 'C')

Crop	Code
Bajra/Pearl millet (Local variety)	CA
Bajra/Pearl millet (HYV)	CB

Jowar/Sorghum (Local variety)	CC
Jowar/Sorghum (HYV)	CD
Maize (Local variety)	CE
Maize (HYV)	CF
Ragi/Finger millet	CG
Other minor millets	CH
Paddy (Local variety)	CJ
Paddy (HYV)	CK
Wheat (Local variety)	CL
Wheat (HYV)	CM
Rice (local variety)	CN
Rice (HYV variety)	CP
Meals	CQ
Other cereals	CX

PULSES

(Class Code 'P')

Crop	Code
Redgram (Tur)/Pigeonpea	PA
Greengram (Mung)	PB
Blackgram (Urad)	PC
Bengalgram (Chenna)/ Chickpea	PD
Redgram dhal	PF
Greengram dhal	PG
Blackgram dhal	PH
Bengalgram dhal	PJ
Guar	PK
Cowpea	PL
Soybean	PN
Other pulses	PX
Other dhal	PZ

OILSEEDS

(Class Code 'B')

Crop	Code
Groundnuts	BA
Sesamum	BB
Castor	BC
Mustard	BD
Linseed	BE
Linseed Oil	BL
Castor (HYV)	BM
Sunflower	BF
Safflower	BG
Safflower oil	BS
Groundnut oil	BH
Other oilseeds	BX

FIBER CROPS

(Class Code 'D')

Crop	Code
Cotton (Local variety)	DA
Cotton (HYV)	DB

Other Fiber crops DX

SUGARCANE  
(Class Code 'S')

Crop	Code
Sugarcane	SA
Sugar	SB
Gur (jaggery)	ZG
Other sugar products (e.g. sweets for children)	SX

VEGETABLES AND SPICES  
(Class Code 'V')

Crop	Code
Onion	VA
Chillies	VB
Brinjal	VC
Cabbage	VD
Tomato	VE
Cauliflower	VF
Leafy vegetables	VL
Potato	VP
Carrot and Radish	VR
Fennel	VS
Tubers	VT
Other vegetables	VX
Other spices (including salt tamarind, etc.)	VY

GARDEN CROPS  
(Class Code 'F')

Crop	Code
Grapes	FA
Lemon	FB
Orange	FC
Mango	FD
Coconut	FE
Toddy Trees	FG
Other Fruits	FX
Banana	FH
Papaya	FP

CROP BYPRODUCTS  
(Used as fodder)  
and  
FODDER CROPS  
(Class Code 'Z')

Item	Code
Rough dry fodder	ZA

(crop byproduct)	
Fine dry fodder	ZB
(crop byproduct)	
Green fodder crops	ZC
Grass and other green fodder	ZD
Grass and other dry fodder	ZE
Crop byproducts not used as fodder but used as fuel, etc.	ZK

Unit (field 32). Main products such as grain, vegetables, sugarcane, cotton lint are recorded in kgs while fodder as main product in quintals. Fruits are recorded in number of 100 units some new crops like mulberry is recorded in number of worms in 100 units or kgs whichever is the unit of sale. Byproducts are always recorded in quintals.

Value (field 33)

Value of main and byproduct is recorded at the harvest price (prevailing prices at the time of harvest in the village). If a farmer sells his produce the actual value is recorded in the VLS-L schedule. But normally farmers do not sell just after harvest and keep for threshing which often takes a long time. In this case to make it similar harvest price is recorded as the value of main and byproducts.

Byproducts of some crops like cotton are not normally sold or purchased and large farmers leave in the field which sometimes are uprooted and used for fuel by the farmer himself or by other people of the village. The value of these byproducts are difficult to get. The wages paid or value of time spent for collecting these cotton or castor stalks may be used as the value of these byproducts.

Allocation of labor cost. It is a common practice of the farmers to harvest the earhead of crops first and the stalks later on. In a mixed crop different crops have different maturity periods and so they are harvested at different dates. Sometimes farmers harvest many plots collectively (specially small plots) in a day and it is difficult to collect actual time spent in each field. Similarly the harvested crops are also not threshed separately for each plot. In these cases it becomes difficult to get actual time spent on threshing the crop. If however, several fields are threshed together, the concerned farmer may be asked to give accurate estimates of production and labor times spent in each field. But if he is unable to tell accurately then total output jointly threshed and labor inputs used should be proportionately divided according to the area of each plot. The farmer may not tell actual quantity of threshed product in quintals or kgs so these information can be collected in local units such as bundles, number of cart loads etc., in the worksheet and after converting accurately in quintals or kgs it may be recorded in codesheets. (Note: While recording output make sure that the kind wages paid to the laborers from the output are also part of the total production and it should properly be included in the output field.)

Crop failure. Crop failure is coded as a 'harvesting of main product operations' (code N/P), with zero output and input labor, or else as "harvesting of crop" operation (code H), with zero input of labor and zero main product and byproduct. Field 22 is not left blank and '0' zero should be coded. If the crop is harvested and some byproduct is obtained this should be coded separately as a "harvesting byproduct"

operation, and labor inputs and output of byproduct should be coded.

#### Y-20 CROP OR CROP MIXTURE (fields 34-39)

This section corresponds to one portion of the section entitled "cropping pattern" in VLS-D. Since we already have a season code, these fields record only the crop or crop mixture to which the operation record is related. A single crop of mungbean grown in the kharif will be recorded as PB in field 34 for all operations relating to the mungbean. A mixed pearl millet-pigeonpea intercrop will be recorded as CA, PA in fields 34 and 35 for all operations relating to the pearl millet and/or to the pigeonpea. For example, in the threshing operation of pigeonpea, the crop mixture is still coded as CA,PA. A rabi crop of chickpea will be coded as PD in column 34 for all operations relating to that crop and so on.

Specific issues: Sometimes nursery is raised in a small piece of land in the corner of a field and the seedlings are transplanted either in the same plot or in some other plots. It becomes difficult to get the actual value of seedlings if prepared on own field. The seedlings from which plot is used is called the donor plot and where it was used is called receiver plot. To get accurate idea of the total cost of raising nursery for transplanting in a plot the plot code of donor plot is recorded in unnumbered field of the VLS-Y. The plot from where seedlings were brought the plot code of the plot where seedlings were used is recorded as receiver plot. This helps in identifying the source of the nursery plot and where used. So the cost of raising nursery can easily be transferred to the concerned plot.

For nursery raising, vegetable gardening, and orchards, all inputs and outputs are recorded as one operation regardless of the exact nature of the operation and location.

If a farmer does not harvest the byproduct (crop stalk) but uproots the plants and leaves them in the field for decomposition, it should be recorded as green manuring operation. But if the stalks are removed outside the field it is treated as field cleaning.

If a crop fails to germinate or fails after germination the farmer may plant same crop or another crop in part of the field or whole this is considered as resowing operation and coded as F. If a farmer observes that after germination crop stand is poor he may transplant few plants to cover the gap between plant. This is treated as gap filling operation and can be coded as 'Z'.

For sugarcane, fruits, vegetables like potatoes, brinjals, chillies where plants (seedlings) are used as seed the sowing operation means transplanting. Hence for sowing operation of these crops code G (planting/transplanting) should be used not the code E.

If a plot more than five crops are grown as a mixed or intercrop while recording in field 39 put 1. The sequence of crops written in the cropping pattern field 34-39 the first crop should be written as the dominant crop which occupies larger area of the plot. The other crops are also recorded considering area occupied by each component of a crop mixture.

## VI. VLS-L - HOUSEHOLD TRANSACTION SCHEDULE

### L-1 Organisation of the Schedule

The purposes of this schedule are:

- i) Assessing the income position of a household.
- ii) Computing consumption quantities and expenditures of the household.
- iii) Breaking down income by sources.
- iv) Determining inter-enterprise flow of goods within the household.
- v) Recording production expenditure.
- vi) Recording changes in the debt or credit position of households.
- vii) Computing cash prices of commodities.
- viii) Tracing marketing behavior by locating certain transactions.

Many of these areas are sensitive. Therefore, in explaining the schedule, points (ii), (iv), and (v) rather than the income aspects are stressed. But if a respondent is unwilling to give certain details he should not be insisted for the same. It is better to convince him about the importance of these information.

All the transactions are recorded in the schedule are broadly grouped into seven classes as given below:

#### Classes of Transactions

Section	Out-right	Credit or saving	Transfer of resources and money without compensation
1. Cash transaction	L-2.1	L-2.2	L-2.3
2. Kind transaction	L-3.1	L-3.2	L-3.3
3. Intra-household transaction	L-4.0	-	-

### L-2 CASH TRANSACTIONS

These are all transactions in which money actually changes hands.

Such transactions give rise to one line on the VLS-L schedule. But only one side of the schedule is used, either the cash inflow or the cash outflow side. Both sides transactions in which money changes hands are never used.

#### L-2.1 Outright Cash transactions

These are transactions in which money is paid or received for the sale

or purchase of goods or services (including taxes which in principle are regarded as payments for some government services). If goods are sold or money is received for labor or other service, the left hand "cash inflow" side is used. If commodities are purchased or money is paid for labor, veterinary, government services or taxes, the right hand side "cash outflow" is used. Always the account number which receives the money for the goods or services produced, or which has to pay the money with which goods or services are paid are used.

#### L-2.2 Cash Transactions for Credit, Savings, or Life Insurance

In these transactions, cash comes into the house or leaves the house, but the ownership of the cash does not change. For example:

If a person takes a credit he gets some money, but the lender still owns it. If he deposits money as savings, he gives it to the Bank but still he owns it.

If he borrows money the credit account (and the household) receives the money--it is recorded on the "cash inflow" side.

If he lends money, the credit account (and the household) pays the money-- it is recorded on the "cash outflow" side.

If he withdraws savings from the bank, the money flows into the household-- the "cash inflow" side (regardless of the fact that the savings account loses money) is used.

If he deposits money, the money flows out of the household--the "cash outflow" side (regardless of the fact that the savings account receives the money) is used.

#### L-2.3 Cash Transactions for Transfer Purpose

These include payments received from the outside without the sale of goods or services: gifts and income transfer from other family members or outsiders, pensions, relief money, etc.

These also include payments made to other family members or third persons, charity payments, etc.

Again if money leaves the house, the "cash outflow" side is used; but if it comes into the house, the "cash inflow" side is used.

#### L-3 KIND TRANSACTIONS

These are transactions in which goods and services are exchanged without the use of money. But money values involved is recorded. Therefore, it is necessary to compute the money value involved and to split the transaction conceptually into two parts, namely, a sale of goods or service on the cash inflow side, and a purchase of goods or service on the other side for barter transactions or payments of labor in kind. Similarly, credit given in kind is a credit taken in money value, and a simultaneous purchase of the goods in which the credit was given; vice versa for a debt repayment in kind.

A gift of goods or services received is a receipt of the money value of the goods, and a simultaneous purchase of the same goods;

vice versa for gifts given to others.

[Note that, unlike cash transactions, kind transactions is entered on both the 'cash inflow' and the 'cash outflow' sides of the schedule, on the same line. Note also, however, that intra-household transaction also gives rise to entries on both sides of the schedule.]

[Note further that the money values on the cash inflow and the cash outflow side of the schedule are always identical for all kind transactions. If the two values differ, it may be because of coding mistake.]

Details about all these are described carefully in the remarks column.

### L-3.1 Outright Kind Transactions

These include payments for labor or bullocks in kind, or the barter of one kind of goods for another goods, or one service for another service.

Payments of labor services in kind give rise to a sale-of-goods entry on the cash inflow side to the benefit of the product account which produced the goods and a purchase of labor services on the cash outflow side, charged to the account which used the labor service. Here hour and kind of labor hired; are not recorded but only the value and the account number.

Income received in kind from labor services gives rise to a cash-income entry into account number 57 on the cash inflow side (without hours and kind of work involved) and to a purchase of a good on the cash outflow side, generally into the consumption account 71 (with minor exceptions such as when clothing is given).

Barter of one product for another product which is used for consumption gives rise to a sales entry on the cash inflow side, credited to the account which produced the goods given away, and to an entry on the cash outflow side, charged generally to the consumption account 71 (with minor exceptions).

If the goods received in barter is used for production, then the account charged on the cash outflow side becomes the production account for which the production was used.

In barter transactions, two item codes are usually used--one for the goods going out and the other for the goods coming in.

### L-3.2 Credit Given or Taken in Kind

A credit received in kind gives rise to a credit-inflow entry on the cash inflow side (account number 62) without quantity but with the one-digit item code "1" which identified it as a credit received (see section L-5.7). This gives rise to a purchase of good entry on the cash outflow side and is charged to account 71 if it is used for consumption or to one of the production accounts if the item is used as an input (seed, manure, fertilizer). In this case, quantity and item codes are recorded on the cash outflow side.

A credit given in kind is credited to the account which produced the item (with item code and quantity) and is recorded cash inflow side. On the cash outflow side, it is recorded in account number 62



without quantity and one digit item code "3" identifying it as a loan.

If a large farmer takes loan in cash from the bank and he purchases fertilizer and seed from that it is recorded in account 62 on left side and account 02 and 03 on right side in different lines.

All the credit, savings, and income transfer transactions are recorded. Interest incomes from lending or savings account and interests, expenditures on credit taken are recorded in account 63, if they can be easily distinguished from principal repayment or withdrawal activities. Sometimes it is difficult to find out principal and interest separately then total repayment is recorded in account 62.

To distinguish a credit given to some one else or a debt paid back to a lender (and conversely for cash inflows) under account 62 the following codes are used in fields 14 or 33).

1. Money value in as a loan.
2. Money value in as a repayment of credit/interest given to others.
3. Money value out as a loan.
4. Money value out as a repayment of debt/interest paid back to lender.

#### L-3.3 Kind Transactions Without Compensation

Some of the transactions discussed here are extremely rare but provision for them still needs to be made.

(a) Gifts, Donations, Thefts, Begging of Current Account Items (Consumption and Production)

These transactions are treated as income received/expenses incurred due to gifts, etc. (account 64), or as "purchases" or "sales" in the consumption or production accounts corresponding to the items gained or lost.

A gift given in kind gives rise to a sales entry on the cash inflow side credited to the account which produced the item given away (with quantity and item code recorded). On the cash outflow side it comes as an income given away entry in account 64, without item code or quantity.

A production input received as a gift (fertilizer, seeds, machines, etc.) gives rise to an income received entry into account 64 on the cash inflow side, without item code or quantity, and to a purchased entry on the cash outflow side, charged to the account using the input, with an item code.

A gift received for consumption is coded the same way, except that the purchase is charged to account 71 (with minor exceptions if, say clothes or bicycles, are received).

[Note: thefts of crops standing in their fields if the quantities are substantial are recorded after confirming the occurrence of the theft and the quantity. However, for those who may

steal regularly from fields, every attempt is made to record correctly the value of such transactions. (An example is given in the table L.1.)

(b) Production Capital Gains and Losses (Account Codes 22 and 64)

Such gains and losses can occur due to natural calamities; birth and death of animals; thefts of animals, machines, and implements; gifts or donations of land, animals, machines, and implements; or, gain or loss of land by succession, litigation, or government action.

For all capital gains a capital item is acquired without the payment of money, i.e. a "purchase" is recorded on the cash outflow side, without money actually flowing out, i.e., with columns 41, to 47 blank. The value of the capital item received is recorded on the cash inflow side but without an outflow of a corresponding quantity. For capital losses the situation is exactly the reverse. (For example see table L.1)

[Note: All capital gains and losses are the only kind transaction for which values do not appear on both sides identically.]

(c) Capital Gains or Losses of Consumer Durables (Account Code 84)

The details are coded exactly like producer's durables, except for the changes in account code (for example see table L.1)

#### L-4 INTRA-HOUSEHOLD TRANSACTIONS

The purpose of recording these transactions is to account properly for the use of items which are produced and consumed in the household.

The following intrahousehold transactions are recorded:

i) Animal products produced and consumed by the household, e.g., milk, egg.

(ii) Feeds given to animals which could also be consumed by humans and which were produced by the household, e.g., food grains.

(iii) Vegetables and fruits produced and consumed by the household.

(iv) Grinding or milling of food grains, i.e. the transfer of food grains from production account to consumption account at the time of grinding or milling.

(v) Seeds taken from own produced stocks. But still following intrahousehold transactions are not recorded.

Home consumption of food grains (and certain oilseeds) has then to be computed as [initial stock + production + purchases or gifts] - [sales + feeding to animals + seeds used from home-produced stocks + terminal stocks]. This will be rather inaccurate because our initial stock figures were:

- Food grains consumed and produced at home (at the time of consumption; however they are transferred at the time of milling or grinding).
- Home-produced fodder given to animals (will be computed from stocks, production, purchases, and sales).
- Home-produced manure used on own fields [will be computed from total manures applied (VLS-H), purchases, and sales].
- Use of own bullocks for cultivators' purposes.
- Use of own produced cowdung cakes, firewood etc. and similar transfers.

All intra-household transactions give rise to entries on both the cash inflow and the cash outflow side of the same line of the transaction schedule.

For example, seeds used on own field are coded as a sale in account 01 and as a purchase in account 02, with quantities and item codes on both sides. Use of own-produced milk or meat is coded as a sale in account 11 and a purchase in account 71. Feeds given to animals are coded as a sale of the corresponding crop product in account 01 and as a purchase in account 13.

#### L-4.1 Grinding and Milling of Food Grains and Oilseeds Produced by the Household

This records the transfer of home-produced food grains to the consumption account at the time of grinding and milling the grains [Note: milling charges are coded as a separate outright cash transaction].

The purpose of collecting these intra-household transactions is

to get a more precise estimate of how much the household consumes from its own stocks. The basis for this procedure is the fact that in the study area none of the major food grains and oilseeds is consumed in unprocessed form. Paddy, all cereal grains, all pulses, and oilseeds are milled or ground before they are used by humans. In the case of cereal grains, grinding and milling usually occur shortly before consumption, while in the case of pulses it may only occur once a year. Grinding and milling dates thus do not correspond closely to consumption dates in the case of pulses.

A grinding or milling transfer transaction is coded as a sale of the corresponding raw product (e.g. paddy) from account 01, and a purchase of the corresponding processed product (milled rice) in consumption account 71 on the same line. If a substantial milling loss is involved, the quantities of raw product (paddy) and final product (rice) will differ. This is the only instance in which quantities are not identical on both sides of the same intra-household transaction.

The quantity of raw product recorded is the one reported by the household. The quantity of the final product recorded is either the quantity reported by the household (when the mill where it was ground is not known) or the quantity of raw product reported, multiplied by a recovery factor (obtained from the miller who mills or grinds the product).

For all cereals processed to flour, it is assumed that the milling losses are zero; therefore, no separate codes are given for raw product and milled product. This is fairly accurate for major cereals, but slightly inaccurate for minor millets.

#### L-4.2 MILLING BYPRODUCTS

Oilcakes, paddy husk, and pulse coatings are milling byproducts which are fed to animals. For those which have a commercial value (unlike some pulse byproducts don't), the value of the byproduct is recorded so that it can be added to crop income. If the byproduct is sold, the sales value of the product are coded in a simple sales transaction, credit to account 01. If the byproduct is fed to the animals, an intra-household transaction from 01 to 13 is coded. (For valuation of the byproduct see L-4.3.)

Note that milling of a crop may thus take up to three lines in the transaction schedule, one for the milling charge (unless milled at home), one for transfer of the homeproduced consumption (this occurs even if the grinding is done at home with partner code C), and one for the byproduct, if any.

#### L-4.3 Valuation of Intra-Household Transaction in Milling Transfer

As a principle for all intra-household transactions are valued at their sale prices, say the sale price of milk if it was consumed at home. However, there often is no 'sale price' of processed products for farmers; thus only a retail purchase price can be observed. Because of this, and because the raw product, value is splitted into a final food product component and a byproduct (if any) component, transferred products are valued on the basis of their retail purchase price.

When there is no byproduct and when grinding occurs at home (Case 1, table L-2) simply value of the bajra flour at (for example) 120

rupees for account 71 are entered and the same value on the cash inflow side as income to the crop production account. This Rs 120 sum can exceed the sale value of the raw product and this excess is a gain (income) to the household from milling at home and not using middlemen.

When bajra is ground by a miller (Case 2, table L-2) milling charge from the value of the final product is deducted and the milling charge is coded separately.

When byproducts exist it is coded exactly (Case 3 and 4, table L-2) the same way for the transaction from account 01 to account 71 (or 79 in the case of oils). If a byproduct is sold, it is coded in the usual manner as an outright cash sale (Case 3). If the byproduct is fed to animals (Case 4), it is valued at purchase price of the oilcake and the same value on the cash inflow side is coded. The quantity of raw product again is not coded as it is already coded in the transfer from 01 to 79 (or 71). When the byproduct has no value, it can be ignored (Case 5, table L-2).

Using this principle results in raw product values in excess of the sale value of the raw product. This excess value is the profit accruing to the household from not using market channels, or from grinding at home and thus saving the marketing margins. This profit can be computed as follows: Profit = Sum of values of final products less sale value of raw product less milling charge (for example see table L-2).

L-4.4 Milling and Grinding of Food Grains Which Have Already Been Coded as "Goods In" Into Account 71 (Food items purchased, received as wages or gifts)

The grinding of such food grains is not be separately recorded as a kind transaction, since it is clear that they will be consumed later. However, the sale of processed grains (rice, flour, dals, and oils) that have previously been entered into account 71 by purchase, gifts, or milling, is recorded as a sale out of account 71 or else they will appear as consumption by the family. Grinding charges are not recorded.

L-4.5 Partner Codes

For the milling and grinding intra-household transaction (from 01 to 71), the partner code is either B for the commercial miller, 3 for a cooperative mill, or C for self in the case of self-grinding. If milling is done by a miller the "grinding expense" transaction also receive partner code B.

L-4.6 Milling Charges

These are coded as outright cash transactions under account code 70 with item code GG.

L-5 ACCOUNT DESCRIPTION

The accounts used in the coding of the schedule are grouped into nine major groups. It is to be noted that in many account groups (AC), accounts for labor inputs, material inputs, draft animal inputs, taxes, and other charges can be found. Hence they are coded in related group of accounts.



#### L-5.1 Crop Production (Group 0)

All crop products, inputs, and services used for crop production are recorded under these accounts. Land taxes, water charges, land revenue and electricity charges relating to crop production are included in this group.

Item	Account code
Crop products (For crop codes, see section Y-19)	01
Seeds (For item codes, see section Y-19)	02
Fertilizers (For item codes, see section Y-19)	03
Organic manure (bought) (For item codes, see section Y-19)	04
Pesticides/Insecticides (For item codes, see section Y-19)	05
Land taxes, fees, land rent (paid only), irrigation water and electricity charges, no item codes	06
Labor expenses, no item codes	07
Draft animal, implement and machine expenses	08
Fuels/Others	09
Others, no item codes	00

#### L-5.2 Animal Husbandry (Group 1)

All animal products, inputs, and services related to livestock specially veterinary charges, grazing etc. are included under these accounts.

Item	Account code
Products (current products like milk, ghee, dung, wool, etc. sold only; not animals sold). (For item codes, see section on EFGN/P schedules)	11
Fodder (For item codes, see section on EFGN/P schedules)	12
Concentrates/Feeds (For item codes, see section on EFGN/P schedules)	13
Veterinary, breeding, and other services (For item codes, see section on EFGN/P schedules)	15
Grazing, watering charges, including penalty on unauthorized animal	16
Labor expenses, no item codes	17
Draft animal hire incomes, including income from machines hired out with animals (For item codes, see section on EFGN/P schedules)	18
Material, fuel, etc., no item codes	19
Others, no item codes	10

#### L-5.3 Production Capital (Land, farm buildings, animals, implements, and machineries) (Group 2)

All receipts or costs associated with the purchase, sales, or constructions of productive capital assets are coded under these accounts. In addition, capital gain/losses on these assets are also recorded. The expenses such as taxes and fees for purchase or sale of main items relating to the production capital is recorded. (Residential houses and consumer durables are not included under these accounts and so the taxes etc. relating to them)

Item	Account Code
Land/farm building/animals/farm machineries acquired or sold (For item codes, see section on EFGN/P schedules)	21
Capital gain/loss (due to natural factors, birth/death of animal, litigation or theft) (For item codes, see section on EFGN/P schedules)	22
Income received from land leasing/ share cropping, no item codes	23
Taxes, fees, etc. (e.g. land purchase tax, but not house tax), no item codes	26
Labor expenses - for new construction only, no item codes	27
Draft animal, machine expenses - for new construction only	28
Material, fuel, etc. - for new construction only, no item codes	29
Others (including capital related litigation expenses) no item codes	20

#### L-5.4 Production capital: current maintenance (Group 3)

All the expenses relating to maintenance of production capital above are included under these accounts

Item	Account Code
Labor expenses for maintenance (e.g., carpenter, blacksmith, other labor) no item codes	37
Draft animal expenses for maintenance (For item codes, see section on EFGN/P schedules)	38
Material, fuel for maintenance, no item codes	39
Others, no item codes	30

#### L-5.5 Handicrafts and Trading (Group 4)

All the incomes and expenditure relating to handicraft such as ropes, pots, carpentry, blacksmithy, leather work, weaving, basket making, beedi making, etc. are included under these accounts. The income of bankers, tailors, and other craftsman rendering personal services and of traders and shopkeepers are also recorded.

In recording handicraft sales and incomes from services, the item code is recorded without the quantity unless it is a standardized commodity, e.g. basket. For inputs into handicrafts expenses without



item code or quantity is recorded. The sale of handicrafts is recorded under account 41 (with item codes from code list).

For shopkeepers details of purchases and sales relating to the shopkeeping business of any respondent may not be available hence it is not recorded. But to get an idea of income from the enterprise, gross purchases and gross sales of the shop is recorded. These purchases are recorded under account 49 with item code KJ, and sales are recorded under account 41, item code KJ.

In the case of a shopkeeper using some product for his home consumption out of his shop-stock, the details are recorded. The item sold as a product from the shop is coded under account 41 (with product code as item code) and purchase of the item under account 71 (consumption) with appropriate item codes.

If handicrafts or personal services of barbers, etc. are bought, this is not coded in the handicraft and trade accounts, but as an expense in the account using the item (animal husbandry for ropes used to attach animals, account 74 for barber services).

Item	Account Code
Products sold or services rendered	41
Taxes, rents, fees (no item codes)	46
Labor expenses (no item codes)	47
Draft animal expenses	48
Material bought, fuel power etc.	49
Other expenses (no item code)	40

#### L-5.6 Labor Incomes and Expenditures (Group 5)

All incomes from regular or irregular labor of the family and labor expenses for permanently hired laborers who work in all enterprises of the farm are recorded here.

Expenditures on permanent laborers and for all labor expenditures in other account groups number of hours or days worked are not recorded. Also labor expense paid to a male, female, or child are not recorded separately. Resource codes for permanent labor incomes in account 51 are recorded, but not labor time. Also daily labor incomes (account 57) are recorded by resource (male, female, child) and by distance (0) for all locations within village or on land owned by villagers. Whether daily labor income was from work on a government scheme or not is also distinguished from that date. Number of days of work involved are recorded as well. Therefore, transactions in account 57 have an account code, a resource code, a unit code (hours), total hours worked, income received, distance, and government code 1 if earned from government scheme. [Note: Farm and nonfarm employment are distinguished because this distinction is made on VLS-K].

When a bullock pair with family labor is hired out, wages for both as per existing wage/hiring rates, are coded separately as labor wage under account 57 and bullock wages under account 18.

Exchange labor is coded like any paid labor, except that it is distinguished by a new account code, account 58. If a member of the household goes for exchange labor, details are coded on cash inflow side. If someone comes to work for the household, then the cash outflow side is used.

Actual exchange labor is recorded. Also such things as unpaid loans off equipment, bullocks, servants, etc. are recorded. Value of labor performed and of equipment or servant loans at the going rates are recorded.

It is better to distinguish the type of activity through use of the proper one- and two-digit codes.

[Note: It is very important to use the proper partner code].

If more than one person in the respondent's family does exchange labor, or if he receives such labor from several people, each laborer is coded separately.

Item	Account Code
Regular salaries, etc. (received or payments made to permanent servants)	51
Incomes from daily labor	57
Exchange labor	58

#### L-5.7 Financial Account (Group 6)

All details about, credit, savings, and income transfers transactions are recorded here. Interest received from lending or savings and interest expenses on credit takers are recorded in account 63 if easily it can be separated from principal repayment and withdrawal. If it is difficult then it is coded under account 62. But the details about gifts, dowry etc. is recorded in remark column.

Item	Account Code
Savings/withdrawal/life insurance (no items code)	61
Credit/debit	62
Interest	63
Income/expenses owing to gift, dowry remittances, pension, theft etc.	64
Others	60

#### L-5.8 Current Consumption Accounts (Group 7)

All current consumption expenditures except repair and maintenance of consumer capital items (i.e. residential house and consumer durables) are recorded here. Money sent to children studying outside of the village is not a consumption expenditure but is recorded in account 64. Foods are recorded with the crop code or the animal product code to which they belong.

Codes for milled rice, milled pulses, sugar, and gur, which all are coded under account 71. Oils and fats other than ghee are recorded under account 79. Labor inputs contain only labor for household help. The electricity-water charges account 76 includes only electricity and water charges for household use and not for production. Others (account 70) are such things as postage stamps, complete meals in hotels, milling charges, and anything else which cannot be classified elsewhere and only value is recorded. Soap and washing powder fall under cosmetics (account 74).

Item	Account Code
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Food (codes) including milk, sweets and spices	71
Narcotics, tea, coffee, tobacco, pan, alcoholic beverages	72
Clothing, sewing of cloth, other tailoring expenses, thread, needles, chappals and other footwear (purchase and repair), etc., (no item codes)	73
Medicines, cosmetics, soap, barber service	74
Travel and entertainment, (no item codes)	75
Electricity, water charges and cooking fuels (like kerosene, match box) for household use, (no item codes)	76
Labor expenses for domestic work, (no item codes)	77
Ceremonial expenses (including Kapur, Gulal, Agarbathi, etc.)	78
Edible oils and fats (other than ghee) (no item code)	79
Others, including complete meals in hotel, school and educational materials, stamps, stationery, grinding and milling charges etc.	70

#### L-5.9 Consumption Capital Acquisition and Maintenance (Group 8)

This includes purchases of houses, construction of houses, purchase and construction of consumer durables (bicycles, furniture, etc.), and costs and inputs for the repairs and maintenance of residential houses and consumer durables.

Item	Account Code
Residential house, consumer durables bought/sold (For item codes, see section on EFGN/P schedules)	81
Residential house, consumer durables maintenance/repairs, (no item codes)	82
House rent, (no item codes)	83
Capital gain/loss of consumer durables (For item codes, see section on EFGN/P schedules)	84
House tax on acquisition or annually, (no item codes)	86
Labor input, (no item codes)	87
Materials, (no item codes)	89
Others, (no item codes) (including litigation)	80
Crop production codes	91

#### L-6 ITEM CODES

Item codes are used when the account code does not give full information about a transaction. When fertilizer is bought, this is recorded in account 03, but it does not indicate the type of fertilizer. Therefore it is coded with item code. Since this is one

digit code it is recorded into one digit code field.

Similarly when sorghum or sorghum straw are sold, this is credited to account 01, but the product code is needed to know what was sold. These are two-digit codes and go into the columns for two-digit codes.

One-digit and two-digit codes on the same side of the transaction schedule are only used for exchange labor transaction. If fertilizer is bartered for seeds, use a one-digit code on one side and a two-digit code on the other side of the schedule.

#### L-7 UNIT CODES

Quantities of goods exchanged in transactions are recorded whenever quantities are clearly identifiable, i.e., when sufficient standardization of the commodity exists to make it meaningful (it does make sense to count the number of items of clothing purchased because clothing is too heterogeneous in quality) Whenever a quantity is recorded, the unit of measurement is given as unit code in VLS-L fields 15 and 34. Codes for measurement units are:

Unit	Code
Quintal	Q
Litres	L
Hundreds	C
Cubic feet	T
Metres	M
Kilogram	K
Numbers	N
Acres	A
Hours	H
Square feet	S

#### L-8 LOCATION AND PARTNER OF TRANSACTION

Location and Partner Codes were used during June 1, 1976 to June 30, 1977 in a simplified way with Partner Code Set I. Later on from July 1, 1977, the anthropologist greatly expanded the list of partner codes to Partner Code II. [Set II includes all codes of Set I, and no contradiction exists between them]. But Set II includes exchange labor, transactions related to marriage and litigation etc. (for example partner codes: Set I and Set II). The instructions valid from June 1976 to June 1977 are discussed below.

The purpose here is to trace marketing behavior and other transactions more precisely. For selected transactions record the location (distance from village) of the transaction and the transaction partner (VLS-L, fields 48, 49 for distance and field 50 for partner code).

For all transactions occurring within village boundaries and labor incomes accruing from working on fields operated by village people, the distance is recorded zero by definition.

These details are recorded for the following transactions:

- Purchases and sales of all five ICRISAT crops (sorghum, pearl

millet, pigeonpea, chickpea, groundnut).

- Purchases and sales of other major crops in each village. These will be paddy, castor, safflower, sugarcane, cotton, but may differ from village to village.
- Purchases and sales of all products of above crops.
- Grinding and milling of all the above crops (including self-grinding).
- Purchases and sales of animals.
- Sales of milk (not purchases).
- Purchases of major machinery items.
- Purchases and sales of fertilizers and pesticides.
- Purchases and sales of rough dry fodder and fine dry fodder (but no other feeds and fodder items).
- Incomes received in daily labor market (distance only, partner code only for government schemes).

Note that in these partner codes the moneylender category is used for all private persons whenever they charge interest on loan, i.e., try to make money on it, regardless of their other relationships to the household. Similarly if a miller is also a shopkeeper and sells fertilizers, then he is classed as a shopkeeper for the fertilizer sales.

#### L-8.1 PARTNER CODES: Set I

(Used in transactions and inventories from June 1, 1976 to June 30, 1977)

Source	Code
Government (FCI, Fair Price Shop, Panchayat Samithi) [For all kinds of transactions]	1
Commercial bank (For credit and tied input sales only)	2
Cooperatives (For all kinds of transactions)	3
Private moneylender (For all credit transactions in which interest is taken, even if the moneylender is a friend, shopkeeper or relative, etc.) (and for K Schedule)	4
Landlord (including interest-free advances)	5
Relative (including interest-free advances)	6
Friend (including interest-free advances)	7
Others (including interest-free advances)	8
Regulated market (For purchases	9

and sales of regulated items only)	
Private shop (including itinerant traders and weekly markets) [For all kinds of transactions]	A
Miller [For all transactions (including credit) which involve exchange of millable food grains]	B
Self (For home grinding and milling intra-household transaction only)	C

L-8.2 PARTNER CODES: SET II (Col. 50) (Revised list of partner codes: Set II)

The original list of partner codes Set I in force through June 30, 1977, has been expanded so that many different kinds of relationship can be recorded. We have also expanded the number of columns, so that more complicated relationships can be recorded. For example, if a transaction partner is both a landlord and a caste fellow, we can now record this. The new partner code list II in section L-8.2 contains the partner codes of Set I as a subset.

The list of partner codes has been divided into four groups:

- i) Relations involving selling, or lending at interest.
- ii) Land relationships and regular labor relationships.
- iii) Kinship relations.
- iv) Miscellaneous.

Since we now have five columns in which to record partners we can put down multiple relations. The only rule to be followed is to record the relationships in the order of their group: i, ii, iii, iv. Some examples of how to record partners are given below (further examples are on sample sheet no. 2 for VLS-L in the back of the handbook, Appendix A).

Samples of Revised Partner Coding System in VLS-L

Col 50	Col 51	Col 52	Col 53	Col 54	Remarks
5	V	-	-	-	Money for medicine given by landlord (caste fellow)
Z	V	-	-	-	Gift to tenant (caste fellow) for tenant's son's marriage
4	5	-	-	-	Loan for consumption from landlord
4	W	V	-	-	Loan for expenses in daughter's marriage received from employer (caste fellow)
X	E	2	-	-	Gift to regular employee (FaBroSo; Telugu: Annayya)

A M 2 - -

Purchased ghee from shopkeeper  
(SiSo; Telugu: Mena Alludu)

Note that in recording kinship a partner may be found who is one kind of relative by marriage and another by birth. Follow the rule that marriage takes precedence over birth and code the marriage relationship.

(Used in transactions and inventories from July 1977 onwards)

Relations involving selling or lending at interest

Source	Code
Government (FCI, Fair Price Shop, Panchayat Samithi, etc.)	1
Commercial bank	2
Cooperative	3
Private moneylender	4
Regulated market	9
Private shop	A
Miller	B

L-8.3 Land relationships and regular labor relationships (Col. 50)

Source	Code
Landlord	5
Tenant	Z
Any regular full or part-time employer other than landlord	W
Any regular full or part-time employee other than tenant	X

L-8.4 MISCELLANEOUS

Self (only for home grinding and milling as an intra-household transaction)	C
Caste fellow or caste group	V
Ritual partner (priest, vaidya, jadugar, astrologer, recipient of ritual charity; employer in ritual context)	Y
Friend	7
Others	8

L-8.5 ITEM CODES FOR MARRIAGES, (fields 14, 33)

Marriage of son (own son only)	5
Marriage of daughter (own daughter only)	6
Marriage of other close relative (specify in Remarks by English abbreviation and by a term in local language)	7
Marriage of friend, caste fellow,	8

business or political associate (one who does not fall under code 5, 6, or 7; specify relationship in Remarks)	
Marriage at which the respondent is employed for some service such as acting as priest, or as a servant to feed the guests	9
Litigation	0

## L-9 RECORDING MISCELLANEOUS EXPENSES

### L-9.1 Distinguishing Transactions Related to Marriages

Marriages are very important social and economic occasions, which result in a large number of transactions in the case of any one marriage. These include gifts, dowry, travel expenses, entertainment expenses, use of food from the household stocks, loans, etc. Obviously it is impossible to lump all these together under one account for 'marriage transactions.' Instead, the usual account code should be used depending on whether a transaction is a gift, a use of own stocks, transportation expenses, etc. We can distinguish marriage-related transactions, however, if we use a system of special one-digit codes. They should be entered as appropriate in columns 14 and 33 of VLS-L.

Use these codes for any expense or income (including exchange labor and loans) occasioned for the respondent by a marriage. Also use two-digit item codes in columns 12-13 and 31-32 to identify the type of expense or activity.

### L-9.2 Recording Litigation Transactions

There is also a large range of transactions occasioned by litigation: travel, entertainment, lawyers' fees, which normally would be coded as labor expenses, etc. As with marriages, it is impractical to have a separate set of account codes to cover all litigation-related transactions. Therefore, we add another one-digit code (page ). This code should be entered in column 14 or 33 of VLS-L to mark any transaction occasioned by litigation.

### L-9.3 Recording the Purpose of Travel

Until July 1, 1977, the purpose of travel was not noted on VLS-L -- there was only an entry in account 75 for "travel and entertainment." From July 1, 1977, travel expenses for marriages and litigation are identified by the special one-digit codes for columns 14 and 33 explained in L-9.4. This includes such things as the use of one's own bullock cart to transport guests or to attend a marriage.

As far as other travel expenses not occasioned by marriages or litigation are concerned, no code is used, but try to note the purpose of travel in remarks: for example, "visit Sholapur to sell buffalo calf," or "visit mother's sister."

### L-9.4 Identifying Types of Marriage in Remarks

When informant has a transaction occasioned by a marriage, ask if the bride and groom had any kinship to each other before marriage. Note whether or not there was any such relationship, and what it was, in the remarks (put this information as a footnote at the end of the



VLS-L sheet if no room in the remarks). An example would be: "Marriage of HB-3 to her FaSiSo (Marathi: atya bhau, or Telugu: bawa).

#### L-9.5 Identifying Relatives in Remarks

In kinship terms, one term can cover many different types of relationship. Therefore, while using a relative code, also note the exact relationship in remarks, with an English abbreviation and a term in local language.

#### L-9.6 Recording Gifts

Be sure to record all gifts, even those which are purchased, not given in cash or kind. A gift purchased has the shopkeeper as partner, but always note in remarks whom the gift was for and what relationship there is with the respondent. Use the appropriate two-digit code in columns 12-13 and 31-32.

For customary, yearly, and part-yearly gifts to employees, record the amount in account 51 (labor expenses).

#### L-9.7 Recording Ceremonial Expenses

When "ceremonial expenses" occur, define these as fully as possible in remarks: thus, put 'agarbathi (incense) for daily puja,' 'offering to temple at Tirupati,' 'offering to Nagoba temple in village,' 'puja expenses for wife's ceremony after giving birth,' etc. General terms, such as "ceremonial expenses," "ceremony," "festival," or "religious program" are insufficient. Use the proper two-digit codes in columns 12-13 and 31-32 where these codes exist.

### L-10 MISCELLANEOUS PROBLEMS RELATING TO TRANSACTIONS SCHEDULE

#### L-10.1 Problem of Petty Purchases by Laborers Against Kind Payment

Sometimes labor households get wage payment in kind (e.g. paddy/jowar, etc.) and for purchasing provisions like spices, etc., they again make payment to the shopkeeper in kind (i.e. paddy or jowar, etc. which they have earned as wages in kind). The paddy/jowar received as wages is a labor income and is split (conceptually) into two parts:

- i) Sale of labor services.
- ii) Purchase of paddy/jowar.

The purchase of spices, etc., is again split into two parts, (i) sale of paddy/jowar (with goods out and cash inflow entry), and (ii) purchase of spices, etc. (with goods in and cash outflow entry). An important point to be noted is that the account to be credited (i.e. the account which receives money value due to sale of paddy/jowar) is not crop production account 01. Instead, it is consumption account 71 which should get entry of cash inflow resulting from paddy/jowar given to the shopkeeper. The account debited (losing cash value) is again account 71, the consumption account. Of course, the item codes will be different (i.e. paddy/jowar in the first case and spices in the second case). The actual value of such petty transactions can be known if one sits for a few hours in the provision shop where most of the laborers purchase their daily requirements.

When this type of transaction (i.e. paddy/jowar bartered for spices) takes place in the case of a farmer (rather than a laborer)

who takes his home produce to be bartered against provisions from the shop, the account to be credited will be account 01 crop production account and not consumption account 71. Of course, account to be debited will be account 71 again.

#### L-10.2 Problem of Grain Loan Against Future Labor Service

In Mahbubnagar villages a practice has been seen where labor households get kind loans (paddy, etc.). These are repaid through labor service (without wages) during the crop season. These details are recorded according to the following procedures.

First, the grain received is treated as (i) financial credit activity, account 62, and (ii) grain purchase activity account 71 (with cash outflow and grain inflow).

Secondly, when the wage employment (without actual payment) takes place, the activity is split into two parts: (i) sale of labor service and income received in account 57 (hours and kind of labor are not recorded); but only money value is recorded (computed as per the prevailing wage rate); and, (ii) back payment of the debt account 62.

#### L-10.3 Litigation Expenses

Court fees, payments to lawyers, etc., should be recorded as expenditure under the broad activity to which the litigation relates. For example, if litigation expenses relate to land, they should come under account 20. If the litigation relates to consumption or social custom, expenses should come under account 80, etc. See also L-9.4.

#### L-10.4 Cultivation Contract Charges

These have no separate code. Whether labor/bullock/other input is involved in the contract is ascertained and the amount is recorded under the correct account.

#### L-10.5 Ceremonial Expenses

Usually these are payments or gifts to priests. If a landlord gives extra gifts to his permanent laborers on special holidays, this should be coded as labor expenses in account 51. For large ceremonies such as weddings, put the corresponding item codes in account 78. The quantity of food grains purchased or used is recorded under their item codes. For clothing, consumer durables, and jewelry, the corresponding consumer durable codes in account 78 are recorded.

However, every small invitation of people for food at the house is not recorded as a ceremony. There may frequently be guests entertained without a large ceremony. The investigator has to use his judgment.

The coding of ceremonial expenses was revised from July 1, 1977. See L-9.1, L-9.3, and L-9.5 to L-9.10 for explanations.

#### L-10.6 Delayed Payments

In many instances, farmers who deliver grains or other crops to government marketing agencies are not paid or paid only partially on delivery, and will be fully paid only a few months later. If they are not paid, this is simply a kind transaction, with a sale of produce linked with a credit given to the marketing agency. When full or

partial payment occurs later, even within the same round, this gives rise to a credit repayment entry in account 62.

Also, conversely, if a laborer receives a payment in advance for labor services to be rendered in the growing season, this will first be a loan received. When the laborer fulfills his obligation by working, this gives rise to labor income (account 57) and debt repayment (account 62) on the same line of the code sheet.

#### L-10.7 Land Rents and Rental Shares

When a lease holder pays a land rent, this is coded as an outright cash transaction in account 06. When he pays his share this leads to a crop sales entry in account 01 and a 'rent' payment entry into account 06.

However, when a landlord receives payment of land rent, this is coded as an outright cash transaction in account 23, because it is capital income and not crop production income. When he receives his share of the crop, this is coded as income received under account 23 and as a purchase of foodgrain into the consumption account 71. If the landlord later sells the grain, the sale is credited to account 71. (This will not occur frequently, because there are few landlords so wealthy that they will not consume all of their share themselves).

#### L-10.8 Collecting Data from Returning Migrant Households

When migrant labor households return, an interview with them is arranged as soon as possible to gather data for the K and L schedules. On the K schedule, the fact of being out of station is indicated in the previous rounds by the 'out of station' code 2 in column 73. In the VLS-L schedule, rounds of data collection in which the household was out of station are marked by one 'transaction' for that round with only the identifier columns 1 to 9 filled in and no transaction recorded.

Income details are gathered with the respondent for each place where he went.

- Number of days worked at a location;
- Number of days involuntary unemployment;
- Cash wage rate;
- Kind benefits (rice, etc.);
- Whether work was done on a government scheme or not.

From this record labor income of the family is recorded while out of station, and coded as usual. The days of wage employment and involuntary unemployment while out of station must be allocated correctly among all rounds which occurred during the out of station period. The way to do this is to make a special notation on the household's VLS-K schedule in the round they return to the village, indicating how the head office should allocate these details among the rounds previously sent in. The head office will update the files at headquarters and the investigator should do the same on his carbon copies of the respective VLS-K rounds.

Then collect information on:

- Credit taken before departure;
- Cash position at departure;
- Credits taken and repaid while out of station;
- Cash position after returning;
- Credit taken/repaid after returning.

And code the credit transactions as usual.

#### L-10.9 Expenditures while out of station

Expenditures for consumer durables are collected and coded separately since they are relatively easy to remember. Other expenditures are calculated as follows:

$$\begin{aligned} \text{Current expenditures} = & \text{Initial cash} + \text{Cash income} + \text{Credit} \\ & \text{while out of station taken} - \text{Credit and interest paid back} - \\ & \text{Expenditures on consumer durables} - \text{End cash.} \end{aligned}$$

[Note: cash income only is estimated for this formula since kind incomes are already included as "expenditure" in the appropriate consumption account. These current expenditures while out of station are recorded into account 70 under item code GN. Any transaction between the day of returning to the village and the day of interview are coded in the usual manner. Similarly, labor utilization data for the day preceding the interview are taken as usual.]

## CODING LIST

### 1. Common Codes

#### 1.1 Identification codes

##### CARD

A - Household Census Schedule  
C - Household Member Schedule  
E - Animal Inventory Schedule  
F - Farm Implement Inventory Schedule  
G - Farm Building Inventory Schedule  
Y - Cultivation Schedule  
K - Labor, Draft Animal, and Machinery Utilization Schedule  
L - Household Transaction Schedule  
N - Stock Inventory Schedule  
P - Debt and Credit Schedule

##### VILLAGE

Aurepalle	A
Dokur	B
Shirapur	C
Kalman	D
Kanzara	E
Kinkheda	F
Boriya	G
Rampura	H
Papda	J
Rampura Kalan	K

##### LAND HOLDING CLASS

Laborer	0
Small Farmer	1
Medium Farmer	2
Large Farmer	3

##### HOUSEHOLD NUMBER

Labor Household	1-10
Small farmer	30-39
Medium farmer	40-49
Large farmer	50-59

##### REPLACED HOUSEHOLDS

Labor Household	60-69
Small farmer	70-79
Medium farmer	80-89
Large farmer	90-99

##### YEAR

1975-76	5
1976-77	6
1977-78	7
1978-79	8
1979-80	9
1980-81	0

1981-82 1  
 1982-83 2  
 1983-84 3  
 1984-85 4

INDIVIDUAL MEMBER NUMBER

Family members residing in the village 1-49  
 Family members residing outside the village 50-59  
 Attached laborers and permanent servants (full time) 60-79  
 Attached laborers and permanent servants (part time) 80-99

2.1 VLS-C HOUSEHOLD MEMBER SCHEDULE

RELATION TO HEAD (Column 12)

Self 1  
 Spouse 2  
 Parents 3  
 Son 4  
 Daughter 5  
 Grand child 6  
 Other relatives 7  
 Non-relatives (excluding servants) 8  
 Non-relatives (servants, etc.) 9

SEX (Column 13)

Male M  
 Female F

MARITAL STATUS (Column 16)

Unmarried U  
 Married M  
 Divorced D  
 Separated S  
 Widowed W

EDUCATION LEVEL (Column 17)

Illiterate 1  
 Read and write 2  
 Upto Primary School 3  
 Upto Middle School 4  
 Upto High School 5  
 Diploma Course 6  
 Graduation 7  
 Post-graduate and above 8  
 Technical Degree (Medical,  
 Engineering, Agriculture, etc.) 9

OCCUPATION (Column 20 and 21)

Cultivation A  
 Agricultural labor B  
 Casual Labor (nonfarm) C  
 Livestock rearing/grazing D  
 Trading/Shopkeeping/Moneylending/Toddy selling etc. E  
 Rural Crafts (carpentry, blacksmithy, F

pottery, weaving, goldsmithy, etc.)	
Other traditional caste occupations--	G
(religious service, sweeping, toddy tapping etc.)	
Attached labor, permanent servants	H
Transport of equipment hiring capacity	J
Profession/service, i.e. regular income job	K
(jobs of Patwari, Village Level worker, Teacher, etc.)	
Remittance, pension, interest on past savings,	L
income from property (including renting of land	
and buildings), etc.	
Domestic work	M
School/College going	N
Others	Z

PLACE (Column 22)

Within own Taluka/Tehsil	1
Within own districts	2
Within own State	3
Within own country	4
Outside the country	5

PURPOSE(Field 23)

For business	1
For service	2
For education	3
Domestic reasons	4
Other reasons	5

FREQUENCY OF VISITS (Column 24)

More than once a month	1
Once a month	2
More than once a year	3
Once a year	4
Once in 2-3 years	5

SOURCES OF REMITTANCES (Column 25)

Family receives remittances	1
Family sends money	2
Money neither sent nor received	3

NATURE OF EMPLOYMENT (Column 28 and 40)

Seasonal (employed for a particular season)	1
Regular (employed full-time on yearly basis)	2
Casual (employed for a specific period and job)	3
Regular part-time (for specific job e.g. cleaning of the cattleshed etc.)	4

REASONS OTHER COMMITMENTS (Column 29 and 41)

Due to past debts	1
Due to current debts	2
Due to any other commitments	3
Due to 'Jajamani' system	4
No prior commitment	5

DEGREE OF DISABILITY (Column 50)

Can do any farm or domestic work	1
Can do only domestic work	2
Can do light farm work e.g. watching	3
Can do only light domestic work (e.g. sweeping, child care etc.)	4
Cannot do any farm or domestic work (completely disabled)	5

CHANGES IN THE HOUSEHOLD MEMBERSHIP (Column 51)

Persons left the household (including married out)	1
Person died	2
New member entered due to birth	3
New member entered due to marriage	4
Permanent servant left household (due to termination of contracts, etc.)	5
Permanent servant came in (due to new contract)	6
Member reentered the household (on return from education, or reunion of the fragmented household, etc.)	7
Others	8

[Note: Not to be used for VLS-K schedule)

3.1 CONSUMER DURABLES (to be used in VLS-N and VLS-L)

Bricks/Stones	YB
Tin sheets	YT
Asbestos sheets	YA
Bamboo	YM
Rope	YR
Other wood materials	YZ
Diesel oil	YE
Kerosene	YK

3.2 FINANCIAL ITEM AND LIABILITIES

Savings	S
Deposits	D
Life Insurance	C
Credit Outstanding	L
Other financial assets	Z
Debt (outstanding, including interest accrued)	B
Accumulated arrears of land revenue	R
Accumulated arrears of other dues	A
Other liabilities	Y

3.3 LIVESTOCK (class code 'L')

Bullocks	LA
Cow	LB
Young Cattle (under 3 years)	LC
He buffalo	LD



She buffalo	LE
Young buffalo (under 3 years)	LF
Horse	LG
Donkey	LH
Goat	LK
Sheep	LM
Pig	LP
Poultry birds	LQ
Others	LZ

(Note: These codes can be used for meat of the animals coded in VLS-L Account 71)

#### 3.4 ANIMAL PRODUCT (class code 'A')

Milk	AM
Ghee	AG
Other milk products like curd, etc.	AP
Dung cakes	AC
Dung, manure	AD
Skin, hide, bones	AS
Wool, goat hair, etc.	AW
Eggs	AY
Other animal products	AX
Fish	AF

#### 3.5 CONSUMER DURABLES (class code 'Q')

Residential house	QA
Furniture items	QB
Cooking and other kitchen utensils	QC
Radio	QD
Cycle, motorcycle	QE
Sewing machine	QG
Fan	QH
Jewelry	QJ
Clothing	QK
Others	QZ

#### 3.6 FARM EQUIPMENT AND IMPLEMENT (class code 'E')

Desi plough	EA
Modern plough	EB
Desi seed drill	EC
Modern seed drill	ED
Blade harrow	EF
Modern harrow (such as disk harrow)	EG
Blade/Tooth hoe	EH
Leveller	EJ
Persian wheel	EK
Mote	EL
Pipe line (in feet)	EM
Manual sprayers and dusters	EN
Chaff cutter	EP
Sugarcane crusher (bullock-operated)	EQ

Oilseed crushing equipment (bullock-operated)	ER
Minor farm implements	ES
Implements for dairying	ET
Implements for handi-crafts, etc.	EV
Bullock cart	EY
Others	EZ

### 3.7 MAJOR FARM MACHINERY (class code 'M')

Tractor--50 H.P. and above	MA
Tractor--35-50 H.P.	MB
Tractor--13-35 H.P.	MC
Two-wheel tractor, cultivator	MD
Harvester	ME
Thresher	MF
Oil engine (multipurpose)	MG
Electric Motor (multipurpose)	MH
Oil pump	MJ
Electric pump	MK
Sprayer/duster (power-operated)	ML
Power-operated sugarcane crusher	MN
Power-operated mills	MP
Other power-driven machines	MZ

### 3.8 PRODUCTION CAPITAL ASSETS (class code 'R')

Dryland	RA
Wet land	RB
Well	RC
Tank	RD
Cattleshed	RE
Cattleyard	RF
Storage facility	RC
Others	RZ

### 3.9 ANIMAL ENTERPRISE INPUT AND COST (record expenses on VLS-L)

Veterinary	1
Breeding service	2
Use of public pasture	3
Use of other public facilities	4
Taxes, rent on grazing land, etc.	5
Grazing fee	6
Others	7

### 3.10 HUMAN RESOURCE (class code 'H')

Family male laborer	HA
Family female laborer	HB
Family child laborer	HC
Attached laborer/permanent	HD

servant (male) - full-time

Attached laborer/permanent servant (female) - full-time	HE
Attached laborer/permanent servant (child) - full-time	HF
Attached laborer/permanent servant (male) - part-time	HG
Attached laborer/permanent servant (female) - part-time	HH
Attached laborer/permanent servant (child) - part-time	HJ

#### 4.1 REASONS FOR NOT WORKING

Sick	1
Out of station	2
Holiday	3
Involuntary unemployment (i.e. when a person did not get a job even though he tried)	4
Voluntary unemployment (i.e. when he chose not to work)	5
Left permanently (This information is recorded in VLS-C also with codes as discussed elsewhere)	6
Bullocks remaining idle	7
Temporary migration	8
Information about individual not available (This code is not to be used by investigator but only in checking)	9

#### 4.2 OTHER ACTIVITIES (to be used in VLS-K)

Religious services	A
Shopkeeping	S
Handicrafts	K
Trading	T
Ceremonial and social functions (including political activities)	E
Miscellaneous	Z

#### HANDICRAFT AND OTHER ACTIVITIES

Weaving	KA
Leather work	KB
Pottery	KC
Carpentry	KD
Blacksmithy	KE
Rope making	KF
Basket making	KG
Beedi making	KH
Shopkeeping	KJ
Trading	KK
Toddy tapping	KL
Dung gathering/	KM

processing and selling	
Neem seed collecting	KN
and selling	
Food/Fruit gathering	KP
and selling	
Wood gathering	KQ
and selling	
Goldsmithy	KR
Livestock rearing	KS
Gur preparation	KT

4.3 PLACE OF WORK (to be used in VLS-K)

Own farm/house	0
Other farm/house	1

5.1 IRRIGATION SOURCE (to be used in VLS-Y)

Tank	1
Canal	2
Well with electric motor	3
Well with oil engine	4
Well with traditional device	5
Others	6

5.2 SOIL TYPES

Deep black	1
Medium black	2
Medium to shallow black	3
Deep red	4
Shallow red	5
Gravelly	6
Problem soil (Saline soil, etc.)	7
Sandy soil	9
Others	8

5.3 LAND OWNERSHIP STATUS (to be used in VLS-Y)

Owned by the household	A
Taken on lease basis (fixed cash rental)	B
Taken on sharecrop basis	C
Owned but leased out on fixed cash rent or sharecrop basis	D

5.4 CROPPING YEAR (to be used in VLS-Y)

1979-80 =	79
1980-81 =	80
1981-82 =	81
1982-83 =	82
1983-84 =	83
1984-85 =	84

5.5 CROPPING SEASON (to be used in VLS-Y)

Monsoon or kharif season (roughly covering	K
--	---

period of June to October)	
Postmonsoon or rabi season (roughly covering period of October to February)	R
Summer season (roughly covering period of March to May)	S
Perennial crops	P

5.6 CULTIVATION OPERATION (these codes are to be used in VLS-Y)

Field preparation (including field cleaning, preparation of beds for irrigation, presowing, plowing and puddling)	A
Minor repairs of bunds, fencing, etc.	B
Manuring (including use of FYM, organic manures like oil cakes, sheep penning, tank silt, etc.)	C
Fertilization (using chemical fertilizers for top dressing)	D
Sowing	E
Resowing (in case of poor germination or crop failure farmers resow the plot)	F
Transplanting/planting	G
Weeding and thinning	H
Interculturing	J
Plant protection (using of pesticides/insecticides)	K
Irrigating crops	L
Watching	M
Harvesting (including transport from field to threshing floor)	N
Harvesting main product (if done separately)	P
Harvesting by-product (if done separately)	Q
Harvest processing (including drying, de-husking, threshing, winnowing, cleaning, etc.)	R
Nursery raising (including all operations regardless of location in field or hours)	S
Vegetable gardening (including all operations regardless of location in field or hours)	T
Orchard cultivation (including all operations regardless of location in field or hours)	U
Supervision/Management	X
Others (including fencing)	Z

5.7 TYPE OF LABOR USED (to be used in VLS-Y)

Owned bullocks/buffaloes	OB
Hired bullocks/buffaloes	HB
Exchange bullocks/buffaloes	EB
Family male	FM
Family female	FF
Family child	FC
Hired male	HM
Hired female	HF
Hired child	HC

Exchanged male	EM
Exchanged female	EF
Exchange child	EC
Male regular servants	RM
Female regular servants	RF
Children regular servants	RC

## 5.8 FARM INPUT CODES (to be used in VLS-Y)

### STRAIGHT FERTILIZERS

#### (i) Nitrogenous Fertilizers

- Ammonium Sulfate	A
- Calcium Ammonium Nitrate	B
- Ammonium Sulfate Nitrate	C
- Urea	D

#### (ii) Phosphatic Fertilizers

- Super Phosphate (single)	E
- Super Phosphate (triple)	F

#### (iii) Potassic Fertilizers

- Muriate of Potash	G
- Sulfate of Potash	H

#### (iv) Compound Fertilizers

- Diammonium Phosphate	J
- Ammonium Nitrate Phosphate	H

#### (v) Complex Fertilizers

- 22 : 22 : 11	L
- 18 : 18 : 10	M
- 15 : 15 : 15	N
- 14 : 28 : 14	P
- 17 : 17 : 17	Q
- 11 : 11 : 11	R
- 14 : 35 : 14	S
- 28 : 28 : 0	T
- 6 : 12 : 6	U
- micronutrients	X
- Others	Z

### ORGANIC MANURES

Farm-yard manure	1
Groundnut cake	2
Castor cake	3
Other cakes	4
Green manure (take down the activity only, no units)	5
Tank silt	6
Penning of sheep/goats (in animal day number = Animals x Days)	7
Other manures (e.g. pig excreta, night soil, etc.)	8
Cultures (e.g. Azotobacter,	9

Rhizobium)

PESTICIDES

Usage Class	Name	Codes
Insecticide- seed dressing	1. Carbofuran	1A
	2. Ceresan/Agrosan	1B
Insecticide- contact	1. BHC 10%	2A
	2. BHC 50%	2B
	3. DDT 50%	2C
	4. Sultaph/Sulphur (dust)	2D
	5. Heliothox (dust)	2E
	6. Sumithion	2F
	7. Thiodon/Endosulfan	2G
	8. Endrin	2H
	9. Ambithion (mixture Malathion/Fenitrothion)	2J
	10. Cythion/Malathion	2K
	11. Carbaryl 50%, Seven 50%	2L
Insecticide- Systemic	1. Dimicron	3A
	2. Rogor	3B
	3. Parathion (dust)	3C
	4. Zolone	3D
	5. Nuvan	3E
	6. Nuvacron	3F
	7. Thimet	3G
Insecticide- contact/systemic	1. Lipcomby	4A
	2. Metacipcomby	4B
Fungi-seed application	1. Ceresan W.P.	5A
	2. Agrosan G.N.	5B
Fungicide-foliar application	1. Dithane M-45	6A
	2. Dithane-Z-78	6B
Fungicide-seed/ soil application	1. Thiram (TMTD)	7A
	2. Brassicol 75 WP (PCNB)	7B
Fungicide-seed/ foliar application	1. Sultaph/Sulphur (dust)/ Sulphur W.P.	8A
	2. Copper oxychloride/ Blitox 50/Cuprex	8B
	3. Henosan	8C
	4. Streptocycline	8D
Rodenticide	1. Zinc Phosphide	9A

Pesticide Group

Insecticides - seed dressing	1
Insecticides - contact	2
Insecticides - systemic	3
Insecticides - constant/systemic	4
Fungicides - seed application	5
Fungicides - foliar application	6
Fungicides - seed/soil application	7

## 5.9 UNIT OF MEASUREMENT

Items	Unit	
Seeds, fertilizer	Kilograms	K
Groundnut cakes, castor cakes, other cakes	Hundreds	C
Farmyard manures and tank silt	Quintals	Q
Human and bullock labor	Hours	H
Machine use	Hours	H
Pesticides/insecticides (liquid)	Litres	L
Pesticides/insecticides (powder)	Kilograms	K
Goat and sheep penning	Animal day number	N

## 5.10 FARM PRODUCTS AND FOOD ITEMS (to be used for inventories, seeds, production, transaction and consumption)

Bajra/Pearl millet (Local variety)	CA
Bajra/Pearl millet (HYV)	CB
Jowar/Sorghum (Local variety)	CC
Jowar/Sorghum (HYV)	CD
Maize (Local variety)	CE
Maize (HYV)	CF
Ragi/Finger millet	CG
Other minor millets	CH
Paddy (Local variety)	CJ
Paddy (HYV)	CK
Wheat (Local variety)	CL
Wheat (HYV)	CM
Rice (local variety)	CN
Rice (HYV variety)	CP
Meals	CQ
Other cereals	CX

## PULSES (Class Code 'P')

Redgram (Tur)/Pigeonpea	PA
Greengram (Mung)	PB
Blackgram (Urad)	PC
Bengalgram (Chenna)/Chickpea	PD
Redgram dhal	PF
Greengram dhal	PG
Blackgram dhal	PH
Bengalgram dhal	PJ
Guar	PK
Cowpea	PL
Soybean	PN
Other pulses	PX
Other dhal	PZ

## OILSEEDS (Class Code 'B')

Groundnuts	BA
Sesamum	BB



Castor	BC
Mustard	BD
Linseed	BE
Linseed Oil	BL
Castor (HYV)	BM
Sunflower	BF
Safflower	BG
Safflower oil	BS
Groundnut oil	BH
Other oilseeds	BX

FIBER CROPS (Class Code 'D')

Cotton (Local variety)	DA
Cotton (HYV)	DB
Other Fiber crops	DX

SUGARCANE (Class Code 'S')

Sugarcane	SA
Sugar	SB
Gur (jaggery)	ZG
Other sugar products (e.g. sweets for children)	SX

VEGETABLES AND SPICES (Class Code 'V')

Onion	VA
Chillies	VB
Brinjal	VC
Cabbage	VD
Tomato	VE
Cauliflower	VF
Leafy vegetables	VL
Potato	VP
Carrot and Radish	VR
Fennel	VS
Tubers	VT
Other vegetables	VX
Other spices (including salt tamarind, etc.)	VY

GARDEN CROPS (Class Code 'F')

Grapes	FA
Lemon	FB
Orange	FC
Mango	FD
Coconut	FE
Toddy Trees	FG
Other Fruits	FX
Banana	FH
Papaya	FP

CROP BYPRODUCTS (Used as fodder) and  
FODDER CROPS (Class Code 'Z')

Rough dry fodder (crop byproduct)	ZA
Fine dry fodder	ZB

(crop byproduct)	
Green fodder crops	ZC
Grass and other green fodder	ZD
Grass and other dry fodder	ZE
Cabes (cabes used as concentrates)	ZF
Gur (Jaggery)	ZB
Oil	ZM
Mineral and minor feeds	ZJ
Crop byproducts not used as fodder but used as fuel, etc.	ZK

6.1 ACCOUNT CODES (to be used in VLS-L)

Crop products	01
Seeds	02
Fertilizers	03
Organic manure (bought)	04
Pesticides/Insecticides	05
Land taxes, fees, land rent (paid only), irrigation water and electricity charges, no item codes	06
Labor expenses, no item codes	07
Draft animal, implement and machine expenses	08
Fuels/Others	09
Others, no item codes	00
Products (current products like milk, ghee, dung, wool, etc. sold only; not animals sold).	11
Fodder	12
Concentrates/Feeds	13
Veterinary, breeding, and other services	15
Grazing, watering charges, including penalty on unauthorized animal	16
Labor expenses, no item codes	17
Draft animal hire incomes, including income from machines hired out with animals	18
Material, fuel, etc., no item codes	19
Others, no item codes	10
Land/farm building/animals/farm machineries acquired or sold	21
Capital gain/loss (due to natural factors, birth/death of animal, litigation or theft)	22
Income received from land leasing/ share cropping, no item codes	23
Taxes, fees, etc. (e.g. land purchase tax, but not house tax), no item codes	26
Labor expenses - for new construction only, no item codes	27
Draft animal, machine expenses - for new construction only	28
Material, fuel, etc. - for new construction only, no item codes	29

Others (including capital related litigation expenses) no item codes	20
Labor expenses for maintenance (e.g., carpenter, blacksmith, other labor) no item codes	37
Draft animal expenses for maintenance	38
Material, fuel for maintenance, no item codes	39
Others, no item codes	30
Products sold or services rendered	41
Taxes, rents, fees (no item codes)	46
Labor expenses (no item codes)	47
Draft animal expenses	48
Material bought, fuel power etc.	49
Other expenses (no item code)	40
Regular salaries, etc. (received or payments made to permanent servants)	51
Incomes from daily labor	57
Exchange labor	58
Savings/withdrawal/life insurance	61
Credit/debit	62
Interest	63
Income/expenses owing to gift, dowry remittances, pension, theft etc.	64
Others	60
Food (codes) including milk, sweets and spices	71
Narcotics, tea, coffee, tobacco, pan, alcoholic beverages	72
Clothing, sewing of cloth, other tailoring expenses, thread, needles, chappals and other footwear (purchase and repair), etc.	73
Medicines, cosmetics, soap, barber service	74
Travel and entertainment	75
Electricity, water charges and cooking fuels (like kerosene, match box) for household use	76
Labor expenses for domestic work, (no item codes)	77
Ceremonial expenses (including Kapur, Gulal, Agarbathi, etc.)	78
Edible oils and fats (other than ghee) (no item code)	79
Others, including complete meals in hotel, school and educational materials, stamps, stationery, grinding	70
Residential house, consumer durables bought/sold	81
Residential house, consumer durables maintenance/repairs, (no item codes)	82
House rent, (no item codes)	83
Capital gain/loss of consumer durables	84
House tax on acquisition or annually, (no item codes)	86
Labor input, (no item codes)	87
Materials, (no item codes)	89
Others, (no item codes) (including litigation)	80

Crop production codes 91

6.2 PARTNER CODE

Government (FCI, Fair Price Shop, Panchayat Samithi) [For all kinds of transactions]	1
Commercial bank (For credit and tied input sales only)	2
Cooperatives (For all kinds of transactions)	3
Private moneylender (For all credit transactions in which interest is taken, even if the moneylender is a friend, shopkeeper or relative, etc.) (and for K Schedule)	4
Landlord (including interest-free advances)	5
Relative (including interest-free advances)	6
Friend (including interest-free advances)	7
Others (including interest-free advances)	8
Regulated market (For purchases and sales of regulated items only)	9
Private shop (including itinerant traders and weekly markets) [For all kinds of transactions]	A
Miller [For all transactions (including credit) which involve exchange of millable food grains]	B
Self (For home grinding and milling intra-household transaction only)	C

Samples of Revised Partner Coding System in VLS-L

Col 50	Col 51	Col 52	Col 53	Col 54	Remarks
5	V	-	-	-	Money for medicine given by landlord (caste fellow)
Z	V	-	-	-	Gift to tenant (caste fellow) for tenant's son's marriage
4	5	-	-	-	Loan for consumption from landlord
4	W	V	-	-	Loan for expenses in daughter's marriage received from employer (caste fellow)
X	E	2	-	-	Gift to regular employee (FaBroSo; Telugu: Annayya)
A	M	2	-	-	Purchased ghee from shopkeeper (SiSo; Telugu: Mena Alludu)

### 6.3 NARCOTICS

Alcoholic beverages	NA
Coffee	NC
Tea	NT
Tobacco, beedi	NN
Pan, betel, etc.	NP
Others (Ganja, etc.)	NZ

### MEDICINES, COSMETICS, SOAP

Medicine Doctor's fees	NM
Cosmetics tooth paste etc.	NB
Soap, washing powder	NS
Barber service (and material relating to it)	ND
Others	INZ

### OTHER CONSUMPTION ITEMS

Complete meals in hotel	GM
Educational expenses (fees)	GS
Educational material expenses (pen, books, paper, etc.)	GE
Grinding/milling charges	GG
Processed foods (e.g. biscuits Khara, syrup, baby food, etc.)	GP
Others (i.e. item without codes)	GZ

### 6.4 LAND RELATIONSHIPS AND REGULAR LABOR RELATIONSHIPS (Col. 50 VLS-L)

Landlord	5
Tenant	Z
Any regular full or part-time employer other than landlord	W
Any regular full or part-time employee other than tenant	X

### 6.5 MISCELLANEOUS

Self (only for home grinding and milling as an intra-household transaction)	C
Caste fellow or caste group	V
Ritual partner (priest, vaidya, jadugar, astrologer, recipient of ritual charity; employer in ritual context)	Y
Friend	7
Others	8

### 6.6 ITEM CODES FOR MARRIAGES (Fields 14, 33 VLS-L)

Marriage of son (own son only)	5
Marriage of daughter (own daughter only)	6
Marriage of other close relative (specify in Remarks by English abbreviation and by a term in local language)	7

Marriage of friend, caste fellow, business or political associate (one who does not fall under code 5, 6, or 7; specify relationship in Remarks)	8
Marriage at which the respondent is employed for some service such as acting as priest, or as a servant to feed the guests	9
Litigation	0

## GLOSSARY

Jajmani System	:	Hereditary Patron-Client System
Beedi	:	Country Cigarette
Agarbathi	:	Incense Stick
Kharif Season	:	Monsoon Season
Rabi Season	:	Post-Monsoon Season
Puja	:	Workship
Nagoba	:	A Diety
Tirupati	:	Piligrimage
Gunta	:	Land Measurement Unit Equal to 0.025 Acres
Desi Plough	:	Country Plough
Vaidya	:	Doctor
Jadugar	:	Magician
Toddy Tapping	:	Palm Wine Tapping
Gur	:	Jaggery
Ganza	:	Hashis

Table 1. Location of selected villages for village studies from different regions are given below.

Villages	Tehsil/Taluka	District	State	Approximate distance of village from Hyderabad (kms)	Coordinates
Aurepalle	Kalvakurthi	Mahbubnagar	Andhra Pradesh	70	78° 39' E 16° 52' N
Dokur	Atmakur	Mahbubnagar	Andhra Pradesh	122	77° 50' E 16° 36' N
Shirapur	Mohol	Sholapur	Maharashtra	336	75° 45' E 17° 45' N
Kalman	North Sholapur	Sholapur	Maharashtra	348	75° 49' E 17° 52' N
Kanzara	Murtizapur	Akola	Maharashtra	528	77° 23' E 20° 39' N
Kinkheda	Murtizapur	Akola	Maharashtra	525	77° 28' E 20° 36' N
Boriya	Prantij	Sabarkantha	Gujarat	1350	72° 54' E 23° 14' N
Rampura	Prantij	Sabarkantha	Gujarat	1350	72° 55' E 23° 27' N
Papda	Gairatganj	Raisen	Madhya Pradesh	1200	78° 17' E 23° 27' N
Rampura Kalan	Gairatganj	Raisen	Madhya Pradesh	1215	78° 14' E 23° 21' N



Table 2. Total and Selected Number of Households in the Ten Study Villages

Villages	Number of Households <sup>a</sup>				Sampling Fractions (%)			
	Laborers	Cultivat ors	Others <sup>b</sup>	Total	Laborers	Cultivat ors	Others	Total
Aurepalle	146 (30)	322 (68)	8 (2)	476 (100)	6.85	9.32	0	8.40
Dokur	76 (24)	226 (72)	11 (4)	313 (100)	13.16	13.27	0	12.78
Shirapur	97 (32)	183 (62)	17 (6)	297 (100)	10.31	16.39	0	13.47
Kalman	156 (37)	211 (50)	56 (13)	423 (100)	6.41	14.22	0	9.46
Kanzara	54 (32)	109 (64)	6 (4)	169 (100)	18.52	27.52	0	23.67
Kinkheda	55 (38)	83 (58)	5 (4)	143 (100)	18.18	36.14	0	27.97
Boriya	64 (36)	106 (60)	8 (4)	178 (100)	15.63	28.30	0	22.47
Rampura	40 (31)	77 (60)	12 (9)	129 (100)	25.00	38.96	0	31.00
Papda	39 (36)	63 (58)	6 (6)	108 (100)	25.64	47.62	0	37.03
Rampura Kalan	46 (27)	122 (71)	4 (2)	172 (100)	21.74	24.59	0	23.26

a. Figures in parentheses are the percentage of households in each category.

b. Includes artisans, shopkeepers, traders, etc.

Table 3. Farm Size Classification Based on Operational<sup>a</sup> Holdings (ha) in Different Study Villages of India's SAT

Village	Village Code	Farm size class (Land holding code)		
		Small (1)	Medium (2)	Large (3)
Aurepalle	A	0.20-2.50	2.51-5.26	>5.26
Dokur	B	0.20-1.01	1.02-3.04	>3.04
Shirapur	C	0.20-2.50	2.51-5.87	>5.87
Kalman	D	0.20-6.07	6.08-10.77	>10.77
Kanzara	E	0.20-2.26	2.27-5.59	>5.59
Kinkheda	F	0.20-3.00	3.01-5.60	>5.60
Boriya	G	0.20-0.97	0.98-1.98	>1.98
Rampura	H	0.20-2.37	2.38-4.53	>4.53
Papda	J	0.20-2.50	2.51-5.00	>5.00
Rampura Kalan	K	0.20-3.64	3.65-6.10	>6.10

a. Operational holding was calculated as: owned land minus land leased-out/sharecropped-out plus land leased-in/sharecropped-in.

Table 4. List of questionnaires and schedules used for data collection

Sl. No.	Name of schedule	Schedule code	Frequency of data collections
1.	Household Census Schedule	VLS-A	In the beginning of the study
2.	Household Member Schedule	VLS-C	In the beginning of the study
3.	Animal Inventory Schedule	VLS-E	In the beginning of the study
4.	Farm Implements and Machineries Schedule	VLS-F	Beginning of the cropping year, i.e., July
5.	Farm Building Schedule	VLS-G	Beginning of the cropping year, i.e., July
6.	Stock Inventory Schedule	VLS-N	Beginning of the cropping year, i.e., July
7.	Debt and Credit Schedule	VLS-P	Beginning of the cropping year, i.e., July
8.	Monthly Price Schedule	VLS-M	Every month in the first week
9.	Household Transaction Schedule	VLS-L	Every 3 to 4 week interval
10.	Labor, Draft Animal and Machinery Utilization Schedule	VLS-K	Every 3 to 4 week interval
11.	Plot and Cultivation Schedule	VLS-Y	Every 3 to 4 week interval
12.	Livestock Schedule	VLS-Z	Every 3 to 4 week interval

Table L-1. Kind transactions without compensation

	<u>Cash Inflow</u>					<u>Cash Outflow</u>				
	10,11	12-14	15	16-21	22-28	29,30	31-33	34	35-40	41-47
Sorghum received from relative	64				50	71	CC	K	50	50
Paddy given to beggar	01	CJ	K	1	1.50	64				1.50
Rice received by begging	64				2.50	71	CN	K	1	2.50
Bajra stolen by respondent	64				20	71	CA	K	25	20
Fertilizer stolen by respondent	64				20	03	D	K	30	50
Calf born	22	LC			70	22	LC	N	1	--
Bullock died	22	LA	N	1	--	22	LA			200
Pumps stolen	22	MK	N	1	--	22	MK			1500
Dry land received from government	22	RA			600	22	RA	A	1	--
Wet land given to son	22	RB	A	2	--	22	RB			10000
Cattleshed burnt*	22	RE			--	22	RE			500
Radio stolen	84	QD	N	1	--	84	QD			300
Sewing machine from government	84	QG			600	84	QG	N	1	--

\*Note that in this case units cannot be measured.

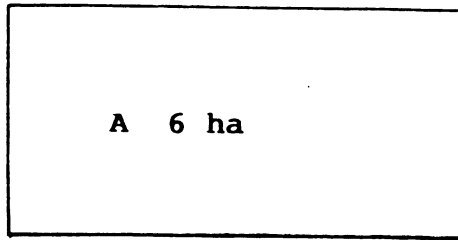
Table L-2. Coding of Milling and Grinding after June 1, 1976

	<u>Cash Inflow</u>					<u>Cash Outflow</u>						
	10,11	12-14	15	16-21	22-28	29,30	31-33	34	35-40	41-47	50	
1) Bajra ground at home	01	CA	K	100	120	71	CA	K	100	120	C	
2) Bajra ground by miller	01	CA	K	100	115	71 70	CA GG	K	100	115 5	B B	
3) Groundnut ground by miller	01	BA	K	100	195	79 70	BH GG	K	40	195 25	B B	
Sold (by-product)	01	ZF	K	60	54						B	
4) Safflower ground by miller	01	BG	K	100	115	79 70	BS GG	K	30	115 50	B B	
Byproduct used at home	01	BG		70	48	13	ZF	K	70	48	B	
5) Gram ground at home*	01	PD	K	100	160	71	PJ	K	80	160	C	

\*Entry of the byproduct of gram (chickpea) is not considered, because it has no commercial value in this particular case.

## Plot Maps

Main plot

1975-76  
Kharif

AA Sorghum 4 ha	AB Sorghum + pigeon- pea 2 ha
-----------------------	--

Rabi

AAA Wheat 2 ha	AB Sorghum + pigeon- pea 2 ha
AAB Chickpea 2 ha	

1976-77  
Kharif

AK Castor 3 ha	AL HYVSorghum 3 ha
----------------------	--------------------------

AK Sunflower 3 ha	ALA Wheat 1 ha
	ALB Groundnut 2 ha

## Appendix 1. Detailed list of data collection at Taluka/Tehsil level.

District: \_\_\_\_\_

Taluk: \_\_\_\_\_

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Description of the Item	Unit of measurement	Years			Average
		1975	1976	1978	

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**A. POPULATION**

1. Males	No.
2. Females	"
3. Total	"
4. No. of villages with < 200 popln.	"
5. No. of villages with 200-499 popln.	"
6.                -do-                500-999 popln.	"
7.                -do-                1000-1999 popln.	"
8.                -do-                2000-2999 popln.	"
9. No. of villages with > 5000	"
10. No. of households	"
11. No. of cultivators	"
12. No. of agricultural laborers	"
13. No. of literates/educated persons	"

**B. LAND UTILIZATION**

1. Geographical area	Km or ha
2. Net sown area (NSA)	"
3. Gross cropped area (GCA)	"
4. Forest area	"
5. Barren and uncultivable land	"
6. Kharif cropped area	"
7. Rabi cropped area	"

**C. RAINFALL (take normal and not actual)**

1. Rainfall during June	mms
2.                -do-                July	"
3.                -do-                August	"
4.                -do-                September	"
5.                -do-                October	"
6.                -do-                November	"
7.                -do-                December	"
8. Annual Rainfall	"

D. IRRIGATION

1.	Net area irrigated by all sources	ha.
2.	Area irrigated by canals	"
3.	-do- wells	"
4.	-do- tube wells	"
5.	-do- tanks	"
6.	-do- other sources	"

E. CROPPING PATTERN

1.	Area under wheat	ha.
2.	-do- sorghum	"
3.	-do- bajra	"
4.	-do- total cereals	"
5.	-do- chickpea/chena	"
6.	-do- total pulses	"
7.	-do- groundnuts	"
8.	-do- soybeans	"
9.	-do- total oilseeds	"
10.	-do- all food crops	"

F. YIELDS

1.	Local sorghum	Kgs/ha.
2.	HYV sorghum	"
3.	Local bajra	"
4.	HYV bajra	"
5.	Local groundnut	"
6.	HYV groundnut	"
7.	Local chickpea	"
8.	Local pigeonpea	"
9.	Local wheat	"
10.	HYV wheat	"
11.	Soybeans	"

G. SOILS

1.	Predominant soil type (Medium black, deep black, brown etc.)	Describe
----	--	----------

H. LIVESTOCK

1.	No. of bullocks	Nos.
2.	No. of cows	"
3.	No. of she buffaloes	"
4.	No. of he buffaloes	"
5.	No. of sheep and goats	"



I. AGRICULTURAL IMPLEMENTS AND MACHINERY

1. No. of plows	Nos.
2. No. of bullocks carts	"
3. No. of oil engines	"
4. No. of electric motors	"
5. No. of tractors	"
6. No. of threshers	"

J. INFRASTRUCTURAL FACILITIES

1. No. of villages electrified	Nos.
2. No. of agri. cooperative societies	"
3. No. of regulated markets	"
4. No. of weekly markets	"
5. No. of schools	"
6. No. of post offices	"
7. Kutcha road length	Kms.
8. Pucca road length	"

K. GENERAL

1. Wet/irrigated land value	Rs/ha
2. Dry land value	"

---

Appendix II Characteristics qualifying the majority of taluks  
in the region.

1. Density of population per sq. km. (100-150)a
2. % of literacy (40-50)
3. No. of cultivators per 100 ha of NSA (16-25)d
4. No. of agricultural laborers per 100 ha of NSA (41-50)
5. No. of cattle per 100 ha of NSA (61-80)
6. No. of buffaloes per 100 ha of NSA (61-80)
7. No. of sheep and goats per 100 ha of NSA (21-40)
8. No. of ploughs (iron and wooden) per 100 ha of NSA (7-10)
9. No. of oil and elec. pumps per 100 ha of NSA (1-3)
10. No. of tractors per 1000 ha of NSA (0.1-0.3)
11. % of forest area to total geographical area (5-15)
12. % of barren and uncultivated land to geographical area (upto 2)
13. % of NSA to geographical area (70-80)
14. Cropping intensity (1.001-1.09)
15. % of net area irrigated to NSA (1-3)
16. % of area irrigated by government canals to NAI (nil)e
17. % of area irrigated by private canals to NAI (nil)
18. % of area irrigated by tanks to NAI (nil)
19. % of area irrigated by wells to NAI (90 and above)
20. Average number of rainy days (31-40)
21. Normal rainfall (700-800mm)
22. Rainfall intensity (15.01-25.00 mm)
23. % of rice area to GCA (upto 1)f
24. % of wheat area to GCA (2-5)
25. % of jowar area to GCA (20-35)
26. % of bajra area to GCA (1-2)
27. % of total cereals area to GCA (40-50)
28. % of gram area to GCA (upto 1)
29. % of tur area to GCA (2-4)
30. % of total pulses area to GCA (10-30)
31. % of cotton area to GCA (30-50)
32. % of groundnut area to GCA (2-10)
33. No. of villages with population less than 200 (31-50)
34. No. of villages with population 200-499 (51-80)
35. No. of villages with population 500-999 (51-80)
36. No. of villages with population 1000-1999 (11-20)
37. No. of villages with population 2000-4999 (11-15)
38. No. of villages with population 5000-9999 (1-2)
39. No. of villages with population 10000 and above (nil)

NSA = Net Sown Area

NAI = Net Area Irrigated

GCA = Gross Cropped Area

Appendix III. Village Level Studies - DAY CODE CALENDAR.

Dates	Months and Day Codes												Dates
	Jan.	Feb.	Mar.	April	May	June	July	August	September	Oct.	Nov.	Dec.	
1	1	32	61	92	122	153	183	214	245	275	306	336	1
2	2	33	62	93	123	154	184	215	246	276	307	337	2
3	3	34	63	94	124	155	185	216	247	277	308	338	3
4	4	35	64	95	125	156	186	217	248	278	309	339	4
5	5	36	65	96	126	157	187	218	249	279	310	340	5
6	6	37	66	97	127	158	188	219	250	280	311	341	6
7	7	38	67	98	128	159	189	220	251	281	312	342	7
8	8	39	68	99	129	160	190	221	252	282	313	343	8
9	9	40	69	100	130	161	191	222	253	283	314	344	9
10	10	41	70	101	131	162	192	223	254	284	315	345	10
11	11	42	71	102	132	163	193	224	255	285	316	346	11
12	12	43	72	103	133	164	194	225	256	286	317	347	12
13	13	44	73	104	134	165	195	226	257	287	318	348	13
14	14	45	74	105	135	166	196	227	258	288	319	349	14
15	15	46	75	106	136	167	197	228	259	289	320	350	15
16	16	47	76	107	137	168	198	229	260	290	321	351	16
17	17	48	77	108	138	169	199	230	261	291	322	352	17
18	18	49	78	109	139	170	200	231	262	292	323	353	18
19	19	50	79	110	140	171	201	232	263	293	324	354	19
20	20	51	80	111	141	172	202	233	264	294	325	355	20
21	21	52	81	112	142	173	203	234	265	295	326	356	21
22	22	53	82	113	143	174	204	235	266	296	327	357	22
23	23	54	83	114	144	175	205	236	267	297	328	358	23
24	24	55	84	115	145	176	206	237	268	298	329	359	24
25	25	56	85	116	146	177	207	238	269	299	330	360	25
26	26	57	86	117	147	178	208	239	270	300	331	361	26
27	27	58	87	118	148	179	209	240	271	301	332	362	27
28	28	59	88	119	149	180	210	241	272	302	333	363	28
29	29	60	89	120	150	181	211	242	273	303	334	364	29
30	30	-	90	121	151	182	212	243	274	304	335	365	30
31	31	-	91	-	152	-	213	244	-	305	-	366	31

Appendix IV.1. General Endowment Schedule.

Year: \_\_\_\_\_ Village: \_\_\_\_\_ Taluk: \_\_\_\_\_

District: \_\_\_\_\_ State: \_\_\_\_\_

1. Household number
2. Landholding class
3. Respondent's name
4. Father's name
5. Caste
6. Size of family (No.)
7. Main occupation
8. Subsidiary occupation

Date of interview: \_\_\_\_\_

\_\_\_\_\_  
Name of the investigator

Appendix IV.1 (Cont'd...)

A. Household details

Sr. No.	Name	Age	Sex	Member No.	Resource code	Spouse of		Child of		Marital status	Year of marriage	Education up to	Year of education terminated
						Male	Female	Male	Female				

Note: Member code of male and female in male and female columns respectively should be written.



Appendix IV.1 (Cont'd...)

C Landholding details

Sr. No.	Plot name	Plot code	Soil type	Total area (acres)	Ownership status	Distance from house (in kms)	Location (outside or inside village)	Culti-vable area (acres)	Bund-ing	Value (Rs)	Revenue (Rs)	Remarks

Note: In ownership status note down the details of leased-in/leased-out and owned. Write the name of person from whom land taken or to whom given on lease basis.

Leased-in on crop share basis A, on fixed rent basis AB

Leased-out on crop share basis B, on fixed rent basis BB

Mortgaged-in with possession AC, without possession BC

Mortgaged-out with possession BD, without possession AD

## Appendix IV.1 (Cont'd...)

x

D Inventory Schedule

## 1. Livestock

Resource code	Resource number	Year of acquisition	Age	Purchase price	Present value	Remarks
Bullocks						
Cows						
Calf						
He buffalos						
She buffalos						
Goats						
Sheep						
Pigs						
Horses						
Donkeys						
Camel						
Poultry (birds)						
Others						

In remarks column note down details about breeds, source of acquisition, etc.



## Appendix IV.1 (Cont'd...)

2. Farm Equipment and Implements

Equipment/Implements	No.	Year of acquisition	Purchased value	Present value	Remarks
Desi plow (iron/wooden)					
Modern plow					
Desi seed drill					
Modern seed drill					
Blade harrow					
Disk harrow					
Hoe					
Persian wheat					
Mote					
Pipe line (feet) (type)					
Sprayer and dusters					
Chaff cutter					
Sugarcane crusher (bullock operated)					
Oilseed crusher (bullock operated)					
Minor implements					
Bullock cart					
Others					
<u>Major Farm Machinery</u>					
Tractor					
Harvester					
Thresher					
Winnower					
Oil-engine					
Electric motor					
Oil pump					
Electric pump					
Sprayer/duster (power operated)					
Sugarcane crusher (power operated)					
Flour mills (power operated)					
Other power driven implements)					

In remarks column note down the horse power, make and other details of the machine e.g. wood or steel construction.

## Appendix IV.1 (Cont'd...)

3. Buildings

Particulars	Year of construction	Value at the time of construction	Present value	Remarks <sup>†</sup>
A. Residential building				
Total area of courtyard (sq. ft.)				
Area roofed				
Condition				
B. Cattleshed				
Total area covered				
Area roofed				
Condition				
C. Field/farm house				
Area covered				
Condition				
D. Wells				
a) Irrigation				
i. Pucca				
ii. Kutcha				
b) Drinking				
E. Storage				
F. Others <sup>a</sup>				

<sup>†</sup>In remarks column, please note type of materials used for construction, ownership of wells, etc. Mention approximate area under different uses.

<sup>a</sup>Others include dry wells, incomplete wells, traction shed, etc.

## Appendix IV.1 (Cont'd...)

4. Stock Inventory

I t e m	Quantity	Value	R e m a r k s
Sorghum (Local)			
Pearl Millet (Local)			
Paddy (Local)			
Wheat (Local)			
Sorghum (Hybrid)			
Pearl Millet (Hybrid)			
Wheat (HYV)			
Paddy (HYV)			
Chickpea			
Soybean			
Chickpea (Dal)			
Pigeonpea			
Pigeonpea (Dal)			
Moong			
Urad			
Mustard			
Rice Straw			
Wheat Straw			
Sorghum Straw			
Firewood			
Kerosene			
Chemical Fertilizer			
DDT			
Other Pesticides			
Others			

## Appendix IV.1 (Cont'd...)

I t e m	Quantity	Value	R e m a r k s
Cooking Utensils			
Clothing			
Watches			
Radios/Transistors			
Furniture			
Fans			
Bicycles			
Motorcycle			
Jeeps			
Cash in hand			
Cash in Bank/Societies			
Wages payable			
Wages receivable			
Jewelry: Gold (gms)			
Silver (gms)			
Outstanding Loans			
Loans given to others			

In remarks column note details whether purchased or home produced.

Appendix IV.2. VLS-K - Employment Schedule, Worksheet.

Village: \_\_\_\_\_ Household Number: \_\_\_\_\_ Member code: \_\_\_\_\_ Name of the member: \_\_\_\_\_

Date of interview	Round number	Activities/type of work	Place of work	Working days	Average working hours	Partner	Wages		Involuntary unemployment days	Remarks
							Cash	Kind		

Please indicate reasons for not working and work done during the period of unemployment in detail.



Appendix IV.3 (Cont'd...)

Village: \_\_\_\_\_ HH No. \_\_\_\_\_ Round No. \_\_\_\_\_

TRANSACTION OF FARM INPUT AND OUTPUT

I t e m s	Purchases		Place/ partner	Sales		Place/ partner
	Quantity	Value		Quantity	Value	

CREDIT

L o a n s	Agency/ person	Amount	Rate of interest	Purpose	Remarks
Received					
Paid					

Appendix IV.3 (Cont'd...)

Village: \_\_\_\_\_ HH No. \_\_\_\_\_ Round No. \_\_\_\_\_

**CAPITAL GAINS AND EXPENSES**

Item	Sold			Purchased		
	Unit	Value	Place/partner/ distance	Unit	Value	Place/partner/ distance
Land						
Live- stock						
Build- ings						
Farm Im- plements & machi- nery						

**CONSUMER DURABLES**

Item	Sold		Purchased	
	Quantity	Value	Quantity	Value

**HANDICRAFTS, ETC.**

Item	Quantity	Value	Place and partner/distance	Miscellaneous expenses



Appendix IV.3 (Cont'd...)

Village: \_\_\_\_\_ HH No. \_\_\_\_\_ Round No. \_\_\_\_\_

CASH TRANSACTIONS

I t e m s	Received	Partner	Paid	Partner
<u>Salaries &amp; wages<sup>±</sup></u>				
Male				
Female				
Child				
Remittances				
Gifts				
Education				
Entertainment & traveling				

\*Please indicate cash and kind separately.

OTHER MISCELLANEOUS EXPENSES



Appendix IV.5. VLS-Y - Cultivation Schedule, Worksheet.

Crop code									
% area									

Plot No. \_\_\_\_\_ Respondent's name: \_\_\_\_\_ Plot code: \_\_\_\_\_ Plot name: \_\_\_\_\_ Area: \_\_\_\_\_ Crop: \_\_\_\_\_  
 Year and season: \_\_\_\_\_

Round number	Date of operation	Name of operation	Type of labor	Hours of work	Total value of wages	Type of material		Input and output	Remarks
						Name	Quantity		

Please write details of share in input/output for sharecropped plots and amount for leased-in plots. In case of mixed intercropping write proportionate area occupied by each crop and in case of row intercropping, write distance between rows and number of rows of each crop.  
 Note: Write cropping pattern in order of preference and area occupied by the crop.

**Appendix IV.6. Livestock Schedule, Worksheet.**

Village: \_\_\_\_\_ Household Number: \_\_\_\_\_ Round Number: \_\_\_\_\_ Date: \_\_\_\_\_

**FODDER AND FEED EXPENSES**

Type of fodder	Bullocks	Cows	Buffalos	Youngstock	O t h e r s
Dry fodder: Type Quantity Value					
Grain fodder: Type Quantity Value					
Concentrates: Type Quantity Value					

**LABOR EXPENSES**

Activities	Type of labor	Sex	Average hours per day	Number of days	Wages
1. Feeding, washing, etc.					
2. Grazing					
3. Tree lopping & fodder collection					

**MISCELLANEOUS EXPENSES**

1. Medicines, ropes, veterinary, etc.					
---------------------------------------	--	--	--	--	--

Appendix IV.6 (Cont'd...)

Village: \_\_\_\_\_ Household Number: \_\_\_\_\_ Round Number: \_\_\_\_\_

LIVESTOCK PRODUCTION

Items	Unit	Total production		Sale		Consumption	Remarks (write conversion rates for ghee from milk, etc.)
		Quantity	Value	Quantity	Value		
Milk	Liters						
Wool	Kgs						
Eggs	No.						
Dung	QcIs						
Others (ghee, etc.)	Rs.						

TRANSACTION OF ANIMALS

Transaction/changes*	Type of animal	Number	Value	Place	Agency

\* Includes details of death, birth, sale and purchase, gift, etc. of animals.

INCOME FROM HIRING-OUT LIVESTOCK\*

\* Write details for renting livestock whether with or without labor and implements. The rate, number of days/hours for hired-out to be written.

Appendix IV.7. Monthly Price Schedule.

Prices<sup>1</sup> of Selected Commodities as Recalled by Different Persons Interviewed.<sup>2</sup>

Village: \_\_\_\_\_

Investigator: \_\_\_\_\_

Date \_\_\_\_\_

Commodity	Unit	Price in Rupees												
		A		B		C		D		E				
		W	R	W	R	W	R	W	R	W	R			
<b>WHEAT:</b>														
Local _____														
HYV _____														
<b>PADDY:</b>														
Local _____														
HYV _____														
<b>SORGHUM:</b>														
Local _____														
HYV _____														
<b>PEARL MILLET:</b>														
Local _____														
HYV _____														
<b>MAIZE:</b>														
Local _____														
HYV _____														
<b>CHICKPEA</b>														
<b>PIGEONPEA</b>														
<b>GREEN GRAM</b>														
<b>COTTON:</b>														
Local _____														
HYV _____														
<b>CASTOR SEED</b>														
<b>SUNFLOWER SEED</b>														
<b>GROUNDNUT (PODS)</b>														
<b>MILLED RICE:</b>														
Local _____														
HYV _____														
<b>CHENNA DAL</b>														
<b>TUR DAL</b>														
<b>MUNG DAL</b>														
<b>SUGAR</b>														
<b>GROUNDNUT OIL</b>														
<b>LINSEED OIL</b>														
<b>DALDA</b>														
<b>KEROSENE</b>														
<b>FIREWOOD</b>														
<b>COVDUNG CAKES</b>														
<b>TEA</b>														
<b>TOBACCO</b>														
<b>GHEE</b>														

<sup>1</sup> Indicate whether Wholesale price (W), or Retail price (R).

<sup>2</sup> Enter the names of A, B, C, D, E and try to make sure that every month you report prices recalled by the same group of persons in the same order.

Appendix IV.7 (Cont'd...)

Monthly Price Schedule "B"

Charges, Fees and Wages for Selected Activities and Services as Recalled by Persons Interviewed<sup>1</sup>

Village:

Investigator:

Date:

Activity	Unit and/or conditions/ type of work	Charges, Fees				
		A	B	C	D	E
<b>TRANSPORT</b>						
Rental of Cart, Driver & Bullock	(Specify distance and load carried)					
Rental of Truck						
<b>PROCESSING</b>						
Threshing by Mechanical Thresher						
Rice Milling						
Wheat Milling						
Dal Processing						
<b>Dilseed Crushing:</b>						
1.						
2.						
3.						
<b>WAGES<sup>2</sup>(Indicate kind of operation, duration of work day)</b>						
1 Male/Day						
1 Female/Day						
1 Bullock Pair + Driver						

Enter the names of A, B, C, D, E and try to make sure that every month you report prices recalled by the same group of persons in the same order.

<sup>2</sup> In case of kind wages, give quantity and value of commodity.

Appendix IV.7 (Cont'd...)

Commodity	Unit	Price In Rupees											
		A		B		C		D		E		F	
		W	R	W	R	W	R	W	R	W	R	W	R
MILK													
MUTTON													
CHICKEN													
WOOD (TEAK)													
IRON													
<b>FERTILIZERS*:</b>													
1.													
2.													
3.													
4.													
5.													
6.													
7.													
8.													
<b>FARM YARD MANURE*:</b>													
1.													
2.													
<b>SEEDS*:</b>													
1.													
2.													
3.													
4.													
5.													
6.													
7.													
8.													
<b>INSECTICIDES/PESTI- CIDES/FUNGICIDES*:</b>													
1.													
2.													
3.													
4.													
5.													
6.													
7.													
8.													
<b>FODDER (E.G. SORGHUM STRAW--LOCAL, HYV, ETC.)*:</b>													
1.													
2.													
3.													
4.													
<b>FEEDS (E.G. RICE BRAN, GROUNDNUT CAKE, ETC.)*:</b>													
1.													
2.													
3.													
4.													

\*Items presently applied.











Appendix V.5

**VIA-X** VILLAGE LEVEL STUDIES - Plot and Cultivation Schedule

Field No.	Plot Characteristics	Record Serial No.	Year	Day	Season code	Operation		Human and Bullock labour use				Inputs				Outputs				Cropping Pattern									
						Name	Code	Name	Code	Hours	Value	Name	Code	Quantity	Value	Name	Code	Quantity	Value	1st	2nd	3rd	4th	5th					
		17	18	19	20		21		22	23	24		25	26	27	28		29	30	31	32	33	34	35	36	37	38	39	
1	Village Code																												
2	Schedule Code	Y																											
3	Landholding class code																												
4	Household No.																												
5	Main Plot Code																												
6	Subplot Code																												
7	Sub Subplot Code																												
8	Total area in acres																												
9	Cropped area in acres																												
10	Irrigated area in acres																												
11	Irrigation Source																												
12	Soil Type																												
13	Ownership status																												
14	Value per acre																												
15	Revenue Rate																												
16	No. of records/plot																												
	Irrigation ownership																												
	Irrigation season																												
	Crop suitability																												

VLS-A HOUSEHOLD CENSUS SCHEDULE

Village : \_\_\_\_\_ Household Sl. No. \_\_\_\_\_

Name of Head of the household : \_\_\_\_\_

Caste : \_\_\_\_\_

Family size : Adult male (more than 15 yrs) \_\_\_\_\_  
 Adult female (more than 15 yrs) \_\_\_\_\_  
 Child male (less than 15 yrs) \_\_\_\_\_  
 Child female (less than 15 yrs) \_\_\_\_\_

1. Number of family members staying outside: Male \_\_\_\_\_, Female \_\_\_\_\_, Child \_\_\_\_\_
2. Number of attached/permanent servants : Male \_\_\_\_\_, Female \_\_\_\_\_
3. Owned area (in acres) : Dry \_\_\_\_\_, Irrigated \_\_\_\_\_
4. Leased-in or sharecropped-in area (in acres) : Dry \_\_\_\_\_, Irrigated \_\_\_\_\_
5. Leased-out or sharecropped-out area (in acres) : Dry \_\_\_\_\_, Irrigated \_\_\_\_\_
6. Owned area in the village : \_\_\_\_\_ acre(s)
7. Owned area outside the village : \_\_\_\_\_ acre(s)
8. Area having bunding : \_\_\_\_\_ acre(s)
9. Number of bullocks : \_\_\_\_\_
10. Number of milch animals : \_\_\_\_\_
11. Number of pumpsets : \_\_\_\_\_
12. Number of wells : \_\_\_\_\_ owned  
 \_\_\_\_\_ jointly owned
13. Major source of income : \_\_\_\_\_
14. Subsidiary source of income : 1. \_\_\_\_\_  
 2. \_\_\_\_\_

Appendix VI. VLS-C : Household Member Schedule

Field No.	Coloumn No.	Description	A/N/B*	D/C\$	Possible Data
1	2	3	4	5	6
1	1	Card code	A	D	C
	2	Vill. code	A	D	A,B,C,D,E,F,G, H,J,K.
	3	Land class	N	C	0 to 3
	4,5	House Number	N	C	1 to 99
	6	Year	N	C	0 to 9
	7,8,9	Day of interview	N	C	1 to 366
2	10,11	Men code	N	C	1 to 99
3	12	Relationship	N	C	1 to 9
4	13	Sex	A	D	M,F
5	14,15	Age	N	C	0 to 99
6	16	Martial Status	A	D	U,M,W,D,S
7	17	Education code	N	C	1 to 9
8	18,19	Education termination year	N	C	0 to 99
9	20	Main occupation	A	D	A,B,C,D,E,G,H, J,K,L,M,N,Z
10	21	Subsidiary occupation	A	D	" "
11	22	Place code	N	C	1 to 5
	23	Purpose code	N	C	1 to 5
	24	Frequency of visits	N	C	1 to 5
	25	Remittances	N	C	1 to 3
12	26,27	Period of Employment	N	C	0 to 99
13	28	Nature of Employment	N	C	1 to 4

1	2	3	4	5	6
14	29	Other commitments	N	C	0 to 5
15	30,31	Hours of work	N	C	0 to 24
16	32,33,34	Monthly wages (Cash)	N	C	0 to 999
17	35,36,37	Monthly wages (kind)	N	C	0 to 999
18	38,39	Period of employment	N	C	0 to 99
19	40	Nature of employment	N	C	1 to 4
20	41	Other commitments	N	C	1 to 5
21	42,43	Hours of works	N	C	1 to 24
22	44,45,46	Monthly wages (cash)	N	C	0 to 999
23	47,48,49	Monthly wage (kind)	N	C	0 to 999
24	50	Degree of disability	N	C	1 to 5
25	51	Status changes	N	C	1 to 8
26	52,53	Caste code			
27	54	Doherty is caste rank	N	C	0 to 9
28	55,56	Year of education	N	C	0 to 99
29	57,58	Mother is code	N	C	0 to 99
30	59,60	Father is code	N	C	0 to 99
31	61,62	spouse of	N	C	0 to 99
32	63,64,65 66,67	Behrman's caste rank	N	C	0 to 99
33	68	JGR caste rank	N	C	0 to 9

\* A = Alpha; N = Numerical; B = Both

\$ D = Discrete; C = Continuous

Note: In Alpha field, we never used 'I' and 'O'. Therefore whenever A to Z are continuously used, 'I' and 'O' are excluded.



## VLS-E. Animal Inventory Schedule

Field No.	Col. No.	Description	A/N/B	D/C	Possible data
1	1	Card code	A	D	E
	2	Vill. code	A	C	A,B,C,D,E,F,G, H,J,K
	3	Landholding class	N	C	0 to 3
	4,5	Household Number	N	C	1 to 99
	6	Year	N	C	0 to 9
	7 to 9	Day of interview	N	C	1 to 366
2	10,11	Item code (2D)	A	D	LA,LB,LC,LD, LE,LF,LG,LH, LK,LM,LP,LQ, LZ.
3	12	Item code (1D)	-	-	Nil
4	13	Unit	A	D	N
5	14 to 19	Quantity	N	C	0 to 999999
6	20 to 24	Value	N	C	0 to 99999
7	25	Source	N	C	1 to 6

## VLS-F Farm Implement Inventory Schedule

Field No.	Col. No.	Description	A/N/B	D/C	Possible data
1	1	Card code	A	D	F
	2	Vill. code	A	C	B,C,D,E,F,G, H,J,K
	3	Landholding class	N	C	0 to 3
	4 to 5	Household No.	N	C	1 to 99
	6	Year	N	C	0 to 9
	7,8,9	Day of interview	N	C	1 to 366
2	10,11	Item code (2D)	A	D	EA,EB,EC,ED,EF, EG,EH,EL,EK,EL, EM,EN,EP,EQ,ER, ES,ET,EU,EY,EZ, MA,MB,MC,MD,ME, MF,MG,MH,MJ,MK, ML,MZ.
3	12	Item code (ID)	-	-	Nil
4	13	Unit	A	D	N
5	14 to 19	Quantity in stock	N	C	0 to 999999
6	20 to 24	Value of stock	N	C	0 to 99999
7	25	Source of stock	N	C	1 to 6

## VLS-G Farm Building Inventory Schedule

Field No.	Col. No.	Description	A/N/B	D/C	Possible data
1	1	Card code	A	D	G
	2	Vill. code	A	C	A,B,C,D,E,F, G,H,J,K
	3	Landholding class	N	C	0 to 3
	4 to 5	Household number	N	C	1 to 99
	6	Year	N	C	0 to 99
	7 to 9	Day of interview	N	C	1 to 366
2	10,11	Item code (2D)	A	D	QA,QZ
3	12	Item code (1D)	-	-	Nil
4	13	Unit	A	D	S
5	14 to 19	Quantity in stock	N	C	0 to 999999
6	20 to 24	Value of stock	N	C	0 to 99999
7	25	Source	N	C	1 to 6

## VLS-N. Stock Inventory Schedule

Field No.	Col. No.	Description	A/N/B	D/C	Possible data
1	1	Card code	A	D	G
	2	Vill. code	A	C	A,B,C,D,E,F, G,H,J,K
	3	Landholding class	N	C	0 to 3
	4 to 5	Household number	N	C	1 to 99
	6	Year	N	C	0 to 99
	7 to 9	Day of interview	N	C	1 to 366
	2	10,11	Item stocked (2D)	B	D
2A,2B,2C,2D,2E,2F,2G, 2H,2J,2K,2L, 3A,3B,3C,3D,3E,3F,3G 4A,4B, 5A,5B 6A,6B 7A,7B 8A,8B,8C,8D;9A AC,AD BA,BB,BC,BD,BE,BF,BG CA,CB,CC,CD,CE,CF,CG,CI CJ,CK,CL,CM,CN,CP,CX, PA,PB,PC,PD,PF,PG,PH,P, PX,PZ, QB,QC,QD,QE,QF,QG,QH,Q, QK,QZ VA,VB ZA,ZB,ZC,ZD,ZE,ZK YA,YB,YE,YK,YR,YT,YZ.					
3	12	Item stocked (1D CODE)	A	D	A,B,C,D,E,F,G,H,J,K,L, M,N,P,Q,R,S,T,U,X,Z, 1 to 9
4	13	Unit	A	D	Q,L,C,S,M,K,N,A,H
5	14 to 19	Quantity in stock	N	C	0 to 999999
6	20 to 24	Value of stock (Rs)	N	C	0 to 99999
7	25	Source of stock	N	C	1 to 6
8	26 to 31	Normal Annual Requirement of the item (Physical)	N	C	0 to 999999
9	32 to 37	Value of normal annual requirement (Rs)	N	C	0 TO 999999

## VLS-P. Credit and Debit Schedule

Field No.	Col. No.	Description	A/N/B	D/C	Possible data
1	1	Card code	A	D	G
	2	Vill. code	A	C	A,B,C,D,E,F, G,H,J,K
	3	Landholding class	N	C	0 to 3
	4 to 5	Household number	N	C	1 to 99
	6	Year	N	C	0 to 99
	7 to 9	Day of interview	N	C	1 to 366
10	38	Item	A	D	S,D,C,L,Z,B,R,A,Y
11	39 to 43	Value (Rs)	N	C	0 to 99999
12	44,45	Purpose	N	C	0 to 89
13	46	Source	N	C	1 to 9
14	47,48	% interest (monthly)	N	C	0 to 99
15	49,50,51	Period (of outstanding)	N	C	0 to 999
16	52,53,54	Period (overdue)	N	C	0 to 999

## VLS-K. Labor, Draft animal, &amp; Machinery Utilization Schedule.

Field No.	Col. No.	Description	A/N/B	D/C	Possible data
1	1	Card code	A	D	G
	2	Vill. code	A	C	A,B,C,D,E,F, G,H,J,K
	3	Landholding class	N	C	0 to 3
	4 to 5	Household number	N	C	1 to 99
	6	Year	N	C	0 to 99
	7 to 9	Day of interview	N	C	1 to 366
	2	10,11	Human Resource code	A	D
		Livestock code	A	D	LA,LD,LE,LB
3	12,13	Individual number	N	C	1 to 99
4	14	Reason for not working	H	C	1 to 99
5	15-17	Farm work			
	15,16	Employment days	N	C	0 to 99
	17,18,19	Average working hours	N	C	0 to 99
	20 to 23	Cash wages values	N	C	0 to 99
	24 to 27	Kind wages value	N	C	0 to 9999
6	28-40	Off-farm non-Govt. work			
	28-29	Employment days	N	C	0 to 99
	30-32	Average working hours	N	C	0 to 99
	33-36	Cash wages values	N	C	0 to 9999
	37-40	Kind wages values	N	C	0 to 9999
7	41-53	Off-farm Govt.			
	41-42	Employment days	N	C	0 to 99
	43-45	Average working hours	N	C	0 to 99
	46-49	Cash wages values	N	C	0 to 9999
	49-53	Kind wages values	N	C	0 to 9999
8	54,55	Involuntary unemploy- ment	N	C	0 to 99

9	56,57	Days worked on own farm	N	C	0 to 99
10	58-59	Other activities	A	D	A to Z KA to KZ
	60	Place of work	N	C	0 to 1
	61-62	Days of work	N	C	0 to 99
	63-66	Wages in rupees	N	C	0 to 9999

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VLS-L. Household Transaction Schedule

Field No.	Col. No.	Description	A/N/B	D/C	Possible data
1	1	Card code	A	D	G
	2	Vill. code	A	C	A,B,C,D,E,F, G,H,J,K
	3	Landholding class	N	C	0 to 3
	4 to 5	Household number	N	C	1 to 99
	6	Year	N	C	0 to 99
	7 to 9	Day of interview	N	C	1 to 366
2	10,11	Account Receiving money value	N	C	01 to 89 <i>(pages 11-12)</i>
3	12,13	Item code (2D)	B	D	1A 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2J, 2K, 2L, 3A, 3B, 3C, 3D, 3E, 3F, 3G, 4A, 4B, 5A, 5B, 6A, 6B, 7A, 7B, 8A, 8B, 8C, 8D, 9A, AV, AD, AF, AG, AM, AP, AS, AS, AW, AX, AY, BA, BB, BC, BD, BE, BF, BG, BH, BL, BS, BX, CA, CB, CC, CD, CE, CF, CG, CH, CP, CJ, CK, CL, CM, CN, CQ, CX, DA, DB, DX, EA, EB, EC, ED, EF, EG, EH, EJ, EK, EL, EM, EN, EP, EQ, ER, ES, ET, EU, EY, EZ, FA, FB, FC, FD, FE, FG, FX, GE, GG, GP, GM, GS, GN, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HJ, KA, KB, KC, KD, KE, KF, KG, KH, KJ, KK, KL, KM, KN, KP, KQ, KR, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LK, LM, LP, LQ, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MJ, MK, ML, MN, MP, MZ, NA, NB, NC, ND, NM, NN, NP, NS, NZ, PA, PB, PC, PD, PF, PG, PH,

*Handwritten notes:*

- 2A-2L, 3A-3G, 4A-7A, 7B-9A, AV-AS, AS-AY, BA-BX, CA-CX, DA-DX, EA-EH, EJ-EQ, ER-EZ, FA-FX, GE-GZ, HA-HJ, KA-KZ, LA-LZ, MA-MZ, NA-NP, NS-NZ, PA-PH*
- from prod. trans* (next to CA-CX)
- from equip* (next to EA-EH)
- from equip* (next to ER-EZ)
- from equip* (next to MA-MZ)
- from equip* (next to NA-NP)
- from equip* (next to PA-PH)



*alred*  
*con...*  
*de...*  
*prod...*  
*2...*  
*su...*  
*of*  
*prod...*

PJ, PX, PZ,  
 QA, QB, QC, QD, QE, QF, QG,  
 QH, QJ, QKQZ,  
 RA, RB, RC, RD, RE, RF, RG,  
 RZ,  
 SA, SB, SX,  
 VA, VB, VC, VD, VE, VX, VY,  
 ZA, ZB, ZC, ZD, ZE, ZK.

4	14	Item code (1D)	A	D	A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, T, U, X, Z.
			N	C	1 to 9
5	15	Unit	A	D	Q, L, C, S, M, K, N, A, H.
6	16 to 21	Goods/Services out (Quantity)	N	C	0 to 999999
7	22 to 28	Money value in (value)	N	C	0 to 9999999
8	29,30	Account paying money value	N	C	02 to 99
9	31,32	Item code (2D)	B	D	02 to 99

*1008*  
*sh*  
*flam*  
*1000*  
*cash ext.*

*animal products*

*wastock*

1A  
 2A, 2B, 2C, 2D, 2E, 2F, 2G  
 2H, 2J, 2K, 2L.  
 3A, 3B, 3C, 3D, 3E, 3F, 3G  
 4A, 4B, 5A, 5B, 6A, 6B, 7A,  
 7B, 8A, 8B, 8C, 8D, 9A.  
 AC, AD, AF, AG, AM, AP, AS,  
 AW, AX, AY,  
 BA, BB, BC, BD, BE, BF, BG,  
 BH, BL, BS, BX  
 CA, CB, CC, CD, CE, CF, CG,  
 CH, CP, CJ, CK, CL, CM, CN,  
 CQ, CX  
 DA, DB, DX  
 EA, EB, EC, ED, EF, EG, EH,  
 EJ, EK, EL, EM, EN, EP, EQ,  
 ER, ES, ET, EU, EY, EZ,  
 FA, FB, FC, FD, FE, FG, FX,  
 GE, GG, GP, GM, GS, GN, GZ  
 KA, KB, KC, KD, KE, KF, KG,  
 KH, KJ, KK, KL, KM, KN, KP,  
 KQ, KR, KZ,  
 LA, LB, LC, LD, LE, LF, LG,  
 LH, LK, LM, LP, LQ, LZ,  
 MA, MB, MC, MD, ME, MF, MG,  
 MH, MJ, MK, ML, MN, MP, MZ,  
 NA, NB, NC, ND, NM, NN, NP,  
 NS, NZ,  
 PA, PB, PC, PD, PF, PG, PH,

						PJ, PX, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QJ, QKQZ, RA, RB, RC, RD, RE, RF, RG, RZ, SA, SB, SX, VA, VB, VC, VD, VE, VX, VY, ZA, ZB, ZC, ZD, ZE, ZK.
10	33	Item code (1D)	A	D	A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R, S, T, U, X, Z.	
			N	C	1 to 9	
11	34	Unit	A	D	Q, L, C, S, M, K, N, A, H	
12	35 to 40	Goods/Services in (quantity)	N	C	0 to 999999	
13	41 to 47	Money value out	N	C	0 to 9999999	
14	48,49	Distance in miles	N	C	0 to 99	
15	50	Partner code	N	C	1 to 9	
16	51,52	Kinship and caste sub-code	B	D	D1, D2, E1, E2, F1, F2, G1, G2, H1, H2, J1, J2, K1, K2, L1, L2, M1, M2, N1, N2, P1, P2, Q1, Q2, R1, R2, S1, S2, T1, T2, U1, U2.	

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## VLS-Y Plot and cultivation Schedule

Field No.	Description	A/N/B	D/C	Possible Data
1	2	3	4	5
1	✓ Village code	A	D	A,B,C,D,E,F,G, H,J,K
2	✓ Card code	A	D	Y
3	✓ Land holding class	A	C	0 to 3
4	✓ Household number	N	C	1 to 99
5	Main plot code	A	D	A,B,C,D,E,F,G, H,J,K,L,M,N,P, Q,R,S,T,U,V,W, X,Y,Z
6	Sub-plot code	A	D	-do-
7	Sub-sub-plot code	A	D	-do-
8	Total Area	N	C	0 to 999
9	Cultivated area	N	C	0 to 999
10	Irrigated area	N	C	0 to 999
11	Irrigation source code	N	C	1 to 6
12	Soil type	N	C	0 to 9
13	Land ownership status	A	D	A,B,C,D,E,F,G, H,K,L,P,Q,R,T, S
14	Land value per acre	N	C	0 to 999
15	Revenue rate	N	C	0 to 999
16	No. of records	N	C	0 to 999
17	Serial number	N	C	0 to 999
18	Year	N	C	75 to 84
19	Day of operation	A	D	1 to 366

20	Season	A	D	K to C
21	Operation code	A	D	A,B,C,D,E,F,G,H,J,K, L,M,N,P,Q,R,S,T,U,X, Z.
22	Human & Bullock Labor	A	D	OB,HB,EB,FM,FF,FC,HM, HF,HC,EM,EF,EC,RM,RF, RC.
23	Hours used	H	C	0 to 999
24	Value	N	C	0 to 999
25	Input (type code) seed	B A	C D	CA,CB,CC,CD,CE,CF,CG, CH,CJ,CK,CL,CM,CN,CP, CX,BA,BB,BC,BD,BE,BF, BG,BX,DA,DB,DX,SA,VA, VB,VC,VD,VE,VX,VY,FA, FB,FC,FD,FE,FG,FX,ZC.
	Machinery	A	D	MA,MB,MC,MD,ME,MF,MG, MH,MJ,ML,MN,MP,MZ
	Fertilizer	A	D	A,B,C,D,E,F,G,H,J,K, L,M,N,P,Q,R,S,T,U,X, Z.
	Manure	N	C	1 to 8
	Insecticides	N A	C D	1 to 9 A,B,C,D,E,F,G,H,J,K, L.
26	Unit	A	D	K,L,Q
27	Quantity	N	C	0 to 999
28	Value	N	C	0 to 9999
29	Source	N	C	1 to 9
30	Outputs Main and by products (type code)	A	D	CA,CB,CC,CD,CE,CF,CG, CH,CJ,CK,CL,CM,CN,CP, CX,PA,PB,PC,PD,PX,BA, BB,BC,BD,BE,BF,BG,BX, DA,DB,DX,SA,VA,VB,VC, VD,VE,VX,VY,FA,FB,FC, FD,FE,FG,FX,ZA,ZB,ZC, ZD.

31	Unit	A	D	K,O
32	Main product (Quantity/Kgs)	N	C	0 to 9999
33	Output value (Main nd by product)	N	C	1 to 99999
34	Main crop	A	D	CA, CB, CC, CD, CE, CF, CG, CH, CJ, CK, CL, CM, CN, CP, CX, PA, PB, PC, PD, PX, BA, BB, BC, BD, BE, BF, BG, BX, DA, DB, DX, SA, VA, VB, VC, VD, VE, VX, VY, FA, FB, FC, FD, FE, FG, FX, ZC, ZD.
35	Second crop	A	D	-do-
36	Third crop	A	D	-do-
37	Fourth crop	A	D	-do-
38	Fifth crop	A	D	-do-
39	More than five crops	N	C	1

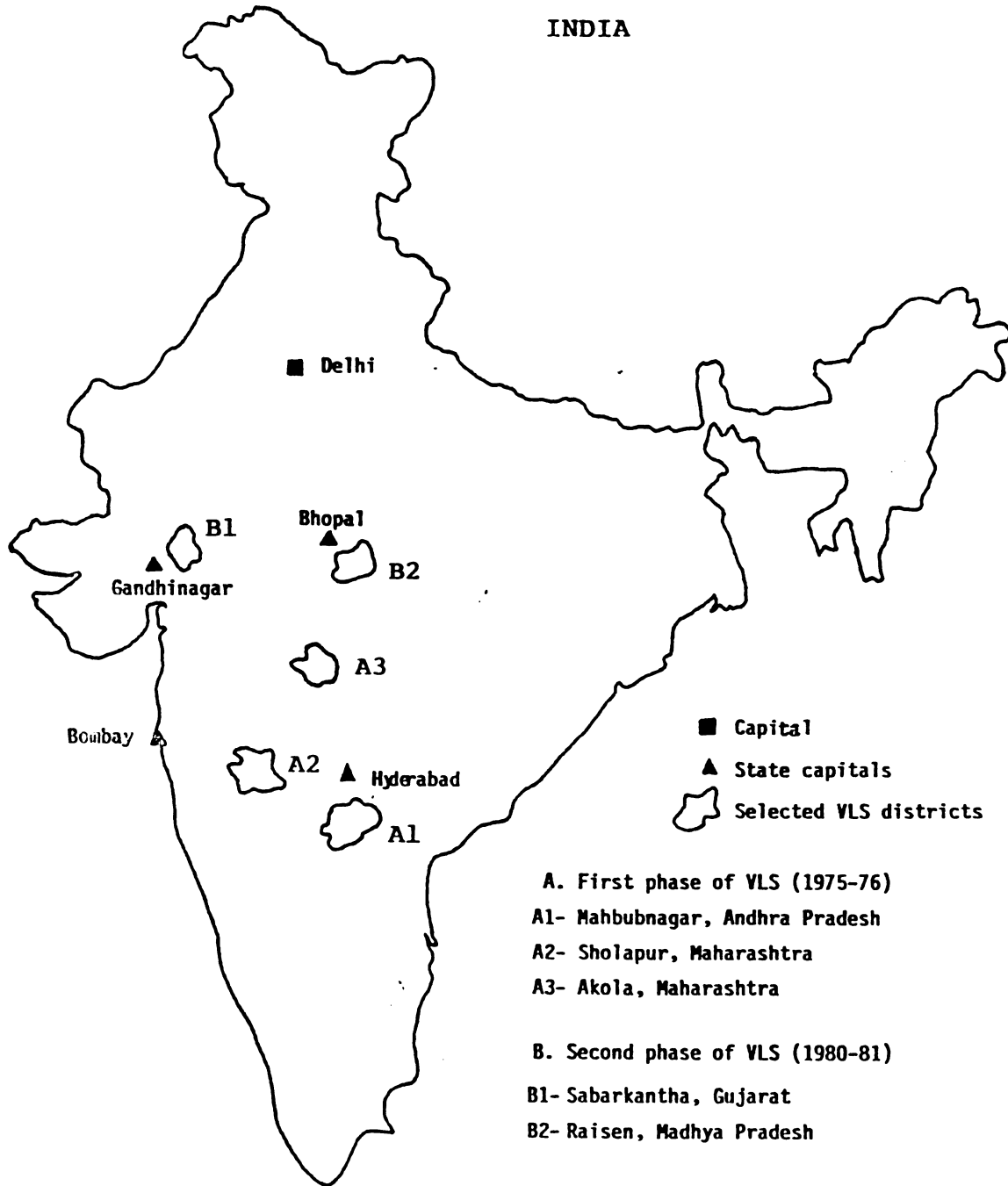


Figure 1. Location of the five study regions.

Figure 2. ICRISAT VILLAGE STUDIES DATA MANAGEMENT SYSTEM

