INTEGRATING INTRA-HOUSEHOLD DYNAMICS INTO FARMING SYSTEMS PROJECTS

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Introduction

This paper is an initial report of a study designed to survey farming systems projects which include an intra-household focus in data collection, design and/or implementation. Farming systems models (Shaner, 1984) have recognized the importance of the household as a component of the farming system, but until recently, little has been done to systematically "open the black box" of the household component in those systems models. Projects responding to the survey being reported here are among those attempting to gain a more systematic undestanding of the inter- and intra-household factors influencing farming systems.

The primary purpose of the present survey is to assess the types of information collected and used by projects, the methods used for obtaining the information and some insight into how and why the intra-household information is helpful. In addition, projects are asked to identify types of information they wish they did have, but which is not available, and the constraints affecting various phases of their project.

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Rationale

This study evolved from on-going work to relate household concerns to farming systems work. When the Farming Systems Support Project was first initiated, a family task force was organized to focus on the integration of household and family concerns into the farming systems perspective. One of the recommendations of this group was to develop case studies and training materials which would promote such integration.

In a position paper on "Intra-household Dynamics in Farming Systems Research: The Basis of Whole Farm Monitoring of Farming Systems Research and Extension," Cornelia Butler-Flora set the stage for an intra-household dynamics and farming systems case studies project which was subsequently funded and implemented. The survey being reported in this paper will hopefully provide supplementary information to the case studies being developed.

Concurrent with the effort to develop materials for training about and sensitization to intra-household factors and their importance in farming systems work, as well as other development efforts, there is a need to become more knowledgeable about the kinds of data currently being collected by existing projects in attempts to focus on intra-household factors, and the methods being used to collect the data. As we seek to recognize the complexity of household dynamics, it is necessary to also recognize the practical necessity of finding ways to obtain and analyze information within reasonable time and other resource limits. Questions about how much information, about which aspects of the household should be obtained from whom have yet to

be answered (Norem, 1983).

This is not to suggest that one "right" way of focusing on household dynamics and farming systems can be identified. Rather it is to suggest that by examining what is being done, and how effective researchers and practitioners involved find current efforts, perhaps some guidelines can be identified which will be helpful in future planning. This paper is an attempt to begin such a systematic assessment.

It may be helpful to think in terms of differences about which units related to the household are important for which purposes. Overall, the unit of interest in intra-household dynamics is the household. The unit of data collection can be one or more household members, other informants and other existing information. The unit of analysis can be an individual, the household or subsystems thereof, work group, or the farming system among other possibilities. Designing parsimonious data collection and analysis procedures requires an understanding of how these units relate in various situations.

For example, it may be possible to obtain good data on the unit of interest from only one person if what is required is basic demographic information such as age, gender and education of household members. The household is also the unit of analysis in this example. Information about the tasks performed in the household as a unit of interest is more likely to require data collection from more than one person, or extensive observation or record keeping in order to permit the

collection of enough information to focus on the household as a unit of analysis. As we develop a clearer picture of the state of the art as it now exists, it is hoped a clearer set of guidelines will evolve. The initial survey summary presented in this paper is a first step.

Design of the study

The Farming Systems Support Project and Population Council Intra-household Dynamics and Farming Systems Case Studies project was initiated with support from USAID and the Ford Foundation in late 1984. In February of 1985, a request for expressions of interest was sent to projects and individuals on a variety of international mailing lists. Over 75 expressions of interest were received in response to the request. These expressions of interest were used to develop initial lists of types of data and data collection methods being used in projects. These lists were in turn used in conjunction with the case studies project conceptual framework to draft a survey questionnaire. The questionnaire was reviewed by the case studies project advisory committee and revised according using suggestions of the committee.

The questionnaire (see Appendix A) was mailed to all projects who had responded to the original request for expressions of interest in the case study project, since those projects self-selected themselves in terms of interest in intra-household concerns. A few other projects were also included in

the survey. Because of the short period of time since the questionnaires were mailed, the summary being reported in this paper only includes 17 projects. More responses are being received and will be included in a later revision of the paper. All questionnaires received are included in the summary, regardless of type of project. Most are farming systems oriented, with one project being specifically focused on women in farming systems. Seven projects from Asia, 6 from Africa, two from the Middle East and two from Latin America are included. The titles and identifying information about the projects are presented in Table 1.

(insert Table 1 about here)

Each project has a different specific target group, but all projects have target groups of farms with multiple crop systems. Fourteen projects report farms in their project also have livestock, most for multiple use, including cash income, food, traction, wealth and prestige. The average land holdings for farmers in the projects ranged from .89 hectares to 30 hectares, with an overall mean of 9.74 hectares.

Results

Types of intra-household data

Each project was asked to indicate whether or not they have data about five general categories: (1) demographic information, (2) household member's participation in activies, (3) household member's access to production resources, (4) household member's

participation in decision-making and (5) income and expenditure data, benefits from farm production, food consumption and nutrition. Each of these categories include several specific kinds of data. Table 2 presents the information for each type of data, indicating the number of projects which collected each type.

(insert Table 2 about here)

Table 3 summarizes the ways each type of information was used or is being used by the projects which responded to the survey.

(insert Table 3 about here)

Demographic information.

The most frequently used methods for obtaining demographic information are pre-existing national surveys, formal project surveys, participant observation and sondeos. This information is summarized in Table 4 for all types of data. In addition to the most commonly used methods, other methods are used by from 2-4 projects in the survey. Demographic information is also available through pre-existing anthropological studies and local village records for some projects. Other projects collected information through farmer records, community informants, time allocation studies, team members personal knowledge and in-depth case studies.

Nine projects collected demographic data before the project began, 5 during the diagnosis stage and 7 parallel with on-farm testing. Ten projects collect demographic data on an on-going

basis.

All projects report collection of demographic data involving household structure, membership and size. Most also have information about education and ethnic identity. Migration patterns and variation in household structure over the life cycle are included by 7 and 6 projects respectively. When the patterns of utilization of demographic information are examined, it is apparent that demographics are important in the early planning stages of projects. Respondents were asked to identify the most helpful information for each type and to give an explanation of how or why the information is helpful to their project. They were also asked to indicate any information in each type of information that they did not have but wish they did. These open-ended questions provide more detail related to intra-household concerns than the tabulated results shown in the tables.

The specific demographic information identified as most helpful to a project varies according to project as one would expect. However, some generalizations can be made. Gender and age structure of the household is mentioned by several respondents, sometimes singlely and sometimes in conjunction with other information such as labor and income. The information is useful in identifying target groups and designing trials which consider labor bottlenecks and total household activity patterns. Household structure is also reported as an important

consideration in designing extension efforts. Ethnic information is second most frequently mentioned as the most helpful demographic information, because farming practices and values about female participation vary according to ethnicity.

The two kinds of demographic information least often available, migration patterns and variation in household structure over the life cycle are also the most frequently named in response to the question "Are there demographic data you do not have that you wish you had collected?".

Household member's participation in activities

Formal surveys, participant observation and community informants are the most frequently used methods to obtain information about the participation of household members in various activities. (see table 4). As with demographic information, there is considerable variety in the ways projects obtain this information. All of the methods listed above for demographic information are used by at least one project to obtain activity data, with the addition of group meetings as a source of information about household member's activities.

Three projects collected activity data before the project began, 5 during initial diagnosis, and 6 parallel with on-farm trials. Nine projects collect activity data on an on-going basis.

Specific questions were asked about type of activity data collected and method of dissagregation. Ten projects collected

task assignment data, disaggregated by gender and age. Seven projects disaggregate by position in the household as well. Four projects have information about time allocation.

Eleven projects report collecting some information about the participation of household member's in various activities. Most frequently (N=11) collected information is about activities related to production of cash crops, with subsistance crops and livestock production information available for 10 out of 17 projects. Other activities within the household receive less attention as indicated in table 2. Table 3 indicates that activity data are used less often by projects than demographic data. Assessing time and labor constraints is the most frequent use of activity data.

Respondents report household member's activity information most helpful for decisions about designing research and targeting interventions especially in terms of labor constraints. They wish their projects had more detailed information about non-production activities and several respondents express a desire for activity data which cover a period of time up to a year. The complexity of activity data is pointed out and difficulties with processing such data are mentioned.

Household member's access to production resources

This study breaks production resources into sub-categories of land, labor, capital, innovations and credit. The projects represented use a variety of methods to obtain resource

information; the most frequent are pre-existing national surveys, project-conducted formal surveys, participant observation and team members personal knowledge.

Six projects collected access to resources data before the project began, 7 during initial diagnosis and 7 parallel with on-farm trials. Five project collect these data on a on-going basis.

As indicated in table 2, this category of information about households is available for most projects. Fourteen of the 17 projects have some resource information. However, examination of table 3 suggests that the use of this information is somewhat more limited than for demographic data in terms of actual number of projects. Resource information is used by more projects for a variety of purposes than activity data, but more projects report use of activity data overall.

The answers to questions about the most useful resource data and why and how it is useful indicate land resource information is perceived as most helpful for more projects than other kinds of resource data, but the responses also indicate the usefulness of resource access data is very project specific. Access to resources data is likely to be helpful in research design and selection of field trial locations. There is a pattern among responses about the kind of resource information respondents would like to have had but which was not available. More information is wanted about monetary income, including gifts and

remittances is mentioned in several contexts, including credit, opportunity costs for innovations and access to captial.

Household member's participation in decision-making

Twelve projects in the survey have some data about decision-making within households. These data are collected most frequently through formal surveys, team member's personal knowledge and participant observation. Other methods are used, but in a project specific manner. Only two projects report having decision-making data to use in initial project design. One project collected decision-making data during the intial diagnosis, and four parallel with on-farm trials. Six projects collect decision-making data on an on-going basis.

Table 2 indicates that the projects which have decision-making data have information about most of the categories identified, land use, labor use, technology use, cropping and cultivation practices and use of production outputs. Table 3 suggests that projects are not using decision-making data extensively. Seven projects use decision-making data to assess time and labor constraints, and this is the most frequent use reported.

Responses to open-ended questions about the usefulness of decision-making data are general, in terms of a better understanding of household dynamics permitting more knowledgeable identification of target groups. Seven respondents indicate their projects could use more detailed decision-making data which

would allow them to know more about the effect of decision patterns.

Income and expenditure, benefits, food consumption and nutrition

Six projects have information about this category of data. Formal surveys and participant observation are the most common methods of obtaining the information. There are some differences among the sub-categories, however. Participant observation is most likely to be the source of information about food consumption and nutrition information, and is not as likely to be a source of production benefits data but formal surveys are used by several projects for all three sub-categories.

Only one project had data from this category before the project began. Three projects collected the data during the initial diagnosis, 4 parallel with on-farm testing and 8 collect the information on an on-going basis.

Table 2 tells us that 10 projects have information in at least one of the three sub-categories represented in this section. Income and expenditure data are least frequently available as a sub-category. Table 3 shows a fairly equal distribution of the use of specific kinds of available data in this category over the various phases of the projects, especially in the design and implementation of field trials.

Since there are 3 sub-categories in this section, the answers to questions about which information is most helpful and

why and how, are somewhat complex, but they also point out the need to integrate information about overall production and consumption patterns in the household. For example, respondents mentioned the importance of looking at off-farm income, cash income from food crops and understanding the reliance on the local markets both for food and income as well as the need to assess the opportunity costs of innovations based on total inputs and total income generating possibilities.

The response to the question about information which the project did not have but wish they had was primarily better income data, monitored over time, by household member. Several respondents mention the difficulty in obtaining reliable income data, but indicate they believe it is important to find better ways of obtaining such information.

Other information

Respondents were asked to identify any other kinds of intra-household data they have which were not included in the previous 5 sections. There are few responses to this section. Table 3 indicates how the data are used and the footnote points out the kinds of information included. These are religious information, inheritance data and information gathered from both husband and wife together.

Most effective methodologies

Respondents were asked to select the study or activity of their project which was most effective in collecting information

about intra- inter-household variables relevant to farm production and which were most useful in determining project decisions concerning research priorities, cooperating farmers, technology acceptance, etc. Nine respondents name the formal survey as most helpful. This is usually done at the beginning of the project. Eight respondents identify participant observation as the most useful activity for obtaining household information. This tends to be on-going. Three respondents name the sondeo as most useful. The sondeo took place anywhere from the beginning to the third year of the project. Ten respondents report the head of household as the primary informant, whether male or female. Six projects tried to include at least one other adult household member. Three relied on whoever was at home with a preference for the head of household. One case study involved all members of the household.

Constraints to projects

Respondents were asked to identify constraints which effected the study design, sample selection, conduct of the study, data analysis or applications of the data to their project or activity. These responses are summarized in table 5. Ten projects report physical, logistical or resource constraints on sample selection for their projects. According to the detailed information provided in open-ended questions about how these factors are constraining, the most common constraint is transportation, either in terms of availability of transportation means or because of difficulties related to terrain.

In order of decending frequency, other constraints which are mentioned are funds, language, personnel, a political situation, and ethnic group considerations. In many instances the constraints are named in conjunction with one another, such as ethnic concerns and language difficulties.

Summary

Since the survey results presented in this paper are preliminary, any summary must be considered tentative. However, some points can be made at this stage. First, there is a wide variation in the kind of data being collected about households, with a common focus on the household as a unit of interest. The data are most often collected from heads of households, so for some kinds of data there may be difficulty in using the household as a unit of analysis. For example, decision-making data try to describe a dynamic intra-household process but process data involving several household members probably require complex data collections procedures. It is important to examine alternatives in context of which information is important for which stage of a project and how it may be obtained as efficiently as possible. One respondent pointed out the difficulty in designing more standardized methods of data collection and analysis because of the unique aspects of any given project, but also emphasized that anything that can be done to move in this direction will save significant resources and hopefully eliminate the need for each future project to make the same mistakes.

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Table 1. Projects responding to survey

Region/ Country	Project Title	Source of Funds	Contractor and Unit in Charge
Asia			
Indonesia	TROPSOILS Soil Management CRSP	USAID	University of Hawaii with Univ. of North Carolina & Center for Soils Research
Philippines	Farming Systems Development Project Eastern Visayas now-Farm & Resource Management Institute	USAID	Ministry of Agriculture and Food and the Virginia State University
Nepal	Agricultural Research & Production Project Farming Systems Research & Development Division	USAID	Winrock, Int'l. Ministry of Agriculture, Dept. of Agriculture
Bangladesh	Women in Farming Systems	Bangladesh Agri. Research Council	Bangladesh Agricul-cultural Uiversity
India	Role of Farm Women in Decision Making Related to Farm Business	Haryana Agri. University	Haryana Agricultural University
Philippines	Balinsasayao Agroforestry Project	Ford Foundation	Silliman University Research Center
Philippines	Farming Systems Development Project Eastern Visayas now-Farm & Resource Mgt. Institute	USAID	Cornell University Ministry of Agriculture & Food & the Visayas State College of Agriculture

Table 1. continued.

Region/ Country	Project Title	Source of Funds	Contractor and Unit in Charge
Africa			
Burkina Faso	Fulbe Agropastoral Production in Southern Burkina Faso-for USAID Ag. Sector Grant	USAID	Frederick Sowers University of California, Berkeley
Burkina Faso	Income & Agricultural Investment in a Bobo Village	NSF, Wenner-Gren Foundation, Univ. of Illinois	University of Illinois
Sierra Leone	Adaptive Crop Research & Extension Project (ACRE)	USAID & Gov't. of Sierra Leone	Southern Ill. Univ., Louisiana State Univ. Ministry of Agriculture & Natural Resources
Ghana	REDECASH/BIRD Minimum Tillage Techniques for Cowpea Production	BIRD & REDECASH	Bureau of Integrated Rural Development (BIRD)
Botswana	Agricultural Technology Improvement Project	USAID	Midwest Int'l Agricultural Consortium (MIAC) Kansas State Univ.
Kenya	Dryland Farming Research & Development	Kenya Gov't, FAO/UNDP	Ministry of Agri. National Dryland Farming Research Station

Table 1, continued

Region/ Country	Project Title	Source of Funds	Contractor and Unit in Charge
Middle East			
Israel	Irrigation Innovation and Family Farming Strategies in Israel	City Univ. of New York, Faculty Research Grant	n.a.
Syria	Syrian Households: Women's Labor & Impact of Technologies	ICARDA & NEAWARDS	Andrea Rassam
Latin America			
Mexico	Livestock Production Systems in Central State of Veracruz	Universidad Nacional Autonomo de Mexico (UNAM)	Centro de Investigacion Ensenanza en Granaderia Tropical (CIEEGT) Facultad de Medicina & Zootechnia UNAM
Honduras	Honduras Agricultral Research Project	USAID	Consortium for International Development, New Mexico State University

Table 2. Types of intra-household data collected by projects responding to survey

Type of Information (N=17)	No. of projects with information
Demographic information	
a. household structure, membership & size	16
b. education	15
c. ethnic identity	15
d. migration patterns	7
e. variation in h. h. structure over the life cycle	6
Household member's participation in activities	
a. cash crops by crop	11
b. subsistance crops by crop	10
c. livestock production	10
d. other primary income generating activities	7
e. major tasks of household reproduction	9
Household member's access to production resources:	
Land	
a. in general	11
b. by tenure category	9
c. by production potential (e.g. irrigated, non-irrigated)	6
Labor	
d. family	11
e. hired	13
f. exchange	10
Capital	
g. seeds	12
h. tools	13
i. equipment	14
j. animals	13
Innovations or improved production inputs	
k. information (extension contacts, training, etc.)	12
l. technology inputs requiring cash or credit	8
Credit	
m. informal	11
n. formal	10
o. other	1

Table 2. continued.

Type of Information (N=17)	No. of projects with information
Household member's participation in decision-making related to:	
a. land use	11
b. use of family labor	12
c. use of hired labor	10
d. use of exchange labor	8
e. use of technology inputs	13
f. use of credit	11
g. cropping choices	12
h. cultivation practices	12
i. uses of harvested crop & residue	12
j. marketing	11
Income and expenditure data:	
a. each household member's sources of income	6
b. each household member's expenditures	6
Benefits from farm production:	
a. use of end products from crop production	10
b. desirable characteristics of each crop or crop product	7
c. each household member's access to or control of end products	5
Food consumption and nutrition information:	
a. diet survey	4
b. nutritional adequacy analysis	4
c. food preparation practices	5
d. food preferences	6
e. on-farm household food production	6

Table 3: Use of types of intra-household data by projects responding to survey

Use of information	No. of projects reporting use of information by type of information*: N=17					
	Type 1	2	3	4	5	6**
initial project design	10	4	5	3	3	-
selection of a target group	10	3	8	3	4	-
identification of recommendation domains	4	4	5	1	4	-
choice of research topic	7	6	8	3	6	-
designing trials	6	4	6	3	4	-
selection of participating farmers for field trials	6	5	6	2	4	3
evaluation of field trials	2	3	6	1	4	2
redesign of trials	2	5	5	5	4	2
technology recommendations	7	4	4	3	6	2
extension efforts	6	3	4	5	4	-
project evaluation design	4	1	3	-	2	1
assessing time and labor constraints	12	10	6	7	1	1
assessing opportunity costs for innovation	6	4	4	2	2	-

*Type 1=demographic information, Type 2=household member's participation in activities, Type 3=household member's access to production resources, Type 4=household member's participation in decision-making, Type 5=income and expenditure data, benefits from farm production, food consumption and nutrition, Type 6=other.

**Other kinds of information collected include religious affiliation, inheritance data and information gathered from husband and wife together.

Table 4. Most frequently used methods of data collection by type of data

Type of data	Data collection method
demographic information	national surveys formal surveys participant observation sondeo
household member's participation in activities	formal survey participation observation community informants
household member's access to production to production resources	national surveys formal surveys participant observation
household member's participation in decision-making	formal survey team member's personal knowledge participant observation
income and expenditure data, benefits from farm production, food consumption and nutrition	formal surveys participant observation

Table 5. Constraints influencing projects

Phase of project	Type of constraint: physical, logistical, resource	Type of constraint: cultural, social, political
study design	N*= 8	N*= 5
sample selection	10	3
conduct of study/activity	6	6
data analysis	6	1
application of data to project/ activity	2	-

*number of projects reporting constraint, total N-17

APPENDIX A

INTRA-HOUSEHOLD DYNAMICS IN FARMING SYSTEMS RESEARCH
FSR Project Survey

I. General Information

Project Title_____

_____

Country_____ Region_____

Funded by _____

Contractor_____

Contractor's address_____

Government agency or University in charge_____

_____

Name of person(s) completing form_____

Position in project_____

Please define your target group in specific terms other than small, resource poor, subsistence, rainfed, etc. (i.e. what is really meant by small or resource poor in your area?)_____

_____

Are one or more of the following included in the target group?

Please check all that apply

a. households capable of producing most of what the family eats
   yes____ no____
b. producers oriented toward the market yes____ no____
c. households who rely on remittances from wage labor to finance farm/household yes____ no____
d. households who rely on hired labor to do work on the farm
   yes____ no____
e. female-headed households yes____ no____
f. inter-household work groups yes____ no____

What is the average farm size for your target group?_____

What are the main crops produced?_____

(Please go on to the next page)

Is livestock a factor in the farming systems for your target group? yes____ no____

If yes, how? check all that apply cash income____ food____ traction____ wealth____ other (please specify)_____

Local professional staff involved in project (including administration). Note number.

BS____; MS____; PhD____; Non-degree____; Men____ Women____

Number in plant science____; animal science____; economics____; other social science____; extension____

Define the study region in geographic terms: (i. e. location, size, distance between farthest experimental farm sites in kms. and between sites and headquarters)_____
Numbers of field site locations (not individual farmer plots)
_____
What factors influence the choice of field site locations?

	Strong	Moderate	Nil
Political	______	______	______
Production potential	______	______	______
Equity	______	______	______
Type of crops grown	______	______	______
Type of environment	______	______	______
Proximity to research station	______	______	______

Other (describe) _____
_____

II. Following is a list of types of information which may be part of intra or inter household information collected by FSR projects. These have been divided into six categories, based on a review of submissions of interest to the Intra-Household and Farmings Systems Case Studies Project. For each category, we are interested in whether your project has the information; if so, how the data were collected and how you have used or plan to use the data for your project.

Please respond in four ways to describe your project.

1. Check all types of information your project has available about household variables.

2. For those types of information your project has available, indicate the data collection method used to obtain the information.

3. Check all uses your project made or plans to make of each of the categories of data you have available.

4. Provide some more detailed information about the most effective and most useful study(ies) and/or activity(ies) of your project related to intra-/inter- household concerns.

25

(Please go on to the next page)

If there is a category of data which does not apply to your project, simply skip over that whole series of questions. For instance, if your project has no household activity data, go on to the section about access to production resources.

Types of information	Project has information	
1. demographic information		
a. household structure, membership and size	yes____	no____
b. education	yes____	no____
c. ethnic identity	yes____	no____
d. migration patterns	yes____	no____
e. variation in h.h. structure over family life cycle	yes____	no____

If you marked a "yes" for any of the above information categories, we are interested in how you obtained the information. For each category you marked "yes" please put that letter in front of the appropriate data collection method(s) listed below. For instance if you had information about household structure from existing national surveys and from a formal survey your project completed, you would put an "a" in front of those two methods listed below. List as many as you marked above.

1. Pre-existing secondary information
   _____ 1a. national surveys
   _____ 1b. anthropological studies
   _____ 1c. other specify)_____

2. Project conducted studies and activities
   _____ 2a. participant observation
   _____ 2b. rapid rural appraisal (sondeo)
   _____ 2c. formal survey
   _____ 2d. farmer records
   _____ 2e. community informants
   _____ 2f. time allocation studies
   _____ 2g. team members personal knowledge
   _____ 2h. group meetings
   _____ 2i. in-depth case studies
   _____ 2j. other specify)_____

(Please go on to the next page)

2b

Did you use demographic data including household information for any of the following? **Please check all that apply.**

initial project design	yes____	no____
selection of a target group	yes____	no____
identification of recommendation domains	yes____	no____
choice of research topic	yes____	no____
designing trials	yes____	no____
selection of participating farmers for field trials	yes____	no____
evaluation of field trials	yes____	no____
redesign of trials	yes____	no____
technology recommendations	yes____	no____
extension efforts	yes____	no____
project evaluation design	yes____	no____
assessing time and labor constraints	yes____	no____
assessing opportunity costs for innovation	yes____	no____

other (please specify) _____

Are there specific parts of the demographic information you have available which are most helpful to your project? yes___ no____

If yes, which are they?_____

_____

How are these data helpful to your project? _____

_____

When were the demographic data on households collected during the project? **(check all that apply)**

before project began, i.e. during project design
yes____ no____
during initial diagnosis stage yes____ no____
on-going yes____ no____ be specific about frequency
_____
parallel with on-farm testing yes____ no____
other (please specify) _____
_____

Are there demographic data which you do not have that you wish you had collected? yes____ no____

If so, which data do you wish your project had collected?

_____

(Please go on to the next page)

27

Now, please respond in the same manner to questions about the second category, household member's activities.

Types of information	Project has information
2. each household member's participation in activities related to:	
a. cash crops by crop	yes____ no____
b. subsistance crops by crop	yes____ no____
c. livestock production	yes____ no____
d. other primary income generating activities	yes____ no____
e. major tasks of household reproduction	yes____ no____
f. other (please specify)_____	

If you marked a "yes" for any of the above information categories, we are interested in how you obtained the information. For each category you marked "yes" please put that letter in front of the appropriate data collection method(s) listed below. List as many as you marked above.

1. Pre-existing secondary information
   _____ 1a. national surveys
   _____ 1b. anthropological studies
   _____ 1c. other specify)_____

2. Project conducted studies and activities
   _____ 2a. participant observation
   _____ 2b. rapid rural appraisal (sondeo)
   _____ 2c. formal survey
   _____ 2d. farmer records
   _____ 2e. community informants
   _____ 2f. time allocation studies
   _____ 2g. team members personal knowledge
   _____ 2h. group meetings
   _____ 2i. in-depth case studies
   _____ 2j. other specify)_____

2B. What kind of activity information have you collected?
- task assignment disaggregated by gender____age____position in the household____ other (please specify)_____
- time allocation of individual household members
  yes____ no____

(if not available for all household members, please indicate who is included _____)

(Please go on to the next page)

28

Did you use household activity data for any of the following? Please check all that apply.

initial project design	yes____	no____
selection of a target group	yes____	no____
choice of research topic	yes____	no____
designing trials	yes____	no____
identification of recommendation domains	yes____	no____
selection of participating farmers for field trials	yes____	no____
evaluation of field trials	yes____	no____
redesign of trials	yes____	no____
technology recommendations	yes____	no____
extension efforts	yes____	no____
project evaluation design	yes____	no____
assessing time and labor constraints	yes____	no____
assessing opportunity costs for innovation	yes____	no____

other (please specify) _____

Are there specific parts of the household activity data you have available which are most helpful to your project? yes___ no____

If yes, which are they?_____

_____

_____

How are these data helpful to your project? _____

_____

_____

When were the household activity data collected during the project? (check all that apply)

before project began, i.e. during project design
yes____ no____

during initial diagnosis stage yes____ no____

on-going yes____ no____ be specific about frequency
_____

parallel with on-farm testing yes____ no____

other (please specify) _____
_____

Are there household activity data which you do not have that you wish you had collected? yes____ no____

If so, which data do you wish your project had collected?

_____

(Please go on to the next page)

The third category is about access to production resources.

Types of information	Project has information	
3. each household member's access to production resources:		
-land:		
a. in general	yes____	no____
b. by tenure category	yes____	no____
c. by production potential (e.g. irrigated, non-irrigated)	yes____	no____
-labor:		
d. family	yes____	no____
e. hired	yes____	no____
f. exchange	yes____	no____
-capital:		
g. seeds	yes____	no____
h. tools	yes____	no____
i. equipment	yes____	no____
j. animals	yes____	no____
k. others (specify)_____		
-innovations or improved production inputs		
l. information (extension contacts, training, etc)	yes____	no____
m. technology inputs requiring cash or credit	yes____	no____
-credit:		
n. informal	yes____	no____
o. formal	yes____	no____
p. other (please specify) _____		

(if not available for all household members, please indicate who is included _____)

If you marked a "yes" for any of the above information categories, we are interested in how you obtained the information. For each category you marked "yes" please put that letter in front of the appropriate data collection method(s) listed below. List as many as you marked above.

1. Pre-existing secondary information
   - _____ 1a. national surveys
   - _____ 1b. anthropological studies
   - _____ 1c. other specify)_____

2. Project conducted studies and activities
   - _____ 2a. participant observation
   - _____ 2b. rapid rural appraisal (sondeo)
   - _____ 2c. formal survey
   - _____ 2d. farmer records
   - _____ 2e. community informants
   - _____ 2f. time allocation studies
   - _____ 2g. team members personal knowledge
   - _____ 2h. group meetings
   - _____ 2i. in-depth case studies
   - _____ 2j. other specify)_____

(Please go on to the next page)

In cases where household members did not own or control resources did you collect information on the conditions of their access to resources? yes____ no____ If yes, how did you gain this information? _____

Did you use access to resources data including household information for any of the following? **Please check all that apply.**

initial project design	yes____	no____
selection of a target group	yes____	no____
choice of research topic	yes____	no____
designing trials	yes____	no____
identification of recommendation domains	yes____	no____
selection of participating farmers for field trials	yes____	no____
evaluation of field trials	yes____	no____
redesign of trials	yes____	no____
technology recommendations	yes____	no____
extension efforts	yes____	no____
project evaluation design	yes____	no____
assessing time and labor constraints	yes____	no____
assessing opportunity costs for innovation	yes____	no____
other (please specify) _____		

Are there specific parts of the access to resources data you have available which are most helpful to your project? yes___ no____

If yes, which are they?_____

_____

_____

How are these data helpful to your project? _____

_____

_____

When were the access to resources data collected during the project? **(check all that apply)**

before project began, i.e. during project design
yes____ no____
during initial diagnosis stage yes____ no____
on-going yes____ no____ be specific about frequency
_____
parallel with on-farm testing yes____ no____
other (please specify) _____
_____

Are there access to resources data which you do not have that you wish you had collected? yes____ no____

(Please go on to the next page)

If so, which data do you wish your project had collected?

_____

The fourth category is about decision making.

Types of information	Project has information
4. household member's participation in decision making related to:	
a. land use	yes____ no____
b. use of family labor	yes____ no____
c. use of hired labor	yes____ no____
d. use of exchange labor	yes____ no____
e. use of technology inputs	yes____ no____
f. use of credit	yes____ no____
g. cropping choices	yes____ no____
h. cultivation practices	yes____ no____
i. uses of harvested crop & residues	yes____ no____
j. marketing	yes____ no____
k. other (please specify)_____	

(if not available for all household members, please indicate who is included _____)

If you marked a "yes" for any of the above information categories, we are interested in how you obtained the information. For each category you marked "yes" please put that letter in front of the appropriate data collection method(s) listed below. List as many as you marked above.

1. Pre-existing secondary information
   - _____ 1a. national surveys
   - _____ 1b. anthropological studies
   - _____ 1c. other specify)_____

2. Project conducted studies and activities
   - _____ 2a. participant observation
   - _____ 2b. rapid rural appraisal (sondeo)
   - _____ 2c. formal survey
   - _____ 2d. farmer records
   - _____ 2e. community informants
   - _____ 2f. time allocation studies
   - _____ 2g. team members personal knowledge
   - _____ 2h. group meetings
   - _____ 2i. in-depth case studies
   - _____ 2j. other specify)_____

(Please go on to the next page)

Did you use household decision-making data for any of the following? Please check all that apply.

initial project design	yes____	no____
selection of a target group	yes____	no____
choice of research topic	yes____	no____
designing trials	yes____	no____
identification of recommendation domains	yes____	no____
selection of participating farmers for field trials	yes____	no____
evaluation of field trials	yes____	no____
redesign of trials	yes____	no____
technology recommendations	yes____	no____
extension efforts	yes____	no____
project evaluation design	yes____	no____
assessing time and labor constraints	yes____	no____
assessing opportunity costs for innovation	yes____	no____

other (please specify) _____

Are there specific parts of the decision-making data you have available which are most helpful to your project? yes___ no____

If yes, which are they?_____

_____

_____

How are these data helpful to your project? _____

_____

_____

When were the decision-making data collected during the project? (check all that apply)

before project began, i.e. during project design
yes____ no____
during initial diagnosis stage yes____ no____
on-going yes____ no____ be specific about frequency
_____
parallel with on-farm testing yes____ no____
other (please specify) _____
_____

Are there decision-making data which you do not have that you wish you had collected? yes____ no____

If so, which data do you wish your project had collected?

_____

(Please go on to the next page)

Category 5 is about income and expenditure data, benefits from farm production, food consumption and nutrition.

Types of information	Project has information	
5A. income and expenditure data:		
a1. each household member's sources of income	yes____	no____
a2. each household member's expenditures	yes____	no____
5B. benefits from farm production		
b1. use of end products from crop production	yes____	no____
b2. desirable characteristics of each crop or crop product	yes____	no____
b3. each household member's access to or control of end products		
5C. food consumption and nutrition information:		
c1. diet survey	yes____	no____
c2. nutritional adequacy analysis	yes____	no____
c3. food preparation practices	yes____	no____
c4. food preferences	yes____	no____
c5. on-farm household food production	yes____	no____
c6. other (please specify)_____		

If you marked a "yes" for any of the above information categories, we are interested in how you obtained the information. For each category you marked "yes" please put that letter in front of the appropriate data collection method(s) listed below. List as many as you marked above.

1. Pre-existing secondary information
   _____ 1a. national surveys
   _____ 1b. anthropological studies
   _____ 1c. other specify)_____

2. Project conducted studies and activities
   _____ 2a. participant observation
   _____ 2b. rapid rural appraisal (sondeo)
   _____ 2c. formal survey
   _____ 2d. farmer records
   _____ 2e. community informants
   _____ 2f. time allocation studies
   _____ 2g. team members personal knowledge
   _____ 2h. group meetings
   _____ 2i. in-depth case studies
   _____ 2j. other specify)_____

(Please go on to the next page)

34

Did you use income and expenditure data, benefits from farm production, and or food consumption and nutrition data for any of the following? **Please check all that apply.**

initial project design	yes____	no____
selection of a target group	yes____	no____
identification of recommendation domains	yes____	no____
choice of research topic	yes____	no____
designing trials	yes____	no____
selection of participating farmers for field trials	yes____	no____
evaluation of field trials	yes____	no____
redesign of trials	yes____	no____
technology recommendations	yes____	no____
extension efforts	yes____	no____
project evaluation design	yes____	no____
assessing time and labor constraints	yes____	no____
assessing opportunity costs for innovation	yes____	no____

other (please specify) _____

Are there specific parts of the income and expenditure data, benefits from farm production, and or food consumption and nutrition information you have avilable which were most helpful to your project? yes____ no____

If yes, which are they?_____

_____

_____

How are these data helpful to your project? _____

_____

_____

When were the above data collected during the project? **(check all that apply)**

before project began, i.e. during project design
yes____ no____
during initial diagnosis stage yes____ no____
on-going yes____ no____ be specific about frequency
_____
parallel with on-farm testing yes____ no____
other (please specify) _____
_____

Are there data from the above category which you do not have that you wish you had collected? yes____ no____

If so, which data do you wish your project had collected?

_____

(Please go on to the next page)

35

Finally, if there are types of household data which have not been included above and which your project collected, please indicate what those are in the space provided below and tell us how you obtained the information.

Types of information	Project has information
6. other types of information related to the household:	
data collection method_____	
data collection method_____	
data collection method_____	

Did you use data identified under number 6 for any of the following? Please check all that apply.

initial project design	yes____	no____
selection of a target group	yes____	no____
identification of recommendation domains	yes____	no____
choice of research topic	yes____	no____
designing trials	yes____	no____
selection of participating farmers for field trials	yes____	no____
evaluation of field trials	yes____	no____
redesign of trials	yes____	no____
technology recommendations	yes____	no____
extension efforts	yes____	no____
project evaluation design	yes____	no____
assessing time and labor constraints	yes____	no____
assessing opportunity costs for innovation	yes____	no____
other (please specify) _____		

Are there specific parts of the information identified under number 6 you have available which are most helpful to your project? yes___ no____

If yes, which are they? _____

_____

_____

How are these data helpful to your project? _____

_____

_____

(Please go on to the next page)

When were the above data collected during the project? (check all that apply)

before project began, i.e. during project design
yes____ no____
during initial diagnosis stage yes____ no____
on-going yes____ no____ be specific about frequency
_____
parallel with on-farm testing yes____ no____
other (please specify) _____
_____

Are there other data which you do not have that you wish you had collected? yes____ no____

If so, which data do you wish your project had collected?

_____

Now please select the study(ies) or activity(ies) of your project which were most effective in collecting information in intra- inter- household variables relevant to farm production and which were most useful in determining project decisions concerning research priorities, cooperating farmers, technology acceptance, etc. For this study or activity please answer the questions asked below and add any additional information which would be helpful to others engaged in this kind of research. If you have more than one study or activity which was particularly helpful, please fill out a sheet for each one.

This study/activity was:

most effective in collecting IHH information yes____ no____
most useful in project decision making, design, etc.
yes____ no____
both yes____ no____

Characterize the kind of study or activity: (sondeo, formal survey, participant observation, etc.)

At what point in the project was this study/activity undertaken?

How long did it last?

How frequently were farmers/households/groups surveyed/observed/ etc (once during the study, once a week, once a month, etc)?

Sample size _____
Percent of total population being studied _____

Sample selection criteria (please describe in detail)

Who designed the study?

(Please go on to the next page)

Who carried out the study? Please designate numbers carrying out the study? the number of men and women? their degrees, training, occupations or discipline speciality if applicable (e.g. extension agents, secondary school students, locally hired enumerators, etc.)?

What data were collected? Please describe as specifically as possible and if you like enclose a sample questionnaire, record sheet, etc.

From whom were data collected? (Head of household? whoever was at home? more than one member of the household? etc.)

Who collated and analyzed the data? How long did it take after the end of the data collection period?

How was the information gained from this study or activity used in the farming systems project?

Did physical, logistical, or resource constraints affect:
- -study/activity design yes____ no____
- -sample selection yes____ no____
- -conduct of study/activity yes____ no____
- -analysis of data yes____ no____
- -application of analysis to project activities yes____ no____

Please describe as specifically as possible.

Did cultural/social/political circumstances affect:
- -study/activity design yes____ no____
- -sample selection yes____ no____
- -conduct of study/activity yes____ no____
- -analysis of data yes____ no____
- -application of analysis to project activities yes____ no____

Please describe as specifically as possible.

Were any special measures taken to overcome any of the constraints listed above? If so, please describe.

Please add any additional comments concerning the means by which the study or activity was undertaken or its usefulness to the project.

Instructions for returning the questionnaire are on the following page. Thank you for your time and help.