

United States
Department of
Agriculture

National
Agricultural
Statistics
Service

January 2003



USDA

2002

Agricultural
Resource
Management
Survey (ARMS)

Phase III – Cost and Returns
Report

Interviewer's Manual

Chapter 1 - General

Purpose

Data collected in the Agricultural Resource Management Survey (ARMS) is the primary source of information to the U.S. Department of Agriculture on a broad range of issues about agricultural resource use and costs, and farm sector financial conditions. The ARMS is the only source of information available for objective evaluation of many critical issues related to agriculture and the rural economy.

The ARMS design is intentionally flexible to address policy relevant to resource use or financial issues and topics of current interest. For example, commodity versions are rotated every 5-6 years to focus on resource use and production costs for specific commodities.

ARMS/Census Consolidation

The responsibility for conducting the Census of Agriculture was transferred from the Department of Commerce to the Department of Agriculture on October 1, 1996. NASS is charged with the responsibility of conducting the Census within USDA.

Questionnaires for the 2002 Census of Agriculture are mailed to all farmers and ranchers in the U.S. to arrive on or about January 1, 2003. Respondents are mailed several reminder postcards over the next couple months to encourage reporting. Telephone follow-up is also conducted of selected non-respondents. Unlike most other NASS surveys which are voluntary, the Census is required by law.

The 2002 ARMS Phase III data collection takes place in February through mid-April of 2003. Since data collected on the ARMS and Census are somewhat similar, it seemed an unnecessary burden to ask farm operators to complete both complex surveys. Therefore, a combined questionnaire to collect both ARMS and Census data was created as was done for the 1997 ARMS/Census year.

Instead of receiving the Census questionnaire, operators sampled for ARMS Phase III will be personally enumerated using the combined ARMS/Census questionnaire. Completing this questionnaire will satisfy the mandatory Census reporting requirement and also provide the necessary information for the ARMS.

Data Collection Phases

Annually the ARMS collects production practices and cost of production data on selected commodities. The ARMS also collects detailed whole farm financial information from a representative sample of farms and ranches across the country. To accomplish this, the ARMS is conducted in three data collection phases. In many ways, the three phases can be viewed operationally as independent surveys. However, the power of the ARMS design is the data between phases are related and can be combined and analyzed as described above.

The initial phase, (Phase I), conducted from May through July, collects general farm data such as crops grown, livestock inventory, and value of sales. Phase I data are used to qualify (or screen) farms for the other phases.

The second phase (Phase II), is conducted from September through December. This phase collects data associated with agricultural production practices, resource use, and variable costs of production for specific commodities.

The final phase (Phase III), which is the focus of this manual, is conducted from February through April. Phase III collects whole farm finance and operator characteristics information.

Respondents sampled for the Production Practices and Costs Report (PPCR) in Phase II will be asked to complete a Phase III report to obtain financial, resource use, and cost of production data for the entire operation. It is vital that both the Phase II and Phase III questionnaires be completed for these operations. Data from both phases provide the link between agricultural resource use and farm financial conditions. This is a cornerstone of the ARMS design.

Uses of ARMS Data

Farm organizations, commodity groups, agribusiness, Congress, and the USDA use information from ARMS to evaluate the financial performance of farm/ranch businesses and to make policy decisions affecting agriculture. Specifically, the ARMS:

- gathers information about relationships among agricultural production, resources, and the environment. ARMS data provide the necessary background information to support evaluations of these relationships. The data are used to understand the relevant factors in producing high quality food and fiber products while maintaining the long term viability of the natural resource base.
- determines what it costs to produce various crop and livestock commodities, and the relative importance of various production expense items.
- helps determine net farm income and provides data on the financial situation of farm and ranch businesses, including the amount of debt. ARMS data provide the only national perspective on the annual changes in the financial conditions of production agriculture.
- provides the farm sector portion of the Gross Domestic Product (GDP) for the Nation. If ARMS data were not available, the Bureau of Economic Analysis (BEA) would have to conduct their own survey of farm operators to collect this data.
- helps determine the characteristics and financial situation of agricultural producers and their households, including information on management strategies and off-farm income.

In general, farmers benefit from ARMS data indirectly. They see the information through contact with extension advisors, in reports issued by State colleges and universities, in farm magazines, newspapers, and on radio or TV broadcasts. Most respondents probably do not realize the data come from the ARMS.

Farm/Ranch Income

Collecting farm/ranch production and expense data to develop an estimate of net farm income each year is necessary because both receipts and production expenses change as production and prices change and as farmers/ranchers use more or less of inputs such as fertilizers or chemicals. Since farmers/ranchers buy most of their inputs, data must be collected every year to obtain accurate estimates of annual expenses.

Throughout the year, the prices farmers receive for their commodities change in response to weather and any number of economic and other national or international events. The ARMS data are used daily to describe the impact these changes have on the financial health of different types and sizes of agricultural operations. The ARMS is the only national source of data available to evaluate and respond to these kinds of information needs.

Drought, flood, hail, insects or outbreaks of disease may impact specific geographic areas while the rest of the country is unaffected. Therefore, it is important to monitor the health of the agricultural economy by region, as well as by size and type of operation.

Numerous requests to USDA's Economic Research Service (ERS) are made from Congress throughout the year to characterize the financial position of various groups of farmers. ARMS data are the only means of answering many of these questions.

The USDA links receipts and expenses associated with the production and sale of agricultural commodities to measure profit or loss over a calendar year. Two measures of **NET** farm income are developed. First, a net cash income measure shows the difference between the cash earnings and expenses of the operation. Second, the estimate of net cash income is adjusted to show how depreciation and changes in the operation's crop and livestock inventory affect earnings.

Components of gross income, such as net rent received and custom or machine work, also change annually as cash and share rents adjust in response to market conditions or government programs. Custom work and machine hire are directly affected by weather and other natural events which are unpredictable. These income items are measured through the ARMS.

ERS publishes farm income estimates monthly in the Agricultural Outlook magazine and in the quarterly report on Agricultural Income Situation and Outlook, both of which are available by subscription. Summaries are available free of charge on the Internet.

Cost of Production

Congressional mandates exist for the development of annual estimates of the cost of producing wheat, feed grains, cotton, tobacco and dairy commodities.

To ensure accurate and reliable estimates, a comprehensive survey is needed to obtain data on production practices and the amounts of inputs used. Estimates of crop and livestock costs and returns provide a basis for understanding changes in the relative efficiency of crop and livestock production and the break-even prices needed to cover all costs. The ARMS provides the data needed to develop "enterprise" budgets showing costs and input use by size and type of farm in different regions of the country. An "enterprise" is the portion of a operation's resources devoted to producing a specific commodity.

Many operations have more than one enterprise, such as a wheat enterprise and a beef cattle enterprise. Enterprise inputs include machine operations, fertilizer, labor (both paid and unpaid), and irrigation.

The ARMS is designed so the whole farm production expenses, crop and livestock receipts, and organizational characteristics may be analyzed along with the individual enterprise costs of production.

Balance Sheets

Responses to ARMS questions about farm assets and debts are used to develop a balance sheet for the farm as well as to provide a variety of financial ratios for use in measuring financial performance.

Changes in the level of income earned affect rates of return and net worth. Purchases and sales of assets such as buildings, machinery and land, changes in their value, and any associated debt are very sensitive to changes in farm earnings and economic performance as well as to changes in the general economy. The balance sheet can change rapidly from one year to the next and can be adequately monitored only through data collected on an on-going basis.

Balance sheet analysis helps identify areas of poor financial performance and pockets of potential financial stress. The ARMS provides the data necessary to develop annual estimates of the farm operation's assets, debts, equity, capital gains, capital flows, and the rates of return to agricultural resources, and to determine how these items (and farm household finances) change from one year to the next.

Financial Situation

Annual information from the ARMS on receipts, expenses, debts and assets is needed to evaluate the financial condition of farm businesses. The Office of the Secretary of Agriculture, Congress, agricultural groups, and the public look to NASS and ERS for reliable, up-to-date information on the financial performance of farms/ranches by size, type and region.

Financial condition analyses involves the ability of an operation to pay bills as they come due. The ability of a farm business to meet financial obligations depends on the amount of debt owed by the farm and the amount of cash receipts and other income available to meet mortgage, interest and other obligations of the farm. Being able to pay operating costs and the interest and principal due on debts can change very rapidly because of drought, flood or other circumstances. With ARMS data, the extent and seriousness of financial problems facing farmers are assessed, including the likely consequences of recurring financial stress.

The 1996 Farm Bill includes a provision establishing the *Commission on 21st Century Production Agriculture*. This commission is charged with conducting a comprehensive review of effects of the Agricultural Market

Transition Act, the future of production agriculture, and the appropriate role of the Federal Government in production agriculture. ARMS data will be used by the Commission to address these issues.

Operator Household's Situation

Farm operators and their households are of special interest for policy purposes because they incur nearly all of the risks of farming and are directly impacted by government agricultural policies.

Most farms in the U.S. are organized along the traditional lines of one family, or one extended family, operating the farm. However, the largest producing farms are often operated by several partners or shareholders, each of whom receives a share of the profit (or loss) of the business. In addition, the majority of farms are small and, on average, lose money. Households operating small farms rely heavily on off-farm income. Thus, it is necessary to understand the complex relationships between the farm business and the farm household and between farm work and off-farm work to accurately describe U.S. agriculture today.

Farm/ranch operators and their households do not depend solely on income from the farm/ranch business. Off-farm work is critical to the financial well-being of many farm households. Past surveys have shown that:

- 90 percent of all farm households have at least one member who receives some off-farm income.
- 60 percent of all farm households had a member who earned income from off-farm wages or salary.
- more than half of farm operators have a non-farm occupation as their major occupation.
- only 20 percent of farm operator households received more income from the farm than off the farm.
- the average household income of farm operators is similar to the average income for all U.S. households.

Policy makers need to know that large numbers of farm households rely on off-farm employment. Local current economic conditions, coupled with the geographic isolation that often exists, pose serious obstacles for the farm

household which would like to maintain its farm lifestyle by earning more stable off-farm income. The ARMS is the only national data source that provides the type of information necessary to study these non-traditional financial conditions of farmers.

Use of ARMS Data for Parity Prices

ARMS information on farm expenses describes the relative importance of production inputs used by farmers. These data are used to update the prices paid index for commodities, services, interest, taxes and wage rates, known as the parity index. This index helps determine the parity price for over 100 agricultural commodities.

Parity prices have been a part of farm legislation for over 50 years. In 1938, the Agricultural Adjustment Act established that parity prices be computed for agricultural commodities.

Publication of ARMS Data

It is impossible for a market to operate efficiently without access to accurate and timely information. As with all USDA reports, everyone, from the smallest farmer to the largest agribusiness firm, has free and equal access to the results from this survey. This access to information allows farmers to stay on equal footing with agribusiness firms and others who market agricultural commodities.

New technologies make accessing information much easier and available to more people than ever before. Many farmers now have a computer and may access these data on the Internet. Internet access is also available at many public libraries. Reports and tables using ARMS data can be downloaded from the NASS and ERS World Wide Web home pages on the Internet.

The NASS home page address is: <http://www.usda.gov/nass>

The ERS home page address is: <http://www.ers.usda.gov>

NASS publishes two reports from ARMS. The first one is called Agricultural Chemical Usage - Field Crops. This report, from data collected in the 2002 ARMS Phase II, will be released in May 2003. The second report is the Farm Production Expenditures. The report, compiled from the 2002 ARMS Phase III will be released in July 2003. This report will show expenditures for the U.S., 10 farm production regions, 7 U.S. economic

sales classes, and U.S. crop and livestock farms. Most State offices use information from these two reports in preparing publications for their State.

ERS prepares several state, regional, and national reports using ARMS data. These reports show operating and financial characteristics by type of farm, and by income and debt/asset categories. The reports are available to NASS State Offices to include in State releases.

ERS publishes numerous reports using ARMS data including:

Annual Report to Congress on the Status of Family Farms

Farm Operating and Financial Characteristics

U.S. "Commodity" Production Costs and Returns

The Economic Well-Being of Farm Operator Households

Productivity & Efficiency Statistics

Financial Performance of U.S. Farm Business

Farm Business Economic Report

Farmers' Use of Marketing and Production Contracts

ARMS expense, income and financial data are used in the Farm Business Economics Report publication which includes the State and National financial summary and costs of production.

ARMS data are also used to develop USDA's quarterly Agricultural Income and Finance Situation and Outlook report.

Chapter 2 - Terms and Definitions

Enumerators working on the ARMS Phase III should be familiar with the definitions of the terms listed below. To gain the most benefit from training, enumerators should review the definitions of these terms before attending the State training workshop. The Appendix A of the *“Interviewer's Manual”* contains definitions of each of the terms below. A revised “NASS Terms and Definitions” was published in June, 2002 and should be provided by the State office.

Economic and Cost of Production Terminology

accounting, accrual	commodity, contract
accounting, cash	Commodity Credit Corporation (CCC)
acreage base	confidentiality
acreage, eligible contract	Conservation Reserve Program (CRP)
acreage, contract	conserving use
acreage, noncontract	contract
agricultural commodity	contract, delayed pricing
agricultural production	contract, forward
animal unit (AU)	contract, marketing
animal unit month (AUM)	contract, production
aquaculture	contract sale
area sample	contractee
assessed value	contractor
assessments	Cooperative State Research, Education, and Extension Service (CSREES)
assets	corporation
auction pool	cost of production
balance sheet	cover crop
barrel (bbl)	cropland
base acreage	crop rotation
BLM	cull
borrowing capacity	
call back	date, due
carryover	date, mailing
cash receipts	date, reference
cattle on shares	date, release
check-off	
commission charges	
commodity	

2002 Agricultural Resource Management Survey
Phase III - Interviewer's Manual

depreciation	double crop
direct sales	drip irrigation
discount	
editing	grazing association
EIN	grazing fee
Environmental Quality Incentives Program (EQIP)	greenhouse
equity	gross value
estate	harvested acres
expenditure	hay
expenses, capital	hedging
expenses, operating	herbicide
expenses, production	hired manager
	household
fallow	hundredweight (cwt)
farm	
farm, contract	idle land
farm, corporate	implement
farm, institutional	improvements
farm, noncontract	inaccessible
farmstead	income, gross farm
Farm Service Agency (FSA)	income, net cash farm
Federal Agriculture Improvement and Reform (FAIR) Act	income, net farm
feeder	income, non-farm
fertilizer	income, off-farm
field	input
financial health	input provider
finish	
flat	landlord
flexibility contract, 7-year	landlord, non-operator
production	landlord, operator
flexibility contract	liability
forage	liquidity
forward pricing	loan, marketing
free-of-charge	loan, marketing assistance
fringe benefits	loan, nonrecourse
futures market	
	market value
government program land	military time
grazing land association, public or industrial (PIGA)	Natural Resources Conservation Service (NRCS)
grazing allotment	net worth

nonresponse	ratio, parity
nursery	real estate
	refusal
oilseed crops	rent
on feed	rent, cash
	rent, share
operating arrangement	respondent
(1) individual	retired
(2) managed	
(3) partnership	salary
operator	sample, list
orchard	sample, multi-frame
out-of-business	sample, probability
	sampling frame
partner	sampling unit
pasture	secondary name
patronage refund	seed
payment, advanced	sharecropper
payment, cost-share	shrinkage
payment, disaster	small grains
payment, final	solar energy
payment, incentive	sold-out
payment, loan deficiency	solvency
payment, transition	straw
payment limitations	subsidy
payment quantity	survey
payment yield	survey period
pesticide	survey, statistically defensible
planting flexibility	
pick your own (U-Pick)	tenant
power-take-off (PTO)	
premium	wages
primary name	water rights
processor	wetlands
production expenses	Wetland Reserve Program (WRP)
production flexibility contract	woodland
production flexibility contract	work, agricultural
payment	work, contract
	work, custom
questionnaire	work, service
	worker
rangelands	
ratio, debt-asset	yardage

Chapter 3 - Survey Procedures

This chapter provides an overview of the questionnaire and other materials for the ARMS Phase III, and general guidelines for collecting data. Administrative matters are covered in the *NASDA Employee Handbook*.

Survey Materials

You will receive the following from your State Office:

- Copies of pre-survey publicity materials mailed to each respondent.
- Questionnaires with labels identifying the assigned operations.
- Extra questionnaires without labels.
- Respondent Booklets containing code tables and a burden statement.
- Supplements and Inserts for questionnaires you are assigned.
- Envelopes for mailing completed questionnaires.
- Several copies of NAS-011 (Time, Mileage and Expense Sheet) and envelopes for mailing them.
- (Other materials may also be provided by your State Office.)

You should have these materials on hand:

- Interviewer's Manual
- Highway and/or street maps
- Black lead pencils
- Name tag
- NASDA Identification Card
- NASDA Employee Handbook
- Ball point pen for completing NAS-011
- Calculator
- Clipboard

Questionnaire Versions

Two questionnaire versions will be used in the 2002 ARMS Phase III. The Costs and Returns Report (CRR), Version 1, will be used in all states except Alaska and Hawaii. Twenty states (AR, IL, IN, IA, KS, KY, LA, MD, MI, MN, MS, MO, NE, NC, ND, OH, SD, TN, VA, and WI) will complete the Version 2, Soybean Costs and Returns Report.

<u>Version</u>	<u>Color</u>
V1 Costs and Returns Report (CRR)	White
V2 Soybean Costs and Returns Report	Buff

Each questionnaire has a Face Page which identifies the selected operator and partners. Since pre-screening of respondents was done during Phase I, a screening form is not printed in the questionnaire. Instead, a Screening Supplement will be used selectively where Phase I screening was incomplete. Screening is discussed in Chapter 4 of this manual.

Respondent Booklets

The purpose of the Respondent Booklet is to help the respondents in answering the questions. Respondent Booklets contain information respondents need to reference when answering some survey questions, such as Code Lists and more detail on some items. In many cases, this information does not appear in the questionnaire. Using the Respondent Booklets can prevent confusion and save interview time.

The respondent may need help in becoming familiar with how to use the booklet. Take a minute and help familiarize the respondent with how to use the booklet. This will make the interview go more smoothly.

Some lists in the Respondent Booklet are there to let the respondents know what types of items we are looking for in response to certain questions. For example, the list of "Other Farm Assets" helps the respondent understand all of the items he should consider when answering the question.

Respondent Burden

You will reduce the reporting burden on the respondent if you are thoroughly familiar with the questionnaire and instructions. Follow go to instructions carefully to avoid asking questions needlessly. If no go to instructions appear after an item, continue with the next item.

Also be aware of the estimate of average completion time in the burden statement for each version. Depending on the version, this figure is either the actual average time from previous interviews or what NASS and the Office of Management and Budget (OMB) think the average completion time will be. The OMB is an agency that is required to review and approve all surveys conducted by the federal government.

At the end of the interview, call the respondent's attention to the Burden Statement on the Respondent Booklet.

Entering Data

Use a black lead pencil to record data and make notes; never use ink on a questionnaire. Make all entries clear and easy to read. Entries in check boxes and item code boxes must be entirely inside the boxes.

Record responses in the unit required (such as acres, bushels or dollars). If a respondent gives an answer in a different unit, write the answer outside the printed box, convert it to the required unit, and record the converted data in the box. If the answer is "none", enter a dash, not a zero (unless instructions indicate to enter a specific code to indicate none or zero, such as when using Value Codes).

Record data to the nearest whole number, unless a decimal point is printed in the box. Locate numbers correctly in relation to decimal points, and fill in every space printed after the decimal. Use zeros as fill when answers are not given to as many decimal places as required, or are given in whole numbers.

If answers appear unreasonable but really are correct, make notes in the margins, or notes pages to explain. Do not write notes or make unnecessary entries in answer boxes.

Planning Your Work

The operator or operation name, mailing address and identification number are on the questionnaire label, along with any other information the State Office has that might be helpful.

Mark the location of each operation assigned to you on a map before you begin the survey. Show the location by a small circle with the ID number or target operator name (or operation name) written beside it. Use this map to plan your daily travel; this will help keep travel expenses down and save time.

You may need to ask Post Office staff or Farm Service Agency (FSA) employees for directions to some operations. Try to do this early in the survey so you can put the information on your map as soon as possible. Tell your supervisory enumerator (or the State Office if that is what you are instructed to do) about any operator whose home or office you cannot locate.

Interviewing

Interview the farm operator, if possible, because information collected from other people often is less accurate. However, if the operator says someone else is more knowledgeable, interview that person.

The ARMS Phase III is a very detailed interview that must be completed in person. It is advisable to call or visit each respondent early in the survey period to setup an appointment to complete the interview at their convenience. During this initial contact, explain the survey purpose and importance, the scope of the interview, and that it will be necessary for them to have their farm records available during the actual interview.

If the operator will not be available before the survey is over, try to interview someone who is well informed about the operation. A partner, family member or hired person may know enough about the aspects of the farm operation covered in the questionnaire to give you the information needed.

The NASS rule-of-thumb is to make up to three visits (the first visit plus two call backs) if necessary, to get an interview. If you have an appointment or information from a neighbor on when to try to reach the operator, obviously you should return then. If not, make each visit at a different time of the day.

Respondents often ask how long the interview will take. Never contradict the burden statement; however, it is okay to add to it. For example, you might say something like this: "The official nationwide average for this survey is 90 minutes, but the interviews I have done in this area averaged about _ minutes." Be honest about the average time, even if your interviews are averaging longer than the time estimate in the burden statement.

Put the respondent at ease about time and burden. Respondents are often not experts about their own finances and may not have their records in order. Because you know the survey questions well, you will be able to help farmers find most of the information in their books or records. Make sure they understand you are helping them find the answers, not quizzing them on their records. Your expert knowledge of this survey will help minimize their effort while maximizing the quality of the data collected.

Encourage respondents to have their farm records at hand. If records are used, accurate information will be readily available and answering will take less interviewing time.

Always begin by reading questions exactly as they are worded in the questionnaire. You may also use any optional wording or explanations printed in the questionnaire. If the respondent still does not understand, or asks you to explain, then use what you learned in training and information from this manual to explain what is needed.

Ask questions in the order they appear in the questionnaire. Do not skip any questions unless instructions allow you to do so. Sometimes respondents will volunteer information you need later in the interview. When you get to a question the respondent already answered, take the opportunity to verify the information. Say something like, "I think you told me this earlier, but let me be sure I got it right." And then ask the question. This shows the respondent you were paying attention earlier and that you want to get things right.

Sometimes you will need to probe in order to get an adequate answer to a question. You should probe when:

- the respondent cannot answer the question,
- the answer is not exact enough to record,
- the answer may be incorrect because it does not fit with information already obtained, or
- you think the respondent did not understand the question.

The purpose of probing is to verify unusual data or to correct misreported data. Be careful when you phrase your probing questions that you do not influence the respondent's answers. Probes should be "neutral". That is, they should not suggest one answer over another. In fact, all questions should be asked in a neutral manner. Do not say things like, "What do I mean by marketing contracts? Oh, you must not have had any, did you?". Instead, say, "During 2002, did this operation have any livestock marketing contracts for livestock raised?".

In another example, if a respondent tells you an expense is between two amounts, such as, "Oh, I guess the total was between two and three hundred dollars," you should ask, "Would you say it was closer to \$200 or \$300, or what amount exactly?". Probing is especially important early in the interview when the respondent is 'learning' from you what level of effort

and accuracy are ideal. If you fail to probe, you may be suggesting that good answers are not needed.

Strike a balance between motivating the respondent to search out sound numbers and taxing the respondent to account for every nickel. Probes should also be “non-threatening.” Be careful you do not appear to be questioning or challenging the respondent’s answers. Do not say, “That can’t be right! You just said you had 20 pigs, so your vet expense couldn’t have been that high!”. Instead, say, “Earlier you said that you had 20 pigs in 2002. Can you tell me why your vet expenses were so high?”. And then make notes of the respondent’s answer.

The importance of good notes cannot be overemphasized. Notes are especially important when you find unusual situations or the respondent explains why information that seems incorrect actually is correct. Good documentation saves the state office from having to re-contact the farmer to confirm the accuracy of the data. Also write down any complicated calculations you make to come up with an answer. These notes will help the survey statistician understand this operation when reviewing the questionnaire. Make sure the notes are clear and can be read. Never erase a note unless it is wrong! **Notes can be the single most valuable editing tool available to the office statistician.**

After completing each interview, be sure to review the questionnaire while the interview is still fresh in your mind:

- check all the answers for correctness and completeness,
- double-check your calculations, and
- make sure your notes are legible and make sense.

Fiscal Year Versus Calendar Year

The questionnaires are designed to collect expenses and income for the calendar year. However, some farm businesses keep their books on a fiscal year basis, such as October 1 - September 30. In these cases, collect information for the operation's 2002 fiscal year and make a note on the questionnaire indicating the time period of the operation’s fiscal year.

Nonresponse

If an interview cannot be conducted, explain why on the questionnaire. Make a note about whether the operation appears to be a farm and any other information you think might be helpful to the State Office.

Most farmers are willing to cooperate on NASS surveys, but in every survey some will refuse to do so. The key to reducing the chances of getting refusals is to be courteous and friendly, but persistent. Most respondents will greet you with basic questions about the survey. Be prepared to answer their questions confidently and concisely. Respondents will want to know what the survey is about, how long it will take and why they should report. You should develop and practice an introduction with which you feel comfortable. Your introduction should explain the purpose of the survey, the need for accurate agricultural statistics, and the confidentiality of the data. Make use of materials on the survey purpose provided at your State training workshop.

Above all, do not become discouraged when you get a refusal. Stay in touch with your supervisor. Continue to meet farm operators with ease, friendliness and optimism as you contact other respondents in the sample.

Supervision

Your supervisory enumerator will set up an appointment to meet with you early in the survey. This visit will help you get off to a good start by spending some time to review a few of the interviews you have completed. Hold all your completed work until this review takes place unless you are instructed to do otherwise.

Your supervisory enumerator, or someone from the State Office, will contact a few of your respondents to conduct a quality check. The quality check will verify that you spoke with the person named in the questionnaire and that the respondent understood the survey procedures.

Completed Questionnaires

Turn in your completed questionnaires according to the instructions you receive from the State Office. If you think that under these procedures the last few questionnaires you complete might not reach the State Office before the final due date, call your supervisor.

Keep a record of when you complete each questionnaire and when you passed it on to your supervisor or mailed it to the State Office. This will help the office locate survey materials if they are delayed.

Chapter 4 - Face Page and Screening

FACE PAGE

Introduction

Before approaching the farm operator, develop and practice an introduction with which you are comfortable. In the introduction include who you are, whom you represent and the purpose of the survey. Become familiar with the information in Chapter 1 of this manual and be prepared to answer general questions about the survey.

During your introduction, be sure to remind the respondent that all the data are confidential and used only in making state, regional and national estimates. In preparing for the interview, mention that using farm financial records (including milk checks, co-op statements, FSA records, etc.) are extremely helpful. These records do not have to be in perfect order to be useful. Make sure the respondent knows you will be conducting several of these interviews so you know the questionnaire very well and will help them find the answers in whatever records are available.

Often when making the initial contact on this survey, you are only setting up an appointment to complete the questionnaire at a later date. If the State office has included a Screening Supplement with a particular questionnaire **it is best to complete it on this first contact**, because you may find out information about the operation you need to discuss with the office. This procedure gives you plenty of time to contact the office before doing the full interview. Account for the screening time in notes so interview beginning or ending time can be adjusted to more accurately reflect total interview time.

Screening Information Forms

All records sampled for ARMS Phase III were screened. Records sampled from the List Frame were screened during the Integrated Screening Survey (ISS) also stated as "Phase I" throughout this document. Area frame records were screened during the June Ag Survey. The State office will insert a Screening Information Form inside the questionnaire with information collected during the screening phase interview. The information on this form is used to help you make sure you are interviewing the correct sampled operation.

The Information Form will have the following from the ISS (List records) or the June Area Survey (Area records):

- Type of Operation reported (individual, partnership, managed)
- Who responded to the screening interview (operator, spouse, etc)
- How the data was obtained (mail, phone, field)
- ID number of the enumerator who completed the interview
- Number of total acres and cropland acres reported in screening

Response Codes

Upon completion of the interview, enter the response code in cell 0910 on the Face Page of the questionnaire. Response codes are:

Code 3 - **COMPLETE**: The questionnaire is complete. You have obtained all of the data needed for the operation. This includes List Frame records that were out-of-business during all of 2002 and Area Frame records that were mis-classified as farms in June.

Code 5 - **OUT-OF-SCOPE**: The selected operation is an institutional farm and therefore out-of-scope for ARMS. This code should be used for Indian reservations, prison farms, private or university research farms, not-for-profit farms operated by religious organizations, FFA farms, etc.

Do not use Code 5 for operations that are out-of-business; these should be a Code 3.

Census Note: Institutional farms are in-scope for the Census of Agriculture. For ARMS records that are “tagged” with Census, the Response Code 5 can be used to indicate out-of-scope for ARMS but data can be collected on the ARMS questionnaire to satisfy the Census reporting requirement. Talk to the State Office for more instruction if this situation occurs.

Code 8 - **REFUSAL**: The respondent refused to cooperate or grant an interview.

Code 9 - **INACCESSIBLE / INCOMPLETE**: The operator was not available throughout the survey period; “inaccessible”. The State Office may also use this code if the respondent gave an interview but could not, or would not, answer a lot of the questions (incomplete questionnaire).

Beginning Time

Record the **beginning time** (military time) of the interview when the respondent agrees to cooperate on the survey and you actually start the interview. Interview times are used to find out how much respondent time we are using (as a measure of respondent burden) in collecting data. We are trying to reduce interview times as much as possible and still collect the high quality data that we need. Also, by using different versions each year, we need to estimate their interview times since we have no recent history.

Name, Address, and Partners Verification -- LIST

Questionnaires will be pre-labeled with names and addresses. If the first line (primary name line) of the label after the identification number line has an individual name (JOHN SMITH), this is the target name, (unless the OpDomStatus is 99). If the first line contains a combination of individual names (JOHN AND BILL SMITH) or an operation name (SMITH FARMS), then the name on the next line (the secondary name line) is the target name. If the OpDomStatus is 99, then the operation named on the primary name line is the target. *When OpDomStatus= 99, the operation name is the key.*

Remember: The target name NEVER CHANGES. The person actually operating the farm (the farm operator) may change, but the selected target name is always the person identified on the label.

The first thing you will do is verify the operator's (or operation's) name and address, and the names and addresses of any known partners. If there are partner labels, be sure the partner names and addresses are correct, and all partners are listed. Mark through the names of any partners no longer involved in the operation. Add the names and addresses of any partners who are not listed.

Area Frame Sampled Operations

All of the area frame samples selected for the ARMS were identified as farm operators during the 2002 June Agricultural Survey.

In the ARMS we are interested in the operation the way it existed on June 1, so ignore any changes that have occurred in the operation since June 1. For example, if the tract was individually operated in June and changed to a partnership in September, collect data for the individual operation for the time it existed (January through August). Do not collect any data for the partnership. Collect data for the operation as it existed on June 1.

We know that by using this rule we will lose some data for those few farms or ranches that were formed after June 1. However, there usually are not very many of these operations and they are generally relatively small. Therefore, they would not have much impact on the overall estimates from the survey

If you find out an error was made in June (the operating arrangement was incorrectly identified), make notes to explain the error, but complete the questionnaire for the operation **as it actually existed on June 1**. *If you have time between your first contact with the respondent (when you find out the June report was wrong) and your appointment to complete the ARMS interview, call the State Office and let them look up the corrected operating arrangement. If it is overlap with the List, you will not have to do an interview.*

Screening Box on Face Page

If a question or problem exists with the operation description information collected during Phase I, the State Office will want you to complete the Screening Supplement. This may be because the screening data were collected from other than the operator on Phase I, or incomplete information was obtained on Phase I.

If a code "1" has been entered in the Screening Box on the Face Page of the questionnaire, the office will have included a Screening Supplement with the questionnaire for you to complete for this operation.

If the Screening Box is not coded, begin the interview with Section A.

Completing the Screening Supplement

Farm operations in each state were sampled for the ARMS based on List Frame information about crop acreage, livestock inventory, and an estimated gross value of farm sales. Agri-business firms and agricultural services that do not have crops or livestock of their own should have been excluded from the sample, but it is possible some records were misclassified. Screening questions determine the eligibility of the selected name for this survey.

Institutional farms such as prison farms, private or university research farms, not-for-profit farms operated by religious organizations, and Indian reservations are out-of-scope for ARMS and should be excluded from the survey. If your assignment includes any of these farms, notify your supervisor or the survey statistician.

If an operation was in business during part of 2002 but went out of business during the year, **complete a questionnaire for the part of the year during which the operation did business**. If the operation was taken over by another operator or operation when it went out of business, make a note of this. This note should include a name, address, phone number and any other pertinent information.

Item 1 Other Operation Name

Even though you have already verified the label, you need to ask this item to detect duplication and make sure the List is up-to-date. Indicate if this name should appear on the label in the future.

Item 2 Crops, Livestock or Poultry

Check YES if the operation grew any crops (field crops, fruit/nut crops, vegetables, oilseeds, specialty crops, hay, etc.) or had cattle, hogs, sheep, poultry or other livestock during 2002 on the total acres operated. If YES, go to item 6. If NO, continue with item 3.

For an operation to qualify as growing a crop, it must have made the decisions on planting, caring for and harvesting the crop.

Include: field crops, fruit and nut crops, vegetables, mushrooms, flowers, nursery stock, greenhouse crops, hay, Christmas trees, etc.

Exclude: home gardens and crops received in 2002 as payment for land rented to someone else.

This screening question would also be checked YES if the target name had any livestock or poultry, regardless of ownership, on the total acres operated at any time during 2002.

Include:

- 1) all cattle, hogs, sheep, equine, goats, chickens, turkeys, ducks, geese, bees, rabbits, mink or other fur bearing animals, and fish that are raised commercially or for home consumption. FFA and 4-H livestock projects should also be included.
- 2) operations that have five or more pleasure horses and no other agricultural items.

Exclude:

- 1) operations that have ONLY FOUR OR LESS pleasure horses, and any number of other animals kept only for pleasure use or as pets, but no other agricultural items.
- 2) horse boarding operations, riding stables, or race horse training operations that do not have other agricultural items.
- 3) Slaughter or packing houses, auction barns, stockyards or order buyers. These operations have livestock which are committed for slaughter. The presence of these livestock alone does not qualify an operation for the survey.

Item 3

**Sales of Agricultural Products or Receipt of Government
Agricultural Payments**

Include sales of crops, livestock, aquaculture and other products from the total land in the operation. Include any government payments received under the 7-year market transition program, conservation programs, etc.

This item should be answered NO when the respondent is a landlord who sold agricultural products from or received government farm payments only for land which was rented out.

If this item is checked YES, go to item 6.

If items 2 and 3 are both NO, continue with item 4.

Item 4 **Out-of-Business Determination**

This item determines if anyone else is now operating the land formerly operated by the target name on the Face Page. Ask this item only if the respondent answered NO to questions 2 and 3. If another operation has taken over from the target name on the label, record the name of the operator or operation now operating the land.

This item gives us information needed to update the List Frame when operations have gone out-of-business. Record the name, address, and phone number (if available) of the individual or operation now operating land that used to be operated by the target name

If the respondent answers NO to this item, probe to determine what happened to the land and make notes.

Item 5 **Enumerator Action**

These instructions only apply in rare cases where the selected target name is out-of-business. If the answer to items 2 and 3 are both NO:

- On the Screening Supplement, enter code '9' for the Reporting Unit in item 6 (cell 0921).
- Go to the Face Page of the questionnaire and enter code '3' in cell 0910.
- On the Face Page of the questionnaire, enter code '1' in cell 0006.
- Go to the Back Page of the questionnaire and complete the Respondent Code, ending time, date, and enumerator ID information.

Item 6 **Decision-Maker For This Operation**

We are interested in how the operation was managed on a day-to-day basis. We do not care what the legal definition of the operation is. Definitions of individual, partnership, and managed land can be found in the *Interviewer's Manual*. Landlord-tenant, cash-rent and share crop arrangements should not be considered partnerships.

When an individual operation is reported, enter code "1". When a partnership is reported, enter the number of partners. Include the person listed on the Face Page and all of the other partners. If there are more than 5

total partners, consider this a managed operation and enter a code "8".
When a hired manager is reported, enter code "8".

Item 7 Other Operations

This is a screening question to find out if the target name made day-to-day decisions for any other operations in 2002. Each additional (non-managed) operation must be listed or verified on the back side of the Screening Supplement. The information collected on the Screening Supplement will be used to update your State's list sampling frame.

If the operator does not have other operations (Item 7 is NO)

If there were not any other operations, enter a "1" in item code box 0923, return to the questionnaire and begin the interview.

If the operator has other operations (Item 7 is YES)

Item 7a Total Number of Operating Arrangements

Enter the TOTAL number of operating arrangements, INCLUDING THE SAMPLED OPERATION LABELED ON THE FACE PAGE OF THE QUESTIONNAIRE. Entering a "2" indicates the operator makes day-to-day decisions for two operations (the one labeled on the Face page of the questionnaire and one additional operation).

Item 7b Identifying Additional Operating Arrangements

After entering the TOTAL number of operating arrangements in item 7a, complete or verify the information for the second operation. If the operator had a third operation, complete or verify the information on an additional Screening Supplement for this operation. If the operation on the Face Page is still in business, then you will **complete the questionnaire for the operation named on the Face Page of the questionnaire.**

If the State Office already knows about additional operations associated with the target name, there should be labels for Operation 2 on the Screening Supplement. There will be an additional Screening Supplement for Operation 3, if there is a third operation. Verify that the target name is still involved with each of these operations. Also, there may be partner labels for any or all of these operations. Verify the names and addresses of additional operations and partners associated with them. Mark out any operations the target name was not associated with in 2002. If any partner names are not listed, add them with complete name and address information.

If the target name is involved (either as individual operator or as a partner) with any other operations which are not listed on a Screening Supplement, record these. In the partner space record the names of all of the partners other than the target name associated with each of the additional operations.

Item 7c Day-to-day Decisions for Additional Operations

For each of the additional operations, check the appropriate box to explain how the day-to-day decisions were made in 2002. We are interested in how the operation was managed on a day-to-day basis. We are not interested in the legal definition of the operation.

Special Situations - Managed Operations

Do not include any operation not already listed for which the target name is a hired manager.

A special situation exists if the operation on the Face Page of the questionnaire is a managed operation. If the target name is still the hired manager, there is no problem; handle it as you would normally.

If the label for the operation on the Face Page is a managed operation and was still in business in 2002 under a new hired manager, you will contact the new hired manager and collect data for the operation named on the Face Page. You will also need to contact the original target name to verify the other operations listed, and if that originally selected target individual has any additional operations you will list them on one or more Screening Supplement(s).

Chapter 5 - Completing the Questionnaire

Section 1 - 2002 Acres

Section Purpose

Section 1 has the following primary functions:

- (1) to measure the total land operated,
- (2) to determine the tenure arrangements and whether farmers are renting on a share, cash, or rent-free basis,
- (3) to account for rent paid on rented land,
- (4) to account for rent received on acres rented to others,

Acres of owned and rented land are used to determine the total size of the farm under the operating arrangement identified on the label. Total acres are one measure of farm size used in reports and analyses. Knowledge of how much land is owned versus rented is the basis for studying farm tenure arrangements.

General Instructions for Items 1-5

Items 1-5 account for acres owned, acres rented from others, and acres rented to others by this operation at any time during 2002. Answers for these items are reported to the nearest whole acre.

For operations that were in business for only a part of 2002, collect data for the part of the year when it was still in operation. If the operation went out-of-business before December 31, 2002, end-of-year inventory values for crops in storage or livestock should be zero when you ask about these later in the interview. However, you will usually find fairly large amounts of cash or other assets such as land contracts due from sales of farmland. Exclude data for the part of the year that an operation was not in business including any income from renting the operation to others after this operation went out-of-business.

Sometimes an operator has several operating arrangements, such as an individual operation and a partnership operation. We have selected only one of the operations, so be sure the questionnaire contains data **only** for the arrangement identified on the label.

INCLUDE:

- (1) all cropland, the farmstead, government program land, idle land, orchards, pasture, wasteland, wetland and woodland, regardless of location, **if the operator made the day-to-day decisions for that land** under the selected operating arrangement. Include land in another state that is part of the operation (if the operator made the day-to-day decisions for that land).
- (2) land worked by sharecroppers. Sharecropper operations are considered part of the landowner's operation. A sharecropper is a worker who furnishes **ONLY LABOR** (his own and often his family's) for a share of the crop. Sharecroppers generally furnish no machinery, seed, fertilizer, etc.
- (3) all land in the operation that is used by the operator's children for 4-H or FFA projects, if the operation's equipment is used.

Item 1 Acres Owned

Include all cropland, the farmstead, government program land, idle land, orchards, pasture land, wasteland and woodland. Include land that has the potential for growing crops or grazing livestock even if it was not used for agricultural purposes in 2002.

Include all land owned by the operation, the operator and/or partners, their spouses or children. Include land held under title, purchase contract, homestead law, or as part of an estate (if someone associated with the operation is an heir or trustee).

Exclude nonagricultural land separate from the operation (such as land in subdivisions, commercial buildings, timber, etc.) which is permanently out of agricultural use.

Sometimes you will find a situation where the **operator** (and/or partners) owns the land but has set up the **operation** so that the land is rented to the operation. This is done for tax and other financial benefits. When this occurs, do not include the acres the operation rents from the operator as owned acres. Treat them as you would acres rented from any other landlord, and be sure the amount of rent paid is recorded.

If the operator (as a landlord to the operation) paid some of the expenses, you should also handle them the same as for any other landlord. You will usually have to probe very carefully in these situations.

Item 2 (a,b,c,d,e) Acres Rented From Others

There are five categories of rented acres: cash rented acres with the payment being a fixed amount are recorded in item 2a, cash rented acres with the payment being a flexible cash amount in 2b, share rented acres are recorded in item 2c, a combination of both cash and share rent in item 2d, and acres used rent-free are recorded in item 2e.

INCLUDE all land rented from private individuals, partnerships, corporations, federal, state or local governments, Indian reservations, railroads, etc. if the operation:

- (1) paid cash rent. (*Items 2a and 2b*)
- (2) paid for use of the land with a share of the crops (either standing or harvested). (*Item 2c*)
- (3) paid for use of the land with a share of livestock production. (*Item 2c*)
- (4) paid a combination of a fixed cash payments plus some shared production (*Item 2d*)
- (5) had free use of the land. (*Item 2e*)

EXCLUDE:

- (1) any land for which payment was made on a per head or an Animal Unit Month (AUM) basis. This is land used as pasture for grazing livestock.
- (2) land on which the respondent's livestock were fed under a contract (for example, commercial feedlots).
- (3) shared livestock production that does not involve land rental.

Be sure you are getting the full number of rented acres from the respondent. Farmers/ranchers often do not think the land they rent contains woods or wasteland. Even though the farmer/rancher may not think about it that way, the landlord considers the whole parcel rented. Rent is usually based on the number of acres of cropland or pastureland.

If the renter was responsible for looking out for the owner's interest in the woodland and/or wasteland, or had the right to cut firewood, hunt, etc. on the acres, then these acres should be included as acres rented from others.

Item 3 Acres Rented To Others

INCLUDE:

- (1) land this operation owned which was rented to another operation in 2002 for cash. This land should also be included in item 1.

- (2) land this operation rented or leased from someone else but which it subleased to another operation in 2002. This land must also be included in one of the categories in item 2.
- (3) land rented to others for which this operation received a specified amount of the crop or livestock produced, a share of the crop or livestock produced, or other non-cash compensation.
- (4) land this operation let someone else use without ever intending to receive payment (rent-free).
- (5) pasture or grazing land rented out on a per acre basis.
- (6) land owned but managed for a fee or salary by someone else.

EXCLUDE:

- (1) land enrolled in Government programs for which **this operation has enrolled and makes day to day decisions** (such as acres under production flexibility contracts in the 7-year farm program, acres in the Conservation Reserve Program, etc.).
- (2) land worked by sharecroppers on this operating unit.
- (3) land used by a child for 4-H or FFA projects if the operation's equipment was used.
- (4) land on which crops were grown under contract, if the land owner furnished machinery or controlled the seeding, growing and harvest of the crop.
- (5) land used for pasturing someone else's livestock when payment was made on a per head, fee, or AUM basis.
- (6) land on which the operator fed livestock under contract for someone else.

Item 3a Acres Owned that were Rented or Leased to Others

Of the acres rented or leased to other (item 3), record the number of acres **owned** by this operation. This land should also be included in item 1.

Item 4 Acres Used and Also Rented Out

This type of situation is generally found in western states in which growers of winter grains grow their grain crop during the fall and winter and then rent these same acres out to others to grow vegetables or other summer crops (or vice-versa). This item is needed so crop and land use totals will reflect the true number of acres in the operation **during the year**. Exclude acres of crop stubble which the operation rented out on a per head basis.

Item 5 Total Acres Operated in 2002

The operation's total farming/ranching operation is the total of items 1 + 2a + 2b + 2c + 2d + 2e - 3 + 4. Verify this total with the respondent because it is the basis for the rest of the interview. Be sure this total includes all cropland, the farmstead, government program land, idle land, orchards, pasture, wasteland, wetlands and woodland associated with this operation.

Item 6 Cash Rent *Received* for Acres Rented *To* Others

Do not skip this item even if the operation rented no land out in 2002. The operation may have received income in 2002 for land rented to others before 2002, or it may have even received a pre-payment of 2003 rent in 2002.

Including rent for land and/or buildings, record the total cash rent received during 2002 for all land rented to others for cash. If rent owed to the operation for 2001 was received in 2002, it should be included here. If rent for 2003 was received in advance (in 2002), it should also be included. Government payments received in association with these acres should also be included.

Item 7 Value of Share Rent *Received* for Acres Rented *To* Others

Do not skip this item even if the operation did not share rent land out in 2002. The operation may have received its share of 2001 commodities in 2002 for land it rented to others in 2001. Record the total value of the share of production received by the operation plus the value of all government payments received in association with the share rented land.

If the operator (as a landlord) has received his share of the production, but has not sold it yet, record the operator's best estimate of its market value, plus the amount received in government payments associated with the share rented land.

Be sure that commodities the operator gets in payment of share rent ARE NOT INCLUDED in the sales reported later in the questionnaire.

Item 8 Cash Rent *Paid* for Acres Rented *From* Others

Including rent for land and/or buildings, record the total amount paid in 2002 to all landlords for cash rented acreage. Ask this question even if no land was rented in 2002. Why? The operation may have paid rent for 2001 or 2003 in 2002. If we skip this question just because the operation did not

rent any land in 2002, we miss previous year's rent paid in 2002, or 2003 rent paid in advance in 2002. If an operation had more than one cash rental arrangement, the sum of all the individual rents should be recorded.

For crops such as tobacco and peanuts, quotas or allotments may be rented with or without associated land. The rent, if any, associated with the rental of the land, should be included in this item. The 'rental' of the quota or allotment should be considered a marketing expense and recorded in Section 14, items 1, 2, or 3.

Exclude any government payments landlords received from these acres. These payments should be recorded in Section 15, item 7.

Item 8a Cash Rent Paid as part of a Hybrid Cash/Share Agreement

Item 8b(1) - Cash Rents - Entire Farm

Cash rented acres and cash rents per acre (columns 1 and 2) will be obtained for all land operated which is rented on a per acre basis for cash. If none of the acres were rented on a per acre basis for cash, enter a dash in each of the cells in columns 1 and 2.

Include:

1. Land rented on a per acre basis for cash.
2. Land rented on a hybrid cash/share rental agreement

Exclude:

1. Land rented for a share of the crop or livestock.
2. Land rented on a fee per head, per pound of gain, or AUM basis
3. Land rented on a "Whole Farm" basis. (Dwelling and buildings along with farmland).
4. Land rented free of charge.

Record the number of acres for each type of land. If none of a type of land is rented, enter a dash in the box for that type of land.

If the respondent is unable to report the acres rented for cash, review the

information in item 2. Acres recorded here should be equal to or less than acres reported in Section 1, Items 2a, 2b, and 2d.

Record the average cash rent paid per acre for the acres recorded in column 1 for the 2002 crop year in column 2. Rents should reflect the total rent for the 2002 crop year. If a respondent grows more than one crop on the rented acres and pays a separate rent for each, the rents should be added together.

Items 9 & 9a Usage fees Paid for AUM basis on Public land

(Mostly found in Arizona, California, Colorado, Idaho, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington, and Wyoming)

Item 9 is a screening question to determine if the operation uses public, industrial or grazing association land rented on an AUM basis. This is usually controlled by the Bureau of Land Management (BLM), the Forest Service (FS), Bureau of Indian Affairs (BIA) or by grazing associations, energy companies, timber companies or railroads. If the operation does not use this type of land, check NO and go to item 10. If the operation does use this type of land, check YES and continue with item 9a.

In item 9a, include expenses for use of public land, industrial land or grazing association land associated with a range grazing area (allotment or unit). Include all expenses for any year, as long as they were paid in 2002.

EXCLUDE expenses for use of land controlled by private individuals or partnerships even if the operator reports livestock were pastured on an AUM basis on this land (this expense should be recorded in item 10).

If the operation owned (or rented from others) land which was administered on an exchange-of-use basis, these acres should be reported as owned in item 1 and as acres rented to others in item 3.

Item 10 Amount Paid for Pasturing Livestock on *Private* Land

Excluding contract arrangements, record the total amount paid in 2002 for pasturing or grazing livestock on privately owned land on a fee per-head (AUM), gain, or other basis.

EXCLUDE expenses for pasturing or grazing livestock on public land. These expenses should be recorded in item 9a.

Item 11a - Location of agricultural activity for THIS OPERATION -

The county in which the largest value of the agricultural products were raised or produced is the county in which the reported farm or ranch data will be tabulated for the Census publication. The principal county is the county where the largest value of the agricultural products sold was raised or produced. Report the principal county, the two letter state abbreviation, and the number of acres from this operation that were located in that county.

Item 11b - If the acres in this operation are located in more than one county, report the names of the additional county(ies), the state(s), and the number of acres in each additional county in these response cells. Up to four counties may be reported with the associated acreage. If the acres in this operation are in more than four counties, report the four counties that have the largest value of production.

Section 2 - Land

In section 2, report how the land in this operation was used during 2002. The land rented to others, as reported in section 1, item 3 is not part of this operation and will not be reported in this section.

Land use for multiple purposes - In general, the land use items have been arranged in what is normally considered a decreasing order of importance. In this section, each acre in this operation will be reported only once, even though the land may have been used for more than one purpose. Acres reported in this section should equal the acres reported in section 1, item 4.

Double-cropping - If more than one crop was harvested from the same land in 2002, report the acreage only once in this section, item 1a, as "Cropland harvested." For example, if wheat was harvested from a 40-acre field in 2002, and then soybeans were planted and harvested from the same field in 2002, report only 40 acres of cropland harvested in item 1a. However, when reporting acres of the individual crops harvested later in section 3, the 40 acres of wheat and the 40 acres of soybeans should both be reported.

Interplanted crops, alternating strips, and "skip" row planting - If two crops were grown together, such as pumpkins interplanted with rows of corn for grain, report the total land used for both crops only once as "Cropland harvested" in item 1a. However, the total acres of corn for grain should be reported in section 3 and pumpkins reported in section 6. If a crop was interplanted in an orchard and harvested, report the acres for the specific

crop in the appropriate crop section. For example, if a vegetable crop was interplanted among trees in a 5-acre orchard, report the portion of the 5 acres devoted to vegetables in section 6, "Vegetables and Melons" and report the total 5 acres for the orchard in section 7, "Fruits and Nuts." Again, include only 5 acres once in section 2, item 1a, "Cropland harvested."

If two crops were grown at the same time in alternating strips in the same field, report the acreage devoted to each crop in the appropriate crop sections in the report form. If a 50 acre field was planted in corn and soybeans, with 16 rows of corn followed by 16 rows of soybeans, 25 acres should be reported for corn and 25 acres should be reported for soybeans in the area where these crops are preprinted or listed in section 3.

"Skip" row planting involves leaving a space between the rows for conserving moisture, soil conservation, tillage practices, movement of machinery and equipment between the rows for spraying and harvesting of the crop, etc. See the examples below.

Example 1. If a crop was planted in "skip" rows with a cover crop for soil improvement, report the harvested portion of the field in the appropriate crop's section and also include these acres in this section, item 1a, "Cropland harvested." Include the acres in soil improvement in this section, item 1d, "Cropland idle."

Example 2. If "skip" rows were in cultivated summer fallow, report the harvested portion of the acres in the appropriate crop's section and include these acres in this section, item 1a, "Cropland harvested." Include the acres in cultivated summer fallow in this section, item 1e, "Cropland in cultivated summer fallow."

Item 1a - Cropland harvested

Includes all acreage from which crops were harvested in 2002 and land in fruit and nut trees and vines. The acreage of cropland harvested will include:

- Field crops (corn, wheat, barley, oats, sorghum, soybeans, cotton, tobacco, etc.)
- Hay and forage crops (dry hay, haylage, silage, greenchop, etc.)
- Christmas trees (whether harvested or not in 2002), fruit trees, nut trees, and grapevines (include acres of bearing and nonbearing trees and vines whether harvested or not in 2002)
- Nursery, greenhouse, floriculture, sod, mushrooms, and vegetable seeds
- Vegetables and melons
- Any other acreage from which a crop was harvested even if the crop was

considered a partial failure and the yield was very low. The sum of acres reported harvested in sections 3 and sections 6 through 8 plus the area reported in section 5, minus the acreage of land from which two or more crops were harvested (acres double-cropped), equals the "Cropland harvested," item 1a.

Exclude acres of maple trees tapped. They should be reported in item 2b.

Item 1b - Cropland used only for pasture or grazing -

Includes:

- Land pastured or grazed which could have been used for crops without any additional improvement.
- Land in planted crops that was hogged-off, pastured, or grazed and not harvested.

Exclude from item 1b, acres of corn, sorghum, soybeans, hay, and cowpeas acres that were hogged-off or grazed after harvest. Report these harvested acres only once in item 1a.

Item 1c - Cropland on which all crops failed or were abandoned

Includes:

- All land on which a crop failed (except fruit or nuts in an orchard, grove, or vineyard being maintained for production) and no other crop was harvested and which was not pastured or grazed.
- Acreage not harvested because of low prices or labor shortages.
- If some, but not all, of the crop acreage was harvested, the harvested acreage should be reported in section 2, item 1a, and in the appropriate crop section. The remainder of the acreage should be reported in this item provided it was not used for pasture or grazing.

Item 1d - Cropland idle or used for cover crops or soil improvement but NOT harvested and NOT pastured or grazed

Cropland idle includes any other acreage which could have been used for crops without any additional improvement and which was not reported elsewhere in item 1. Include:

- Land used for cover crops or soil improvement but not harvested or grazed.
- Land in the Conservation Reserve Program (CRP) or the Wetlands Reserve Program (WRP) that was not hayed or grazed in 2002.
- Land not harvested or summer fallowed in 2002 but occupied with growing crops for harvest in 2003 or later years. Examples are acreage

planted in winter wheat, strawberries, new sugarcane planting, etc., for harvest in 2003.

- Land in “skipped” rows between rows of crops should be reported here if the land was not used for any other purpose and not reported in item 1a, “Cropland harvested.”

Exclude acreage from which crops were harvested or planted and intended to be harvested, or used for pasture or grazing.

Item 1e - Cropland in cultivated summer fallow

Includes cropland cultivated or treated with herbicides to control weeds and conserve moisture and not seeded or harvested in 2002. Include cropland summer fallowed in 2002 and planted to a crop (i.e. winter wheat, etc.) for harvest in 2003.

Item 2 - Woodland

Report all woodland or timber tracts, natural or planted. Include:

- Cut over and deforested land with new or remaining growth should be reported in item 2a or item 2b. This land will have future value as wood products.
- All woodland used for pasture or grazing in item 2a.
- All other woodland, including tapped maple trees (sugar bush), in item 2b.

Exclude:

- Land planted for Christmas tree production. This should be reported in item 1a.
- Cut over or deforested (clear cut) land which has been improved for pasture. This should be reported in item 3.
- Sagebrush or mesquite land. This land should be reported in item 3.

Item 3 - Permanent pasture and rangeland

This land use item includes all remaining types of pastureland and rangeland, other than cropland or woodland pasture, that is normally used for pasture or grazing. It usually includes land referred to as a "meadow" or "prairie" and consists of various types of grasses, such as bunch grass, shortgrass, buffalo grass, bluestem, bluegrass, switch grass, etc. It also includes land predominantly covered with brush or browse. Pastureland or rangeland containing desert shrubs, sagebrush, mesquite, greasewood, mountain browse, salt brush, cactus, juniper, pinion, etc., are to be reported here. Also, include grazing lands which may have been improved by

seeding, liming, fertilizing, irrigating, drainage, or controlling brush or weeds.

Item 4 -All other land

Include all other land occupied by building sites, lanes, roads, ponds, barn lots, gardens for home use, wasteland, etc. Also, include all land in this operation that does not fit the definition of the other land use categories listed in items 1, 2, and 3 above.

Item 5 - Total Acres

This is the total of all entries reported for items 1 through 4. **The total acres reported here should be the same as the acreage reported in section 1, item 5.**

Item 6a Acres Enrolled in the Conservation Reserve Program

Record the total number of acres enrolled in the Conservation Reserve Program (CRP). The CRP is the Federal Government's single largest environmental program safeguarding millions of acres of topsoil from erosion, increasing wildlife habitat, and protecting ground and surface water.

CRP participants sign a 10 to 15 year contract with the CCC under which highly erodible cropland is retired from production for the duration of the contract period and permanent vegetative cover is established on enrolled land. In return, the CCC provides participants annual rental payments, makes cost-sharing assistance on long-term resource conserving cover, and arranges for technical assistance in cooperation with the Natural Resource Conservation Service, Forest Service, and U.S. Fish and Wildlife Service.

Income received from participation in the CRP should be recorded in Section 15, item 5i.

Item 6b Acres Enrolled in Conservation Reserve Enhancement Program

Record the total number of acres the farm operation has enrolled in the Conservation Reserve Enhancement Program (CREP). An offspring of the CRP, CREP is a voluntary program for agricultural landowners that focuses on protecting particular resources within a state. Unique state and federal partnerships allow landowners to receive incentive payments for installing specific conservation practices. Through the CREP, farmers can receive annual rental payments and cost-share assistance to establish long-term, resource conserving covers on eligible land. The following 19 states

currently have approved CREP agreements: CA, DE, IL, IA, KY, MD, MI, MN, MO, NY, NC, ND, OH, OR, PA, VT, VA, WA, and WI.

Item 6c Acres Enrolled in the Wetlands Reserve Program

The WRP is a voluntary program that offers landowners financial incentives to enhance wetlands in exchange for retiring marginal agricultural lands.

Income received from participation in the WRP should be recorded in Section 15, item 5j.

Item 6d Acres Enrolled in the Grassland Reserve Program

The GRP is a newly established that will assist owners, through long-term contracts or easements, in restoring grassland and conserving virgin grassland.

Item 6e Acres Covered Under Federal or Other Crop Insurance

Of the total acres in item 5, report the acres that were covered under federal, private, or other form of crop insurance during 2002.

Item 6f Acres Used to Raise Certified Organically Produced Crops

Of the total acres in item 5, report the acres harvested as certified organically produced crops. Certified organic crops are those that were certified by a Federal, state, or private certification agency.

Irrigation

Irrigation refers to the application of water to land by any artificial or controlled means, such as sprinklers, furrows and ditches, spreader dikes, flooding, or sub-irrigation pipes. Include acres that had preplant, partial, and supplemental irrigation. Include spreading or channeling of spring run-off or flood waters over pasture if done by manmade structures or ditches. Include the acres where lagoon waste water from livestock operations was distributed by a sprinkler or flood system.

Report irrigated acres in item 7a or item 7b only once, regardless of the number of times irrigated or harvested. The sum of items 7a and 7b cannot be greater than section 2, item 5.

Item 7a Acres of harvested land irrigated

Report the acres of irrigated land from which crops were harvested in 2002 including all irrigated land with bearing and nonbearing fruit and nut crops. Irrigated hay land should be included if the hay or haylage was cut. This entry may be equal to, but should never exceed the entry in item 1a., "Cropland harvested."

Item 7b Acres of pastureland, rangeland, and other land irrigated

Report all other irrigated land which was not reported in 7a. Include acreage used as pastureland, rangeland, land not harvested due to crop failure, and land in cover crops and soil improvement grasses irrigated at least once in 2002.

Sections 3 through 8 - Crops Produced

General Instructions

To ensure an accurate and as quick as possible interview, you need to become very familiar with the questionnaire and the items of interest in each section.

Record all crops harvested from this operation in 2002 in Sections 3 through 8.

Guidelines For Completing Crop Sections

Become familiar with the crops listed in each section.

To record each harvested commodity:

1. For Sections 3 and 8 record information for the crops which are preprinted.
2. For Sections 3 through 7 enter the crop name (if not preprinted) and crop code in the first two columns of the first available answer line in the section. Crop codes can be found either pre-printed within each section or a complete list can be found in the respondent booklet.
3. Enter the information requested in the remaining columns.

Crops Relate to Total Acres in this Operation

The questions for crops always relate to the total acres in this operation recorded in Section 1, item 5. Include all crops harvested from these acres, but exclude any crops harvested from land rented or leased to others or worked on shares by others in 2002.

Acres Harvested

Report the area of crops harvested at any time during 2002 from this operation. Note the unit of measure requested for the area harvested. It may be whole acres, whole and tenth acres, square feet, bearing acres, or for maple syrup, number of taps. If a crop was harvested, please give any

additional requested information regarding that crop whether it is total quantity harvested, acres irrigated, or nonbearing acres.

Include acres harvested by all manual and mechanical harvesting methods including combining, cutting, digging, picking, stripping, gathering, etc. Include acres actually harvested even if the crop yield was low.

Exclude from sections 3, 5, 6, 7, and 8:

- The acres of a planted crop that were not harvested due to drought, flood, fire, or some other natural or economic disaster. These unharvested acres should be reported in section 2, item 1c, "Cropland on which all crops failed or were abandoned."
- The acres not harvested in 2002 but occupied with growing crops for harvest in 2003 or later years. Examples are acreage planted in winter wheat, strawberries, new sugarcane planting, etc., for harvest in 2003. These unharvested acres should be reported in section 2, item 1d.

Partial Acreage Harvested in a Field

If only some of the acres within the field were harvested, report only the acres actually harvested and not the total acres in the field. As an example, if 3 acres of corn drowned out in a 20-acre field of corn and 17 acres of corn were harvested for grain, report the 17 acres harvested in section 3. The remaining 3 acres, if not summer fallowed, hayed, or grazed, should be included in section 2, item 1c, "Cropland on which all crops failed or were abandoned."

Acres Not Yet Harvested

If a planted crop would normally be harvested before December 31, 2002, (corn, soybeans, etc.) but harvest was/will be delayed until 2003 because of weather conditions, equipment problems, etc., it should be included in ACRES HARVESTED, the estimated production included in QUANTITY HARVESTED, and the portion of the acres harvested that were irrigated, if any, included in ACRES IRRIGATED.

Quantity Harvested

In section 3, report the total quantity harvested in the unit of measure specified for each crop. If the unit of measure is different in the respondent's records than the unit of measure requested on the report form, convert the total quantity harvested to the requested unit of measure. Enter quantity harvested data on the same line as the crop's acreage harvested.

Note that section 3 is the ONLY section that requests the total quantity harvested.

Example: If 400 square bales of hay were produced, estimate the average weight of the bales and convert total quantity harvested to *tons* (the requested unit of measure).

(70 pounds * 400 bales) divided by 2,000 pounds = 14 tons

Acres Irrigated that Were Harvested

Acres irrigated are acres on which water was applied by any artificial or controlled means, such as sprinklers, furrows and ditches, spreader dikes, flooding, or sub-irrigation pipes. Include acres that had preplant, partial, and supplemental irrigation. Include spreading or channeling of spring run-off or flood waters over pasture if done by manmade structures. Include the acres where lagoon waste water from livestock operations was distributed by a sprinkler or flood system.

Institutions

Crops grown and harvested by an institution (school, prison, hospital, etc.) and consumed by the persons in the institution should be reported as crops harvested. If quantity harvested is requested, include the quantity consumed in the quantity harvested. Also, use the estimated market value when the crop was consumed to arrive at the value of sales that should be reported in section 14.

Double Cropping

If more than one crop was harvested from the same land in 2002, report the total acreage only once in section 2, item 1a, "Cropland harvested" and report separately each crop in sections 3, 5, 6, 7, or 8. For example, if wheat was harvested from a 40-acre field in 2002, and then soybeans were planted and harvested from the same field in 2002, report 40 acres of cropland harvested in section 2, and the 40 acres harvested of wheat and 40 acres harvested of soybeans in section 3 along with the quantity harvested for each crop.

Interplanted Crops, Alternating Strips, and Skip Row Planting

If two crops were grown together, such as pumpkins interplanted with rows of corn for grain, report the total land used for both crops only once in section 2, item 1a, "Cropland harvested." Report the total acres of corn for

grain harvested in section 3 and the total acres of pumpkins harvested in section 6. Estimate acreage if necessary. If a crop was interplanted in an orchard and harvested, report the acres for the specific crop in the appropriate crop section. For example, if a vegetable crop was interplanted among trees in a 5-acre orchard, report that portion of the 5 acres devoted to vegetables in section 6, "Vegetables and Melons" and report the total 5 acres for the orchard in section 7, "Fruits and Nuts." Again, report only 5 acres in section 2, item 1a, "Cropland harvested."

If two crops were grown at the same time in alternating strips in the same field, report the acreage devoted to each crop in the appropriate crop sections in the report form. If a 50-acre field was planted in corn and soybeans, with 16 rows of corn followed by 16 rows of soybeans, report 25 acres for corn and 25 acres for soybeans in the area where these crops are preprinted or listed in section 3.

"Skip" row planting involves leaving a space between the rows for conserving moisture, soil conservation, tillage practices, movement of machinery and equipment between the rows for spraying and harvesting of the crop, etc. See the examples below.

Example 1. If a crop was planted in "skip" rows with a cover crop for soil improvement, report ONLY the harvested portion of the field in the appropriate crop section and also include these acres in section 2, item 1a. Report the unharvested acres in soil improvement practices in section 2, item 1d.

Example 2. If "skip" rows were in cultivated summer fallow, report ONLY the harvested portion of the acres in the appropriate crop section and include the acres in section 2, item 1a. Also, include the acres of cultivated summer fallow in section 2, item 1e.

Commodities grown under a production contract

A **production contract** is an agreement between a grower and contractor (integrator) that specifies that the grower will raise an agricultural commodity and that the contractor will provide certain inputs such as feed, fertilizer, etc. The grower receives a payment or fee from the contractor, generally after delivery, that is usually less than the full market price of the commodity. The contractor takes possession of the raised commodity at the end of the growing period. Exclude marketing contracts, futures contracts, forward contracts, or other contracts based strictly on price.

Report each crop raised and delivered under a production contract, in the

appropriate crop section (section 3, 5, 6, 7, or 8). Report area harvested and other specified information for each harvested crop. Report livestock or poultry raised and delivered under a production contract in the appropriate livestock section (section 10 through 13).

Report the amount of the specified commodity that was raised and delivered under a production contract in section 14, item 2.

Dollar amounts paid by a contractor or integrator for expenses are to be reported in section 19, "Operating and Capital Expenditures".

Acres irrigated

In sections 3, 6, and 8 report **only the portion of the area harvested** that was irrigated at least once in 2002. In section 7, item 1 report the total bearing and nonbearing acres that were irrigated at least once in 2002. Acres irrigated refers to the acres that received at least one application of water by any artificial or controlled means, such as sprinklers, furrows and ditches, spreader dikes, flooding, or sub-irrigation pipes. Include acres that had preplant, partial, and supplemental irrigation. Include spreading or channeling of spring run-off or flood waters over hayland if done by manmade structures. Include the acres where lagoon waste water from livestock operations was distributed by a sprinkler or flood system.

Report the acres of the same crop only once, regardless of the number of water applications. If two different crops were harvested in 2002 from the same acreage, report the irrigated acres of each crop.

Landlord's Share of Production

It is **strongly recommended** not to record the percent received by the landlord in the margin so you can come back later and calculate the amount! You will need to know more to calculate landlord(s) share than that. Using only the percent will often result in serious errors!

For example, operations often share rent some (but not all) of the acres used to grow crops. Thus, applying the percent landlord share to their total crop production would overstate the amount the landlord received and understate the amount kept by the operation. See the examples below:

Example of **INCORRECT** Calculation of Landlord's Share:

Valley Farms owned 200 acres on which it grew wheat in 2002. The operation share rented another 400 wheat acres (for a 20% share) and cash rented 100 acres (for \$40 per acre). Their total wheat production was 31,500 bushels. The average yield per harvested acre was 45 bushels. Of the total 31,500 bushels, the share rent landlord received 3,600 bushels, (400 acres x 45 bushels per acre x 20% share) and 27,900 bushels belonged to the operation.

Suppose the enumerator had recorded the 31,500 bushels produced and noted that the landlord received a 20% share. Later, he/she came back and calculated the amount of the landlord's share as $.20 \times 31,500 = 6,300$. This would result in the landlord's share being 2,700 bushels more than it should be and the wheat belonging to Valley Farms as 28,200 bushels (2,700 bushels less than it ought to be).

Example of **CORRECT** Calculation of Landlord's Share:

The operator reports that soybeans were grown on 500 acres. The average yield per harvested acre was 30 bushels. Since the operator does not know the total **amount** of the landlord's share, you have to probe! You ask how many acres were share rented and find out that there were 150 acres of share rented soybean land. You calculate that his production on the 150 share rented acres was 4,500 bushels (30 bushels per acre x 150 acres). You then ask what percent share the landlord received and learn that the landlord received a 33% share. So you calculate:

$$\begin{aligned} &\underline{\text{Landlord's Share (amount) of production}} \\ &4,500 \text{ bushels} \times (1/3) \text{ share} = 1,485 \text{ bushels} \end{aligned}$$

Section 3 - Crops

Column 1 Crop

Most major field crops are reported in this section. The questions for crops always relate to the total acres in this operation recorded in Section 1, item 5. Include all crops harvested from these acres, but exclude any crops harvested from land rented or leased to others or worked on shares by others in 2002.

To ensure proper and complete reporting, for each item listed, ask the respondent, "During 2002, did you harvest any [*crop*] on the total acres (Section 1, item 5) in this operation?".

Column 2 Acres Harvested

Except for potatoes and tobacco, report harvested acreage to the nearest whole acre. For potatoes and tobacco, record harvested acres to the nearest tenth of an acre.

INCLUDE:

- (1) acreage of crops harvested in 2002.
- (2) acreage of crops intended for harvest in 2002 even if harvest was delayed until 2003 due to bad weather, etc.
- (3) acreage for which two uses were made of the same crop. An example is alfalfa acreage harvested for both hay and seed. These acres are recorded twice: as acres of Alfalfa, and as acres of Alfalfa seed harvested to account for the seed.

EXCLUDE:

- (1) acreage for second or later harvests (for the same use) of any crop from a single planting, such as second or third pickings of cotton and ratoon crops of rice.
- (2) acres of 2001 crops not harvested until 2002 due to weather conditions, etc. Make sure the respondent is not reporting **planted** acres by crop when you are asking only for harvested acres.
- (3) acreage of maple trees that are harvested for sap.

Column 3 Acres Irrigated

Report acres irrigated **to the nearest whole acre** for all crops harvested, except tobacco, sweetpotatoes and potatoes which are reported to the **nearest tenth of an acre**.

Column 4 Total Production

Record the **TOTAL PRODUCTION** of the harvested commodity. For some respondents, this may require multiplying average yield per acres by the number of acres harvested (col 2).

Production **MUST be reported in the unit indicated inside the item code box**. If the operator reports production in a different unit than indicated, be sure to record complete information about that unit, including its weight. This allows you, or the State Office, to correctly convert the total production into the required unit.

Column 5 Amount of Production Used on this Operation

Record the amount of the share of production **belonging to the operation** that has been (or will be) **used on the operation** for feed, seed, etc.

Exclude:

- (4) any production that was (or will be) used for human consumption (record this in Section 19, item 30).
- (5) the landlord's share of production even if it was (or will be) used on this operation.

EXAMPLE:

125 acres of oats were harvested for grain with an average yield of 60 bushels per acre. These oats were harvested off share rented acres where the landlord received a 50% share. The operation used all of its share of the oats on the operation in 2002. This information would be recorded as follows:

Column 2 - 125	acres harvested
Column 4 - 7500	total production [125 acres x 60 bu/acre = 7500]
Column 5 - 3750	operation's share used on this operation [7,500 total bushels produced x 50% share x 100% used = 3,750]
Column 6 - 3750	amount of landlord's share of production [7,500 total bushels produced x 50% landlord share = 3,750 bushels]

Commodity Specific Instructions

Corn

The acres of corn harvested for grain, seed, silage, or greenchop are to be reported in section 3 for all states. Do not report field corn or sweet corn hogged-off as a harvested crop. This land should not be reported as a crop harvested but instead should be reported as (or added to) "Cropland pastured," section 2, item 1b.

Exclude:

- (1) Sweet corn for seed in section 3 under "Other Field and Forage Crops".
- (2) Popcorn in section 3, "Other Field and Forage Crops".
- (3) Sweet corn for harvested for fresh market or processing should be reported in section 6.

Wheat, oats, barley, and rye

Report varieties of wheat, oats, barley, and rye harvested for grain or seed, hay, haylage, silage, or greenchop from this operation in 2002 in section 3. Report acres of wheat harvested for grain or seed by class (Winter, Durum, Other Spring). Winter wheat and oat acres harvested and quantity harvested should be reported for the crop **harvested in 2002** (not the acres planted in the fall of 2002). Mixed grains should be reported under "Other field and forage crops" (report the quantity harvested in pounds).

Report small grains cut for dry hay under "Hay and Forage Crops" as "Small grain dry hay" and small grains cut for greenchop, haylage, or silage as "All other haylage, grass silage, and greenchop."

Exclude acres or quantity produced of straw baled from small grain crops that were previously harvested for grain or seed. Report the value of straw produced on this operation **and sold** in section 14.

Sorghum

Include:

- (4) Sorghum or milo harvested for grain or seed, silage, or greenchop
- (5) Sorghum or milo harvested by cutting the heads from stalks and used for feed un-threshed as sorghum for grain
- (6) Acres from which sorghum or milo was harvested for grain, seed, or silage then grazed after harvest
- (7) Sorghum-Sudan crosses used for hay or silage as "Other tame dry hay" or "All other haylage, grass silage, and greenchop"
- (8) Sorghum that was only hogged or grazed and not harvested as "Cropland pastured" in section 2, item 1b.
- (9) Sorghum cut for dry forage or hay as "Other tame dry hay"
- (10) Sorghum for syrup under "Other Field and Forage Crops".

Soybeans

Report soybeans harvested for beans. Report soybeans cut for dry hay under "Hay and Forage Crops" as "Other tame dry hay" and soybeans cut for greenchop, haylage, or silage as "All other haylage, grass silage, and greenchop."

Cotton

Report acres of cotton harvested. Report the quantity harvested in pounds. If cotton was grown in a "skip" row pattern, report only the acres of cotton harvested and not the land occupied by the skip rows.

Peanuts

Report all types of peanuts for nuts harvested on this operation. Peanuts cut for hay should be reported under "Hay and Forage Crops" as "Other tame dry hay."

Tobacco

Report all types of tobacco harvested from this operation in 2002. In reporting the total acreage, include tenths of acres. If "skip" rows or "sled" rows were used, include as harvested only the acreage occupied by the harvested tobacco.

Report tobacco transplants that were grown and sold from this operation in section 5, item 2.

Potatoes and sweet potatoes

Report the acreage and the total quantity of potatoes and sweet potatoes harvested for sale from this operation in 2002 separately. If the potatoes were graded for sale, be sure to include the culls in the quantity harvested, as well as those sold. Include yams with sweet potatoes. **Exclude** potatoes produced for home consumption.

Sugarcane

Report the acreage of sugarcane for sugar and the acreage of sugarcane for seed separately. If more than one use was made of the crop, prorate the acreage on the basis of each use. *In Florida*, report cuttings of sugarcane from November 2001 through April 2002. *In Texas*, report cuttings of sugarcane from October 2001 through April 2002. Other states report 2002 crop year.

Sugarbeets

Report the acreage of sugarbeets for sugar and the acreage of sugarbeets for seed production separately.

Hay and forage crops

Include hay, haylage, grass silage, or greenchop cut from pastures or CRP land. Any pasture or CRP land that had hay cut from it in 2002 should be reported as "Cropland harvested" in section 2, item 1a.

If two or more cuttings of the same crop were made from the same field, ie., all cuttings harvested as dry hay or all cuttings harvested as haylage, then report the acreage only once for acres harvested and any irrigated harvested acres. Report the total tonnage from all cuttings combined in the quantity harvested column. Dry hay is reported in as "Tons, dry" and haylage, grass silage, and greenchop are reported as "Tons, green."

If haylage, grass silage, or greenchop was cut from the same land from which dry hay was cut, report the acreage and production for that land which was cut for dry hay under "DRY HAY" and the acreage and production under the appropriate haylage, silage, or greenchop item. For example, if 20 acres of alfalfa were cut for hay and then the same land was used to produce alfalfa haylage, report 20 acres and the quantity harvested of hay in "Alfalfa and alfalfa mixtures for dry hay," and 20 acres and the quantity harvested of haylage in "Haylage or greenchop from alfalfa or alfalfa mixtures."

Exclude straw production, but if the straw is sold, report the value from straw sales in section 14.

Alfalfa and alfalfa mixtures for dry hay

Report only the acres and tons of alfalfa harvested or cut for hay and any irrigated harvested acres. Report the dry weight at the time the hay was removed from the field for storage or feeding. If the weight is not known, report the best estimate.

Small grain dry hay

Report the acres, quantity harvested, and any irrigated harvested acres of hay made from small grains or small grain mixtures. Include hay made from small grains and alfalfa mixtures where the quantity harvested was predominately from small grains. Otherwise report these harvested acres as alfalfa mixtures for dry hay. Exclude straw acreage harvested and production.

Other tame dry hay

Report all dry hay made from such crops or mixtures as clover, lespedeza, fescue, timothy, Bermuda grass, Sudan grass, sorghum-sudan crosses, orchard grass, soybeans, peanuts, etc. Report the total acres harvested, quantity harvested, and acres irrigated of all such crops or mixtures.

Wild dry hay

Report all hay cut that was predominantly wild or native grasses, even if it had fill-in seeding of other grasses. Include acres and production of wild hay cut from public lands, pastures, and other land whether rent was paid or not. Estimate acreage, if necessary. Wild hay acreage should be excluded from Cropland harvested section 2, item 1a.

Haylage, grass silage, and greenchop

Report acres harvested, quantity harvested, and any irrigated harvested acres of haylage, grass silage, and greenchop (hay cut and fed green). If haylage, grass silage, or greenchop was cut from the same land from which dry hay was cut, report the acreage and production for that land which was cut for dry hay under "DRY HAY" and the acreage and production under the appropriate haylage, silage, or greenchop item. For example, if 20 acres of alfalfa were cut for hay and then the same land was used to produce alfalfa haylage, report 20 acres and the quantity harvested of hay in "Alfalfa and

alfalfa mixtures for dry hay,” and 20 acres and the quantity harvested of haylage in “Haylage or greenchop from alfalfa or alfalfa mixtures.” When reporting haylage, grass silage, and greenchop, include acres and total quantities from all cuttings, whether harvested from land cut for hay or from land used mainly for pasture.

Total hay and forage crops

Report the total acres of hay and forage crops harvested and any irrigated harvested acres from this operation. If different crops from the same acreage were cut or when there were multiple cuttings, report the acreage only ONCE. Only acres harvested and irrigated acres harvested are needed, not quantity harvested. Exclude corn silage, sorghum silage, and straw.

Woodland Crops

Cut Christmas trees

Report the total acres of Christmas trees for cut Christmas trees as “Acres in Production” whether harvested in 2002 or for future harvest. “Number of Trees Cut” should be only those trees harvested in 2002. Report the value of the sales of cut Christmas trees harvested in 2002 in section 14. If there were acres in production, but no trees cut in 2002, report the acres in production and enter “0” for “Number of Trees Cut.” Also, “Acres in Production” should be included in section 2, item 1a, “Cropland harvested.”

Report acres of Christmas trees harvested as live nursery stock (balled and burlapped) in section 5, code 254, “Nursery stock,” and report the value of these sales in section 14..

Short rotation woody crops

Report the total acres of short rotation woody crops as “Acres in Production” whether harvested in 2002 or for future harvest. These acres are also included in section 2, item 1a, “Cropland harvested.”

A short rotation woody crop is a tree that grows from seed to a mature tree in 10 years or less. These are trees for use by the paper or pulp industry, or as engineered wood. The wood is too soft to be used for lumber. Exclude nursery stock or trees that will be harvested for lumber, fence posts, telephone poles, etc.

Maple syrup

Report the total number of taps in 2002 and the gallons of syrup produced from the **sap** harvested from these taps. If sap was sold, estimate the number of gallons of syrup it would have produced. Also, report the acres of tapped maple trees in section 2, item 2b.

Do not include syrup produced from sap purchased from others.

Other field and forage crops

Report all other field and forage crops harvested but not listed elsewhere in section 3 or sections 5 through 8. If the crop name is not preprinted, print the crop name of each crop harvested in the first column and enter in the second column the corresponding code from the listed crops. Report the acres harvested in the third column and quantity harvested in the fourth column. Report the irrigated acres that were harvested, if any, in the fifth column.

Section 4 - Grain Storage Capacity

Report the capacity of all storage structures normally used to store whole grains or oilseeds and on this operation as of December 31, 2002. These facilities can be silos, cribs, bins, buildings, trailers, etc. Do not report any capacity or usage of off-farm public storage or storage rented to others.

Report storage capacity in bushels. One ton of grain storage capacity is equivalent to approximately 36 bushels. See the conversion table below to convert tons to bushels for the most common grains.

One ton and equivalent (dry) bushels by crop		
Crop	Ton	Bushels
Corn, Sorghum (milo), Flaxseed	1	36
Wheat, Soybeans	1	33
Barley, Buckwheat	1	42
Oats	1	63
Rice	1	44
Millet	1	40

Section 5 - Nursery, Greenhouse, Floriculture, Sod, Mushrooms, and Vegetable Seeds

General Instructions

Review the crop names listed at the bottom of the page before completing this section. Report all of the area for these crops grown for sale on this operation under glass or other protection, including "tunnel" production, or in the open, whether wholesale or retail. Include those sold on consignment. Report the value of sales from these crops in section 14. Exclude greenhouse vegetables grown for home consumption.

- (1) If the same crop was harvested more than once, such as mushrooms, report the square footage only once. In the case where different crops were grown on the same benches or beds, report the area for each crop harvested.
- (2) For crops grown in hot beds, benches, or cold frames, report only the square feet of the beds, benches, or frames and not the walkways or storage areas. An example might be where crops are grown in stacked trays 3 tiers high. In this case, calculate the square footage of one tier and multiply the footage by 3. (If a tier equals 160 square feet, multiplied times 3 levels equals a total 480 square feet).
- (3) For sod, report only acres harvested.
- (4) Report tobacco transplants that are grown and sold from this operation using code 230. Exclude tobacco transplants that were grown and then transplanted on the same operation.
- (5) Report acres harvested of live Christmas trees (balled and burlapped, potted, etc.) grown on this operation using code 254. Cut Christmas trees are reported in section 3 under "WOODLAND CROPS."
- (6) Acreage which was not harvested but had crops growing in 2002, such as sod, ornamentals, shade trees, etc., should be reported in section 2, item 1d, "Cropland idle."

Item 1 Nursery and Greenhouse Crops Irrigated

Report the area of irrigated crops as square feet and/or whole and tenth acres. Report the area only once regardless how many crops were harvested from the same area. If more than one type of crop was harvested from the

same area, report each crop separately in item 2.

Item 2 Nursery and Greenhouse Crops Produced

Columns 1 & 2

Record each crop produced and the associated crop code from the list of nursery and greenhouse codes on the questionnaire and/or the respondent booklet.

Columns 3 & 4

Record the square feet under glass or other protection and/or the acres produced in the open for each crop. Square feet is recorded to the nearest foot and acres to the nearest tenth of an acre.

Item 3 Landlord's Share of Production

Record the MARKET VALUE (in whole dollars) of all nursery, greenhouse, floriculture, sod, mushrooms, and vegetable seeds given to the landlords in return for use of their land.

Section 6 - Vegetables and Melons

General Instructions

Review the crop names that are preprinted in item 2 and the crop names listed at the bottom of the page before completing this section. Report all of the area for vegetable and melon crops harvested on this operation. Exclude vegetables and melons grown for home consumption.

Harvest season - In all states, except Florida and Arizona, report vegetables harvested in the calendar year 2002. For Florida and Arizona, report vegetables and melons harvested from September 1, 2001, through August 31, 2002.

Include:

1. Multiple Cropping

Record entire acreage of each vegetable crop planted and harvested.

For example: If 20 acres of radishes were harvested from a field and the field was replanted in radishes and harvested again, record 40 acres harvested.

2. Sales from Home Gardens

Record home garden acres harvested only if there were sales from the home garden. **DO NOT** record vegetables grown only for home use.

3. Two or More Pickings

If two or more pickings were made from the same planting, record the acres harvested only once.

4. Contracts

Report all vegetables and melons, including those grown under contracts. Crops marketed under contracts will also be record in section 14 also.

5. Institutions (for Census of Agriculture purposes only)

Crops grown and harvested by an institution (school, prison, hospital, etc.) and consumed by the persons in the institution should be reported as crops harvested.

Exclude:

- (1) Report strawberries in section 8.

- (2) Report potatoes, sweet potatoes, dry edible peas, dry edible beans, dry lima beans, lentils, and chickpeas in section 3, "CROPS."
- (3) Vegetables grown under glass or other protection should be included in section 5.

Item 1 Vegetable Acres Harvested and Irrigated

Record the total harvested acres and irrigated harvested acres of vegetables and melons in whole and tenth acres. Record the area only once regardless how many crops were harvested from the same area. If more than one type of crop was harvested from the same area, record each crop separately in item 2.

Item 2 Vegetable Crops Harvested

Columns 1 & 2 Crop Name and Crop Code

Record each crop produced and the associated crop code from the list of vegetable codes on the questionnaire and/or the respondent booklet.

Columns 3 & 4 Acres Harvested and Harvested for Processing

Record the total acres harvested, and the acres harvested for processing to the nearest tenth of an acre, of each vegetable crop harvested.

Example: If 20 acres of squash were harvested from a field and the field was replanted in squash and harvested again, record only 20 acres of land from which vegetables were harvested in section 6, item 1, but record 40 acres harvested in section 6, item 2. If any of the 40 acres were harvested for processing include those acres in column four.

Item 3 Landlord's Share of Production

Record the MARKET VALUE (in whole dollars) of all vegetables, sweet corn and melons given to the landlords in return for use of their land.

Section 7 - Fruits and Nuts

General Instructions

Record the acreage if there were 20 or more fruit or nut trees, and/or grapevines on the this operation which were maintained for current or future production. Record each crop produced and the associated crop code from the list of fruit and nut codes on the questionnaire and/or the respondent booklet. Record acres to the nearest tenth of an acre.

Include:

- (1) Acreage of trees and vines whether the production was for home use or sold.
- (2) Both bearing and non-bearing trees and vines.
- (3) Bearing acres not harvested due to unsatisfactory prices, labor shortages, etc

Exclude:

- (1) Abandoned acres of trees or vines that were not maintained for production.
- (2) Young trees and vines designated for future transplanting and replacement. Record these acres of young trees in section 5, Code 254, "Nursery stock."

Harvest Seasons: (For Census of Agriculture)

- (3) For Texas, New Mexico, and Florida record the acreage of citrus crops for the September 2001 - August 2002 harvest season.
- (4) For Florida record the acreage of limes and avocados for the April 2002 - March 2003 harvest season. Estimate if necessary.
- (5) For California record the acreage of avocados for the 2002 crop year , November 1, 2001 - November 30, 2002. The 2002 crop year consists of the fall crop, November 1, 2001 - June 20, 2002 and the spring crop, April 20, 2002 - November 30, 2002. Record the acreage of olives for the September 2001 - March 2002 harvest season.

Item 1 Total Fruit and Nut Acres Irrigated

Record to the nearest tenth of an acre, acreage in bearing and nonbearing fruit orchards, citrus or other groves, vineyards, and nut trees on this operation in 2002 and the total acreage irrigated.

Item 2 Fruit, Nut, and Vineyard Crops

Columns 1 & 2 Crop Name and Crop Code

Record each crop produced and the associated crop code from the list of fruit and nut codes on the questionnaire and/or the respondent booklet.

Column 3 Total Acres in Trees and Vines

Record the total acres in trees or vines to the nearest tenth of an acre. The total acres of all trees and vines is equal to the acres of bearing trees plus the acres of nonbearing trees.

Column 4 Total Bearing Acres

Record the number of bearing acres to the nearest tenth of an acre.

Column 5 Total Nonbearing Acres

Record the number of nonbearing acres to the nearest tenth of an acre. Nonbearing trees that are planted as replacements for trees that have died in bearing blocks should have an estimate of the land which they occupy reported in the nonbearing acres column.

Item 3 Landlord's Share of Production

Record the MARKET VALUE (in whole dollars) of all fruit, nuts, grapes, and citrus given to the landlords in return for use of their land.

Section 8 - Berries

General Instructions

Record the cultivated (tame) harvested acres of strawberries, cranberries, or other berries harvested for sale from this operation in 2002. Exclude berries grown for home consumption. Wild blueberries are the only uncultivated berries which should be reported here. Report the harvested and irrigated harvested acres in whole and tenth acres.

Item 1 Total Acres of Berries Irrigated

Record the total harvested acres and irrigated harvested acres of berries in whole and tenth acres. Report the area only once regardless how many times the crops were harvested from the same area.

Item 2 Berry Crops Harvested

Column 2 Acres Harvested

Record harvested acreage, to the nearest tenth of an acre, of each berry crop harvested.

Item 3 Landlord's Share of Production

Record the MARKET VALUE (in whole dollars) of all strawberries, cranberries and other berries given to the landlords in return for use of their land.

Section 9 - Genetically Modified and Government Program Acres

Item 1 Genetically Modified or Enhanced Seed Varieties

Adoption rates for new technologies vary widely among producers of various commodities, and policy issues related to the adoption of alternative herbicide and insect resistant varieties also differ. To better address technology adoption as it relates to the operation's other management strategies and financial condition, it is important to know the number of acres reported that were planted to each of the general GM seed types.

For the listed crops, ask if any of the harvested acres reported earlier were planted with any of the listed seed types. Determine if one of the TYPES of seed listed was used for the 2002 crop. If a non resistant or non quality enhanced seed type was used, leave the column blank. If the operator used more than one type of the listed seed varieties, record the acres planted for each seed type in the appropriate seed type column.

Genetically modified herbicide resistant variety. The seed variety was genetically modified to be herbicide resistant. Examples would be Round-Up Ready (corn, soybeans, cotton), Liberty-Link (corn, canola) and BXN (cotton).

Non-genetically modified herbicide resistant variety. The seed variety was developed using conventional breeding techniques to be herbicide resistant. Examples of a non-genetically modified herbicide resistant seed are STS (sulfonyleurea tolerant soybeans) and IMI (Imidazolinone) tolerant (corn), and Clearfield (corn).

Genetically modified Bt variety. "Bt" means *Bacillus thuringiensis*, which is a bacteria that is used to control many larva, caterpillar, or insect pests. The seed variety is resistant to insects. Examples would be YieldGard, Knockout, and NatureGard (all for corn), and BollGard (cotton), New Leaf (potatoes), and Attribute (sweet corn).

Stacked gene variety (both herbicide resistant and Bt). The seed variety is genetically modified to be both herbicide resistant and insect resistant. It contains more than 1 genetically modified traits. Examples include YieldGard+Roundup Ready, YieldGard+LibertyLink, Bt corn + Roundup Ready corn, and BollGard+Roundup Ready (cotton).

Quality enhanced (such as high-oil corn). These seed varieties have output traits that affect the grain/oilseed/lint that is produced. Most are not

genetically modified, such as High-Oil corn or High Oleic soybeans. Some quality enhanced seeds, however, are GM. For example, GM traits are being introduced for tomatoes (Fresh World Farms Endless Summer) and other vegetables to increase shelf life.

Item 2 Government Program Commodities

The Farm Security and Rural Investment Act of 2002 (2002 Farm Act) was signed into law on May 13, 2002. The new legislation governs agricultural programs through 2007, covering a wide range of programs for commodities, conservation, trade, rural development, nutrition, credit, forestry, and energy.

While the 2002 Farm Act introduces some new policies to the array of agricultural commodity programs, in many ways, it extends provisions of the 1996 Farm Act and the ad hoc emergency spending bills of 1998-2001. For example, the 2002 Act continues marketing assistance loans, which existed under previous U.S. farm law; direct payments replace production flexibility contract payments of the 1996 Farm Act; and counter-cyclical payments are intended to institutionalize the market loss assistance payments of the past several years.

Since before the founding of the United States, farmers have received support through a series of markedly different policy approaches. Agricultural policy has at different times focused on distribution of the Nation's vast land resources, on increasing the productivity and standard of living of American farmers, and on assisting farmers in marketing their products. From the 1930s, U.S. farm commodity policy has focused on price and income supports. Through much of this period until 1996, farm policy relied partly on supply management in the form of acreage limits and commodity storage programs.

Beginning with the 1985 Farm Act and continuing with farm legislation in 1990, important changes in commodity programs and other agricultural policies began to move the sector toward greater market orientation and reduced government involvement. Under the 1996 Farm Act, management of risk was seen as being increasingly important for farmers. Farmers in general were expected to face greater risk of income volatility with the ending of supply management programs (such as acreage reduction programs and the Farmer-Owned Reserve program) and the termination of deficiency payments. There were some concerns expressed at the time of the enactment of the 1996 Farm Act that the reduced role for the Government in agricultural commodity policy was too extreme and represented a "dissolution of the safety net that protects farmers and rural America during

lean times” (Secretary of Agriculture Glickman).

Following the high commodity prices of the mid-1990s, prices weakened considerably beginning in 1998 in response to increased global supplies and weaker demand. High prices of the mid-1990s combined with planting flexibility provided by 1996 Farm Act led to expansion of U.S. crop production. High prices also encouraged expansion in foreign markets, and as acreage expanded, production reached record levels. In addition, the 1997-99 economic and financial crisis in Asia slowed economic growth and weakened global demand for agricultural products.

Farmers are given almost complete flexibility in deciding which crops to plant under the 2002 Farm Act, continuing provisions of the 1996 Act. Participating producers are permitted to plant all cropland acreage on the farm to any crop, except for some limitations on planting fruits, vegetables, and wild rice on base acres. The land must be kept in an agricultural or conserving use (as determined by the Secretary), and farmers must comply with certain conservation and wetland provisions. With these planting flexibility provisions, farmers may receive direct payments and counter-cyclical payments corresponding to one program crop while producing another crop.

Farmers were required to report base acres of each program commodity under both the 1996 Act and the 2002 Farm Act. For each crop commodity covered by the 2002 Act, record 1996 and 2002 base acres, 2002 base acres owned, and the direct payment yield and the counter-cyclical payment yield.

Column 1 Government Program Commodities

Rows identify specific program commodities. Record base and yield data for each commodity.

Item 2j - Oilseeds: record base and yield data for program oilseeds other than soybeans. Include sunflower, canola, rapeseed, flaxseeds, safflower, and mustard. (The Secretary of Agriculture may further expand this list of program commodities).

Item 2k - Pulse crops: record base and yield data for dry peas, lentils, and chickpeas.

Column 2 Base Acres - 1996 Act

Production flexibility contract (PFC) payments under the 1996 Act were dependent on reported base acres for specified commodities. Record the

acres for each commodity on which payments were determined. Record base acres for all acres in the operation, including acres rented on a cash or share basis.

Column 3 Base Acres - 2002 Act

The 2002 Farm Act permits the updating of base acres used for determining direct and counter-cyclical payments. Record the base acres under the 2002 Farm Act for each commodity. Record for all acres in the operation, including acres rented on a cash or share basis.

To receive payments on crops covered by the program, a producer enters into annual agreements for crop years 2002-07. Before enrolling in the program, owners of farms must establish base acres and program yields for all covered commodities. There are five options for designating base acres, which apply to all covered commodities for both direct payments and counter-cyclical payments:

- (1) Choose base acres equal to the contract acreage that would otherwise have been used for 2002 production flexibility contract payments,
- (2) Choose one of three options to add oilseeds to PFC acres, based on plantings in crop years 1998-2001, or
- (3) Update all base acres to reflect the 4-year average of acreage planted during crop years 1998-2001, plus acreage prevented from planting during those years due to drought, flood, other natural disaster, or other conditions beyond the control of the producer. An owner who does not make an election is considered to have selected the 2002 PFC acreage, plus eligible oilseeds, if applicable. Base acres for peanuts may be determined separately so long as total base acres do not exceed available cropland. Payment acres equal 85 percent of base acres.

Column 4 2002 Base Acres Owned and Operated

Record the 2002 base acres reported in column 3 that are owned and operated by the operation. All base acres in the operation were obtained in column 3; collect only the owned base acres in column 4. This will allow us to determine the base acres on land rented from others.

Column 5 Direct Payment Yields

Program payment yields for direct payments are unchanged for those crops previously covered under the PFC program.

Column 6 Counter Cyclical Payment Yields

Program payment yields for direct payments are also used for counter-cyclical payments on farms where one of the first four options for establishing base acres is chosen. For those who update their base acres, various options are provided in the legislation for updating payment yields used to compute counter-cyclical payments. That is, owners who select the last alternative for establishing base acres have three options for determining program payment yields for each individual crop for use in determining counter-cyclical payments:

- (1) Use current program yields,
- (2) Update yield by adding 70 percent of the difference between current program yields and the farm's average yields per planted acre for the period 1998-2001 to current program yields, or
- (3) Update yield to 93.5 percent of 1998-2001 average yields per planted acre.

For soybeans and other oilseeds, which were added to the program, payment yields are the farm's average yields for 1998-2001, multiplied by the national average yield for 1981-85, divided by national average yield for 1998-2001 (a 0.78 adjustment factor for soybeans, for example). Peanut payment yields are based on the farm's average yields for 1998-2001.

Recording Livestock and Poultry (Sections 10-13)

Inventory

Record all livestock, poultry, and animal specialties on the total acres operated on December 31, 2002, regardless of who owned them. Record livestock and poultry raised, fed, or pastured under a contract or on a custom basis if they were located on the total acres operated on December 31, 2002.

If on December 31, 2002 the livestock is not located on anyone's operation, the person responsible for the livestock and poultry, should record the inventory on his/her operation. Examples of when this could become an issue are when livestock are:

1. being moved from one place to another.
2. on unfenced land.
3. on a short term pasture, such as wheat or crop residue.
4. grazing in national forests, grazing districts, open range, or on land under permit.

Number Sold

Record all owned livestock and poultry sold from this place in 2002. Include livestock or poultry sold from this place by hired workers or the operator's family members. Livestock and poultry sold which was raised under contract or on a custom basis by others are to be excluded from this section -- these are recorded in Section 14, item 6. Include animals sold for a landlord or given to a landlord or others in trade or payment for goods, services, or use of the land.

Exclude:

1. Livestock or poultry owned by this operation but located on someone else's farm or in a feedlot on December 31, 2002.
2. Livestock or poultry bought and then resold within 30 days.
3. Livestock or poultry slaughtered for home use.

Section 10 - Cattle and Calves

Include inventories of all beef and dairy cattle and calves on this operation on December 31, 2002 and number of cattle and calves sold or moved from this operation during 2002. Inventories should include cattle on land used rent free or on public, private, or industrial property under a grazing permit, per head, or AUM basis. Include cattle located on or fed on this operation for others on a custom or contract basis. Column 2 records the inventory broken out by the number owned and the number not owned, such as contract of custom feeding.

Exclude any cattle owned that on December 31, 2002 were located or on feed on another operation on a custom or contract basis such as feeder cattle owned that were custom fed in a feedlot operated by someone else. Exclude cattle or calf sales of animals that were on this operation for less than 30 days.

Item 1a Beef cows

Record the number of beef cows on this operation on December 31, 2002 that were kept for beef production. Include beef heifers that had calved by December 31, 2002. Report milk cows in item 1b.

Item 1b Milk cows

Record number of cows of any breed kept for milk production on this operation on December 31, 2002. Include dry milk cows and dairy heifers that had calved by December 31, 2002.

Item 1c Other cattle

Record the number of heifers that had not calved by December 31, 2002, steers, calves, and bulls combined. Include number of cattle and calves of all ages on this operation grazing or on feed for others on a custom or contract basis on December 31, 2002.

Item 2 Total cattle and calves

Record the total number of cattle and calves of all ages on this operation on December 31, 2002. Items 1a, 1b, and 1c should add to the number reported here.

Item 3 Total cattle and calves on feed

Of the total cattle and calves recorded in item 2, record how many cattle and calves were on feed December 31, 2002 that will be shipped directly to slaughter.

Exclude veal calves that were fattened primarily on milk, dairy cows that were fed only the usual dairy ration before being sold, or cattle and calves being preconditioned, backgrounded, or fed a warm-up ration and sold or moved to another operation for further feeding.

Cattle and Calves Sold

Record the total number of all cattle and calves sold from this operation in 2002. Column 1 includes the operation's and landlord's share. Include cattle fed on this operation on a custom or contract basis. Column 2 accounts for only the number of cattle sold which were the landlord's share. Do not include livestock production not associated with land. Shared livestock production that is not part of a land rental arrangement (such as raising "cattle on shares" should be reported in Section 14).

Item 4a Calves sold

Record the number of calves weighing less than 500 pounds that were sold or moved from this operation during 2002.

Item 4b Cattle sold

Record all the cattle and calves weighing 500 pounds or more that were sold or moved from this operation during 2002.

Item 5 Cattle ON FEED that were shipped directly to slaughter

Of the cattle reported in item 4b, report in item 5 how many were sold or moved from this operation during 2002 directly to slaughter, after being ON FEED, on a grain or concentrate ration to produce a carcass that will grade select or better.

Section 11 - Hogs and Pigs

Report all hogs and pigs on this operation on December 31, 2002. Include hogs grown for others on a contract basis. Contractors should only report hogs on land they operate.

If the selected operation is a contractor or integrator and in 2002 grew no hogs other than those raised for him/her by other, do not report any hogs in inventory or any hogs sold. If the selected operation was a contractor or integrator and grew hogs himself/herself and had hogs grown for him/her by others, report only the hogs which he/she raised. Exclude hogs grown for this operation by someone else on another operation under contract.

Hog and Pig Inventory

Include the total head of hogs and pigs of all ages on the total acres operated on December 31, 2002, regardless of ownership. The inventory is broken out by the number owned and the number not owned (i.e. owned by someone else such as contract hogs).

Item 1a Hogs and pigs used or to be used for breeding

Record the number of hogs and pigs on this operation on December 31, 2002 that were or would be used for breeding. Include bred sows, bred gilts, boars, other sows, and gilts intended for breeding and young males to be used for breeding.

Item 1b Other hogs and pigs

Record all other hogs and pigs, including all hogs being raised for sale and those intended for home slaughter. Include those being fed or kept for others under a production contract or an agreement.

Item 2 Total hogs and pigs

Record the total number of hogs and pigs of all ages on this operation on December 31, 2002. Include those being fed or kept for others under a production contract or an agreement. Items 1a and 1b should add to the number reported here.

Item 3 Hogs and pigs sold

Record the total number of hogs and pigs sold or moved to a different operation, including feeder pigs, from this operation in 2002. Column 1 includes the operation's and landlord's share. Include hogs grown for others on a contract basis. Column 2 accounts for only the number of hogs sold which were the landlord's share.

Item 4 Type of operation

Enter a "1" to indicate one or more types which can best describe this operation. A maximum of four types of operation can be selected.

- A Farrow to wean operation sells or moves pigs from this operation soon after they are weaned from the sow. Generally at 2 to 5 weeks of age.
- A Farrow to feeder operation sells or moves pigs from this operation after the pigs are weaned and fed to a feeder pig weight, approximately 35 to 55 pounds.
- A Farrow to finish operation farrows and sells or moves pigs from this operation after they have reached market weight and are sold or moved directly to slaughter.
- A Nursery operation buys or moves pigs to this operation after they have been weaned and will feed them for a short period of time, after which they are sold or moved from this operation to a finishing operation.
- A Finish operation buys or moves pigs to this operation at weaning weight and feeds them until they have reached market weight and are sold or moved directly to slaughter.
- Other hog operations, this item could include operations where a majority of production focuses on raising and selling breeding stock. Specify the type of hog operation in the response area.

Item 5 Describe the producer

The purpose is to identify which of the three items best describes the producer. Up to two types of producer can be recorded by one operation.

Section 12 - Poultry

Record inventories of all poultry including breeding, layers, and all meat-type birds on this operation regardless of ownership on December 31, 2002. The inventory is broken out by the number owned and the number not owned. Poultry also includes all exotic and game birds such as emus, ostriches, ducks, pheasants, quail, etc. **Include poultry raised for others on a contract basis when reporting the inventory and number sold or moved from this operation.** Record the number sold or moved from this operation during 2002. Column 3 includes the operation's and landlord's share. Column 4 accounts for the **dollar value** of the poultry which was the landlord's share.

If the number sold or moved from the operation is not known, an estimate should be given. Roosters and young male chickens kept for breeding should be reported in item 10, "All other poultry." Roosters, capons, guinea, and Cornish hens not used for breeding should be reported in item 1c with broilers, fryers, and other meat-type chickens.

Poultry should be reported by the person who actually raised the birds even though they are often not the person who owns the poultry.

Exclude poultry owned by you but raised by someone else on another operation under contract.

Item 1a Layers 20 weeks old and older

Record the number of layer hens in molt and other layer hens and pullets 20 weeks old and older. In the second column, report any of the layers, 20 weeks old and older, and cull hens sold or moved from this operation during 2002, including those under contract. Include layers from all domestic chicken flocks, table egg strains, and meat-type strains. Exclude layers from exotic and game birds.

Item 1b Pullets for laying flock replacement

Record the number of pullets, under 20 weeks old for laying flock replacement on this operation as of December 31, 2002, and the total number sold or moved from this operation during 2002, including those under contract.

Item 1c Broilers, fryers, and other meat-type chickens

Record the number of broilers, fryers, capons, roasters, and other meat-type chickens on this operation as of December 31, 2002, including those raised under contract. Record the number sold or moved from this operation during 2002, including those raised under contract. Include only birds raised for meat production. Exclude meat-type hatching layers.

Item 2 Turkeys

Record the number of all turkeys on this operation on December 31, 2002, including those raised under contract. Record the number sold or moved from this operation during 2002, including those raised under contract. Turkeys include both turkeys for breeding as well as meat-type turkeys.

**Items 3 - 9 Ducks, Emus, Geese, Ostriches, Pheasants, Pigeons or Squab,
 Quail, and All other specified poultry**

Record the inventory for all types and ages of each specie on this operation on December 31, 2002, including those raised under contract. Record the number sold or moved from this operation during 2002, including those raised under contract.

Item 10 All other poultry

Record the inventory of all other poultry on this operation on December 31, 2002, not accounted for in items 1 through 9. Enter the name of other poultry species in the space provided. Record the number sold or moved from this operation during 2002, including those raised under contract. Poultry that is included here should only be species not previously listed and held for either breeding or weight gain purposes. Do not include as poultry, birds that were imported and sold as pets.

Item 11 Poultry hatched

Record all types of poultry hatched on this operation in 2002. Hatched includes all poultry that are placed or sold. Specify the kind of poultry hatched (chickens, turkeys, ducks, pheasants, emus, etc.).

Section 12 - Other Animals and Their Products and Aquaculture

Record all other livestock, animal specialties, and their products not reported in previous sections. The inventory is broken out by the number owned and the number not owned. Record the inventory of all sheep, lambs, colonies, horses and ponies, goats, and other animals such as mules, mink, rabbits, bison, deer, elk, etc., raised in captivity that were on this operation on December 31, 2002. Record the total number sold or moved from this operation during 2002, including those raised under contract. Exclude animals and products owned by the addressee but raised on another operation under contract.

Record the inventory and total sales of all OWNED colonies of bees and the honey sold from them regardless of where the hives were located.

Item 1 Horses and ponies of all ages

Record the inventory and number sold from this operation during 2002. If the addressee is a racetrack or boarding stable, and there is no other agricultural activities (crops, hay, etc.), it is considered an agricultural business and these horses should be excluded.

Item 2 Sheep and lambs of all ages (owned)

Record the total number of sheep OWNED (including ewes 1 year old and older) rams, wethers, and lambs of all ages REGARDLESS OF LOCATION on December 31, 2002. Report the total number sold of the sheep and lambs OWNED, REGARDLESS OF LOCATION, during 2002.

Item 2a Ewes 1 year old or older (owned)

Record the inventory of all ewes 1 year old and older OWNED, REGARDLESS OF LOCATION, on December 31, 2002. Sales of ewes are included in item 2, above.

Items 3 through 5 Milk, angora, and meat and other goats

Record the inventory of goats (in their appropriate classification) on this operation on December 31, 2002, including those raised under contract. Record the total number of goats (in their appropriate classification) sold or moved from this operation during 2002, including those raised under contract.

Item 6 Colonies of bees (owned)

Record the inventory of colonies of bees OWNED, REGARDLESS OF LOCATION on December 31, 2002. Record total number of colonies sold during 2002. Record the production of honey in item 10. Record the sales of honey, bee colonies, beeswax, pollen, and leaf cutter bees in section 14, item 4n.

Fees received from pollination services should be reported in section 16, item 1, as customwork and other agricultural services provided for farmers and others.

Item 7 Other livestock and animals

Record the inventory of any other livestock and animals (mink, rabbits, etc.) raised in captivity on this operation on December 31, 2002 and not previously reported on this report form. Print the name, the corresponding code from the list below the table, the inventory on this operation on December 31, 2002, and the total number sold or moved from this operation during 2002. If mink pelts and rabbit pelts were sold in 2002, include them in the number sold. Retained pelts should be included in inventory.

Livestock and animal products

Item 8 Wool (pounds shorn)

Record the total pounds of production wool, whether sold or not, produced from all owned sheep and lambs shorn in 2002, regardless of the number of times each animal was sheared or whether or not the sheep and lambs are still owned.

Item 9 Mohair (pounds clipped)

Record the pounds of mohair produced (clipped), on this operation in 2002. Record the mohair produced, whether the mohair was sold or not, or whether or not the goats are currently on this operation.

Item 10 Honey (pounds)

Record the pounds of honey produced by this operation from owned hives or colonies in 2002 whether or not it was sold.

Item 11 Other livestock products

Record the production of all other livestock and livestock products including semen, manure, beeswax, worm castings, or other livestock or animal products produced and sold from this operation during 2002. Print the type of product and indicate the unit (tonnage, pounds, etc.) used in reporting the product.

Item 12 Aquaculture

Record the total pounds sold OR total number sold of all fish and aquaculture products raised in captivity on this operation during 2002. Indicate the unit in column 4. Print the name of the fish or product and the corresponding code from the list at the bottom of the page. Catfish or other aquaculture raised under a production contract should be reported by the person who raised the product.

Record fish eggs and fingerlings sold or moved from this operation, regardless of the specie, as code 901, "Other aquaculture products." All types of amphibians or reptiles, such as snakes, turtles, alligators, etc., should also be reported as code 901.

Section 14 - Commodity Marketing and Income

Production and Marketing Contracts

The following instructions should be used when completing information on marketing and production contracts for Commodity Marketing (Section 14).

Importance of Obtaining Information on Marketing and Production Contracts

To show an accurate picture of both the value of the farm sector's output and the financial condition of farming operations, we must fully account for persons or other businesses who provide inputs used on the farm to produce agricultural commodities and receive income from the sales of these products. The contracting information collected on this survey is USDA's only source of data to separate production, income, and expenses among farmers, contractors, landlords and others. For these reasons, collecting complete information on contracting is critical.

In particular, failing to obtain complete information on production contracts can lead to an inaccurate picture of both the value of the farm sector's output and the financial condition of farming operations. Since farmers do not own the animals or crops raised under a production contract, they usually do not report the sales of these commodities. Furthermore, they do not receive the full value of these products when they are sold. Instead, farmers receive a fee for producing them, which is only a small part of their actual value.

If we only obtain information on the operation's cash sales and fee income, we would not account for the quantity removed under contract and would underestimate the operation's total value of production. If we only obtain information on an operation's value of production, we could not determine who actually receives the proceeds from the sale of these commodities and would overstate the operation's gross and net income.

It is also important that the quantity of products removed from the farm operation under production contracts be recorded so an accurate estimate of total value of production can be developed. Farmers usually do not report sales of livestock grown under production contracts since they do not own these animals. But if we do not account for quantity removed, we could underestimate total value of production.

Overview of Marketing and Production Contracts

MARKETING CONTRACT

Contractor:

buys a known quantity and quality of the commodity for a negotiated price (or pricing arrangement).

does not own the commodity until it is delivered.

has little influence over production decisions.

Contractee (operator):

has a buyer and a price (or pricing arrangement) for commodities before they are harvested or raised.

supplies and finances all or most of the inputs needed to produce the commodity.

owns the commodity while it is being produced.

makes all or most of the production decisions.

assumes all risks of production but no price risk or market uncertainties.

receives largest share of total value of production.

PRODUCTION CONTRACT

Contractor:

arranges to have a specific quality and quantity of commodity produced.

usually owns the commodity being produced.

makes most of the production decisions.

Contractee (operator):

provides a service and other fixed inputs (land, buildings, etc.) for a fee.

supplies a small part of the total production inputs needed.

usually does not own the commodity.

makes few, if any, of the production decisions.

bears no price or market uncertainties and limited production risks.

receives a fee for production that does not reflect the full market value of the commodity.

Contract Production and Marketing

To separate production and marketing contracts from cash sales you need to have a good description of the various contracts. (See the previous page for a brief overview of contract features.) Farmers and ranchers have used contracts to produce or market agricultural commodities for many years. Marketing contracts exist for both crops and livestock, but most are associated with marketing of crops. Production contracts also are used for both crops and livestock, but are more common for livestock.

Farm operators use contracts for several reasons. Contracts allow the operation to have access to a particular market for a commodity. Contracts help the operation reduce the risk of commodity prices falling to unacceptable levels causing large reductions in farm income. Sometimes farmers who have large investments in land, machinery and/or equipment (and who may also have large debts) use contracts to gain income stability.

For processors or other people who contract with farmers, contracts provide a way of getting a consistent supply of a fairly standard quality of product.

Contracts also spread the costs of production among the parties to the contract. For example, a vegetable production contract may call for the contractor to provide hauling or seed or a share of the chemical expenses. For some commodities, it is common for the contractor to provide inputs such as seed up front, and later charge the farmer (contractee) for the input at settlement. For commodities such as hogs, broilers, or feeder cattle, it is common for the contractor to provide a large share of inputs such as feed and veterinary services.

Importance of Marketing and Production Contracts

If we do not correctly account for the division of income and expenses between contractees and contractors, we cannot show the real financial picture of the farm operation. To show total receipts and expenses correctly for the farm economy as a whole, we have to collect (and correctly allocate) all costs and returns of production to the parties to whom they belong.

For example, accounting for production contracts is necessary in order to fully account for persons or other businesses who are providing inputs for use by the farm in producing agricultural commodities.

Reporting the quantity removed under contract allows USDA to determine the share of total production belonging to contractors. Income from this production can then be allocated to contractors rather than to farmers.

Farmers earn a fee for undertaking various production activities for the contractor. This income is reported as fees received for services.

This is the only source of data to separate production and income among farmers, contractors, landlords and others. Failing to correctly account for the contractor's production amount will result in a farm operator's net income being overstated.

Collecting Data on Contracts

There are two things you must find out in order to collect contract data correctly. The first is whether the operation is acting as the CONTRACTEE or CONTRACTOR for a specific commodity. (See the *Interviewer's Manual* for definitions). Second, you have to find out whether the contract is a production contract or a marketing contract.

Characteristics of Production Contracts

In production contracts, before production ever begins, the contractee and contractor reach an agreement on specifics such as fees, what inputs are provided and who owns the product. The contractor usually controls most of the terms of production contracts. The amount of payment received by the farm operation (contractee) is a lot less than the full market value of the commodity. The farm operation also pays only a small part of the total expenses required to produce the commodity.

A fairly good clue you are looking at a production contract is they are usually written such that the contractor supplies some or most of the inputs for production. The terms of these contracts tend to be very specific. The contractor has a great deal of control over the amount produced and the production practices used. The contractee usually provides inputs such as labor, utilities, housing, machines and/or equipment.

Another clue to the presence of a production contract is if the operator reported few or no head of **owned** livestock on hand or sold by the operation, yet the operation has livestock or poultry facilities and/or production expenses. It is almost certain these livestock or poultry are being produced under contract.

Look for production contracts on farms that:

- # have broiler houses or other poultry and/or egg producing facilities. Broilers, turkeys, and hatching eggs are almost always produced under contract or for another segment of the same company.
- # have hog nursery or confinement feed arrangements. An ever-increasing portion of hog production is now under contract.
- # have cattle feeding operations. Feedlots almost always feed cattle for someone else.
- # produce vegetables for processing.
- # produce seed crops.

Characteristics of Marketing Contracts

With marketing contracts, the farm operation provides most of the inputs for production. The operation then receives a payment for the commodity which is related to its full market value. The terms of marketing contracts are usually controlled by the contractee. The main role of the contractor is providing a market for the commodity. Marketing contracts are usually agreed to after production of the commodity begins.

Look for marketing contracts on farms that:

- grow citrus fruits, other fruits, or nuts.
- produce fresh vegetables.
- grow sugar beets, sugarcane, peanuts, dry peas or dry beans.
- produce fluid milk.
- grow potatoes.
- produce eggs.
- grow ornamentals or horticultural crops.

Contract *MARKETING* of Commodities

A marketing contract for a commodity exists when a verbal or written agreement is reached to set a price (or pricing mechanism) and a market for the commodity, **before harvest** or **before the time the commodity (livestock) is ready to be marketed**.

Although marketing contracts are more common for crops, some producers use contracts to market their livestock and/or livestock products. Livestock producers use contracts to provide for future delivery of a certain number and/or quality of animals or products. The contract may specify a price or establish a procedure to arrive at a price. One example is grade and yield selling of livestock. Another example is a dairy producer who contracts to market all milk for the coming year through a co-op, with prices determined later through some process such as co-op bargaining.

For the purposes of this survey, marketing contracts may include:

- forward sales of a growing crop (or a crop to be grown). The contract provides for later delivery, and it may fix a price or provide for pricing later. Delivery usually occurs at harvest. Fruit crops are common examples of this.
- price set after delivery (and often according to formula). This is often based on grade and yield.
- crop pooling. Farmers may agree to pool their crop and sell along with other producers through a cooperative or other pooling firm. Most agreements to pool are made pre-harvest. The final price received is determined by the net pool receipts for the quantity sold (by selling a larger amount the pool may get a better price). Farmers may have to wait a year or more to receive final payment, and decisions related to selling are made by the pool manager. Pooling is common in rice and cotton marketing.

While marketing contracts can be used to sell commodities held in inventory, for the purposes of this survey we only want to count contracts made before harvest (or before the commodity is ready for market). Sales from inventory should be considered **cash** sales.

Do not count futures contracts obtained for the purpose of hedging as marketing contracts. Hedging occurs when the farmer takes opposite positions in the futures and cash markets. It allows farm operators to fix now the price of products they intend to sell later. For example, farmers

who are growing a commodity for sale are said to be "long" in the cash market. The appropriate hedge is to **sell** futures. Then, when the farmer sells his cash commodity, he buys back his futures contract, preserving a price. This type of transaction should be recorded in two places. The actual cash sale of the commodity should be recorded in Section 14, item 3 (crops) or Section 14, item 4 (livestock) under the appropriate commodity. The net profit or loss from hedging should be recorded in Section 16, item 9.

Contract *PRODUCTION* of Commodities

Under production contracts for poultry or livestock, the farm/ranch operator (for example, a feedlot or broiler grower) usually houses and feeds the poultry or livestock until they reach a specified age or weight. The contractor (the individual or operation that owns the livestock or poultry to be fed out) usually either pays most of the production expenses or reimburses the contractee for the expenses while the commodity is on the contractee's operation.

For example, in broiler contracts, items normally furnished by the contractor include chicks, feed, chemicals, transportation to market and technical assistance. Inputs provided for feeder cattle, fattened cattle, feeder pigs, slaughter hogs, broilers, eggs and other livestock may not be the same, but it is common for the contractor to supply many (if not most) of the variable production inputs.

Sometimes reimbursement for these expenses is added to the amount paid to the contractee for services. Settlement sheets or other contract documents usually break out reimbursed expenses. Reimbursed expenses should be included under the appropriate item and column in Section 19.

Although production contracts are more commonly used in livestock production, there are quite a few for crop production. A good example is vegetables for processing where the contractor often supplies inputs such as seeds or plants, fertilizer, chemicals, transportation and technical assistance. The payments the growers get are set by the contractor, often even before production begins. Other contract provisions may be largely determined by the contractor.

Marketing Expenses

The following instructions should be used when completing information on marketing charges for the sales of Crops and for Livestock commodities.

Almost all operations that sell commodities have some marketing charges. These are usually deducted from the gross payment, so the check the farmer receives already has these charges subtracted. Farmers do not generally keep very good records of charges that were already deducted before they received their payment checks. Commission fees, yardage fees, storage fees, inspection fees and check-off fees, etc. are identified on payment vouchers, along with the gross and net receipts. **PROBE TO BE SURE THAT THESE "HIDDEN COSTS" ARE ACCURATELY REPORTED.**

If the respondent reports that no marketing charges were paid, probe by asking if anything was subtracted out of the total price before the buyer wrote the check. If the answer is yes, this usually means marketing charges were paid. Be careful not to include expenses for production inputs or loan re-payments that were netted out of the farmer's check -- these are not marketing charges. If an operation sold commodities but truly did not have any marketing charges, make a note of this, or the state survey statistician will have to call you or your supervisor back to verify the information.

If you **absolutely cannot get** per commodity charges, **record the total quantity (and unit) sold** so the survey statistician has something to use for calculating these charges.

If you have to use a handout sheet of marketing charge rates (provided by some State Offices), make a note in the margin so the survey statistician knows the farmer could not supply this information. **DO NOT** use these sheets unless the farmer **cannot** supply the information.

All marketing expenses paid by the operation, landlord(s) and contractor(s) must be included. All commercial crop drying, ginning and storage expenses should be included even if the crop is not yet sold. (However, storage-related expenses such as those for LP gas to run on-farm dryers should be excluded.) If a commodity was not sold from storage, but was returned to the operation, out-of-pocket expenses for storage should be included as a marketing expense.

In field crops such as peanuts or tobacco, quotas or allotments are often rented or leased from operators who do not use their full allotment or quota. Quota or allotment **rentals** should be considered a payment for the privilege

of marketing the crop and **should be recorded as a marketing expense**. It is not necessary to rent land in order to rent an allotment or quota. If only land is rented, it should be recorded in Section 1. But, if quota or allotment rentals are reported, be sure the rent payment reported in Section 1 is **only for land** and not for the land and allotment or quota rental combined. Also include rental of sugarbeet co-op shares in states where this is a practice.

Perishable products such as fruits, vegetables and fish often have to be refrigerated or iced during storage or transportation. These expenses should be considered marketing expenses.

When promotion or check-off fees are automatically deducted from gross sales of commodities such as soybeans, cotton, beef, hogs, or milk, the fee is INVOLUNTARILY charged and should be considered a marketing expense. Operations also make voluntary payments for marketing and production programs. VOLUNTARY payments should be recorded under general farm business expenses (Section 19, item 31).

Include fees which are deducted from payment even if the producer has the option of applying for a refund (such as a refund from Cotton Incorporated). Refunds of marketing expenses should be included as other farm related income in Section 16, item 9.

Include unit retains for sugarbeets which are deducted by the coop or processor from payment even though the producer receives payment from them in future years. Refunds of marketing expenses should be included as Cooperative Patronage Dividends and Refunds in Section 16, item 8.

Include marketing charges paid for cash and/or contract sales.

Milk and Dairy Products

Include as a marketing charge the withholding or reduction in price for the Dairy Refund Payment Program. Refunds of these charges should go in Section 16, item 9. **Do not include hauling as a marketing charge**. If the hauling charge is netted out in the operator's books, add it back to the total sales value for milk and other dairy products. Be sure these hauling charges were included in custom hauling (Section 19, item 27a). If they were not, go back and add them in.

Cotton

The cost of ginning is usually paid by giving the cottonseed to the gin. Often neither the ginning expense nor the cottonseed income appear on the farmer's books; however, the value of the cottonseed traded to the gin is technically an income item, and **the cost of ginning is a marketing expense** to the operation. This information should appear on the operation's statement from the ginning company. You will have to probe for this information.

Occasionally, the cost of ginning is more than the value of the seed produced by the cotton. The operation then has out-of-pocket expenses for ginning. If the cost of ginning was less than the value of the cottonseed, the operation should have received money for cottonseed. This information should be in the operation's record books.

Item 1 MARKETING Contracts

Column 1 Commodity

Show the respondent the list of Crop and/or Livestock Codes in the Respondent Booklet.

Record each commodity the operation marketed through a marketing contract in 2002. For vegetables, be sure to specify whether the contract was for fresh market or processing production. In most cases, contracts for processing are production contracts, and should be recorded in item 2.

Column 2 Commodity Code

Record the commodity code that relates to the commodity identified in column 2.

Column 3 Quantity Marketed

Record the total amount of the commodity marketed or removed from the operation under the contract. Do not include the landlord's share of production even if it was marketed along with the operation's share. It is essential to obtain the quantity removed from the operation under the contract so an accurate estimate of the total value of production (quantity times price) can be developed.

Column 4 Unit Code

Record the code that represents the commodity unit (specified in the contract), such as pounds, tons, bushels, head, etc. If a unit other than those indicated on the questionnaire is reported, make good notes.

Column 5 Price Per Unit

Record the **final** price in dollars and cents per unit the operation will receive for all of the production marketed under the contract. The respondent may have to estimate this price. **Column 6 divided by column 3 will equal column 5 ONLY when the operation was paid in full during calendar year 2002 for the commodity marketed under the contract.** Because buyers often do not pay the whole contract price at one time, total receipts under a contract in 2002 do not always reflect the true value of production. This price gives the data needed to calculate the total value of commodities marketed under contract. The price can also be considered the 'net' price, the gross price minus marketing charges.

Be sure the unit for the price reported agrees with the unit for the quantity reported. Cotton is an example where price and unit often do not agree. A common mistake is to record cotton sales in bales, but price as a price per pound. If you want to record a price per pound (and cotton is normally priced that way), that is fine. Just make sure to record pounds of cotton sold and not bales.

Let's look at an example where just one bale was contracted at 65 cents per pound. If you recorded "1" in column 3, code 7 (for bales) in column 4 and .65 in column 5, the total income to the operation would show up as 65 cents. Assuming a standard bale weight of 480 pounds, you came up short by \$311.35 (the price per BALE is $480 \times .65 = \$312$)!

Column 6 Total Amount Received

Since total payments are not always received in the calendar year of production, you always have to **ask** this question in order to complete this column correctly. Be sure any marketing charges related to sales under the contract are excluded. Record the total amount the operation **received during the calendar year** for sales under the marketing contract. **This is often less than the quantity marketed under contract times the per unit price.** Sometimes the producer is not paid until after the first of the next year. If the operation did not receive any payment under the contract in 2002, enter a dash and make a note.

If the operation did not receive all of the payments owed to them under the contract in 2002 (column 6 is less than column 3 times column 5), the remaining amount owed must be accounted for as an asset in Section 20, item 3.

Column 7 Marketing Charges

Record the total marketing charges PAID BY THE OPERATOR associated with the sale of each commodity. The marketing charges will be those expenses charged to the operator by the contractor for the sale of the contracted commodity. The operator may need to refer to sales receipts to find these charges.

Exclude marketing charges PAID BY THE CONTRACTOR – these expenses will be recorded in the appropriate column in Section 19, item 31, “All Other Farm Business Expenses”.

Item 2 PRODUCTION Contracts

Column 1 Commodity

Show the respondent the list of Commodity Codes in the Respondent Booklet.

Record each commodity the operation produced through a production contract. For vegetables, be sure to specify whether the contract was for fresh market or processing production.

Column 2 Commodity Code

Record the commodity code that relates to the commodity identified in column 1.

Column 3 Quantity Removed

Record the total quantity of the commodity produced and removed from the operation under the contract **during 2002**. Always complete this column when contract production is reported so an estimate of the value of the commodity produced may be made. Livestock examples of this include the number of head of cattle removed from a feedlot, or the number of broilers removed.

Column 4 Unit Code

Record the code that represents the commodity unit (specified in the contract), such as pounds, tons, bushels, head, etc. If a unit other than those indicated on the questionnaire is reported, make good notes.

Column 5 Fee Received Per Unit

Record the price per unit (in dollars and cents) received for producing the commodity. If money is still owed to the respondent under the contract, be sure the fee per unit includes the amount still owed to the operation. Make sure the unit for which the fee is reported agrees with the unit in which the quantity was reported.

Column 6 Total Amount Received

Record the total amount received for producing the commodity under contract during calendar year 2002. **Ask** this question to complete this column correctly. Fees are not always received in the same year as production, so this may not be the same number as price multiplied by quantity. **Exclude reimbursement for expenses from the fee for services. Record those expenses under the contractor column in Section 19.**

If the operation did not receive all of the payments owed to them under the contract in 2002 (column 6 is less than column 3 times column 5), the remaining amount owed must be accounted for as an asset in Section 20, item 3.

IMPORTANT: For **large integrated businesses** where commodities were passed to another phase of processing, commodities may not be "sold." Most of these operations will have a "book value" of the commodity and this is what should be reported in columns 5 and 6. If the operation is not able to report book value, leave columns 5 and 6 blank and make a note. Be sure to record the quantity removed in columns 3 and 4.

Column 7 Marketing Charges

Operators generally do not have marketing expenses associated with production contracts. However, in cases where they incur these costs, record the total marketing charges associated with each commodity in the column. Remember to only include marketing expenses **PAID BY THE OPERATOR** in this item.

In most production contracts, marketing charges are paid by the contractor. These expenses will be recorded in the appropriate column in Section 19,

item 31, "General Business Expenses".

Item 3 CASH SALES of CROPS

For crops sold in 2002, report in column 3, the amount received during calendar year 2002, net of marketing charges (**after** deduction of these charges). Farmers usually report net receipts, not gross receipts, and net receipts are what we want. For example, the check from a co-op a farmer records in the books most likely already has the check-offs or other charges deducted from it. The total of all marketing expenses associated with the sales of crops are recorded in column 4.

Probe carefully to be sure reported receipts are already **net of marketing charges**. If they are, just record what is reported, but be sure other charges such as marketing containers, supplies, and interest on loans, etc. were not deducted. If charges for marketing containers, supplies, etc. were deducted, add them back to the total received for the crop and record in the appropriate expense items in Section 19.

If marketing charges have not been deducted from the farmer's receipts, subtract them before recording net receipts in column 3. Marketing charges are recorded in column 4.

For each crop commodity identified in Sections 3 through 8, total production should be accounted for in other sections of the questionnaire. Quantities used on the farm and going to landlords are reported in Sections through 8, while quantities moved off the farm are reported in Section 14 as production under contract or as cash sales. If the commodity has been sold, but cash payment has not yet been received, that quantity should be reflected as an account receivable and reported in Section 20, Item 3. Quantities that remain in inventory should be reflected in Section 20, Item 2c.

INCLUDE as Cash Sales:

- (6) crops sold in 2002, REGARDLESS OF THE YEAR PRODUCED.
- (7) an estimate of the value of the crop moving through the operation for integrated operations which do not sell the commodity but pass it on to another phase of the operation (such as processing, distributing or retailing). If the firm considered the commodity to have been produced under contract, record it in item 2.
- (8) **CROPS INITIALLY PLACED UNDER CCC LOAN WHICH WERE LATER REDEEMED AND SOLD DURING 2002.**

Farmers often report redeeming CCC loans for crops without showing that the crops were either sold or placed in inventory. **These crops have to be recorded one place or the other, unless they were fed to livestock.** When these mistakes occur, the farmer's income statement shows a negative value for the redemption and no offsetting positive value in sales or crop inventory. This causes us to make an incorrect (low) estimate of net farm income.

EXCLUDE from Cash Sales:

- (1) commodities removed under a contract arrangement. (Record in items 1 or 2.)
- (2) crops placed under CCC loan which were not redeemed. (These should be recorded in Section 15, items 1 - 3.)
- (3) cash sales of straw and manure. (Record these in Section 16, item 9.)
- (4) landlord shares of crops sold. (Record these in Section 3 for each commodity as well as item 3 for Sections 5 - 8.)

Items 3a-d Pre-printed Commodities

Items 3a-d have preprinted groups of commodities indicated. For each of these categories, report the **sum** of the NET receipts from cash sales for the combination of crops indicated. Do **NOT** include Christmas trees in item 3c, Nursery and Greenhouse crops. Record the total marketing charges for each commodity group in column 4.

Item 3e-o

For cash sales of crops **not accounted for in items 3a-d**, such as corn, wheat, soybeans, etc., refer to the Crop Codes in the Respondent Booklet and write in the name (column 1) and code (column 2) of each commodity. Record the net dollar amount received for the cash sale of each commodity sold in 2003 in column 3. Record the total marketing charges for each commodity in column 4.

Item 4 CASH SALES of Livestock and Livestock Products

If this operation is a contractor, record the income received from sales of commodities produced under contract by other operations in Section 14, item 6, column 6 ONLY. Do not record these sales in items 1, 2, or 4.

This item records the **net** sales of livestock and livestock products sold for cash in 2002.

Probe carefully to be sure the receipts the farmer reports are already **net of marketing charges**. If they are, then you should just record what is reported, but be sure that other charges such as marketing containers, supplies, and interest on loans, etc. were not deducted. If charges for marketing containers, supplies, etc. were deducted, they should be added back to the total received and also reported in the appropriate expense items in Section 19.

If marketing charges have not been deducted from the farmer's receipts, you or the farmer must subtract them before you record net receipts in column 2.

Exclude:

- Livestock Marketing Contracts (report in item 1).
- Livestock Production Contract Sales (report in item 2).
- Landlord Shares for livestock (report in Sections 10 - 13 under the appropriate column).

Column 2 Net Dollar Amount Received

Record the Net Dollar Amount Received in 2002 for each commodity sold. Remember this is the NET amount, not the gross amount.

Column 3 Marketing Expenses

Record the total marketing expenses for each commodity.

Item 5 Payments in 2002 for Previous Years' Marketings (Deferred Receipts)

This item accounts for payments received in 2002 for all commodities sold or transferred **before** 2002. This is money that would have been owed to the operation at the end of 2001. Farms/ranches often receive payments in one year for commodities marketed in earlier years. Operators often ask that payments be deferred from one year to the next for tax benefits. These deferred receipts (deferred in 2001 or before) should be included in the appropriate category under this item.

Be sure these payments are **NOT** included in Marketing Contracts (item 1), Production Contracts (item 2) or Cash Sales (item 3 or 4).

Item 5a Deferred receipts from previous years' Marketing Contracts

If the operation received payments in 2002 for commodities **marketed** under contract in previous years, record the 2002 payments here. Be sure to emphasize this item since it can be a large part of income in any given year. For commodities marketed under contract, it is common for payments to be made across two or more years. Contracts for crops such as fresh and processing fruits and vegetables, cotton, rice and sugar beets may call for payment to the farmer as the crop is sold by the co-op, pool, or contracting firm.

Item 5b Deferred receipts from previous years' Production Contracts

If the operation received payments in 2002 for commodities **produced** under contract in previous years, report those payments here. As with payments under marketing contracts, payments under production contracts may be paid over more than one year.

Item 5c Deferred receipts from Cash Sales of Commodities in Previous Years

If the operation received income in 2002 from cash sales of commodities sold or transferred in previous years, record that income here.

Item 6 Contracts to have Livestock or Poultry Fed or Raised by Another Operation

If this operation paid *another* operation a fee for the service of feeding or raising a commodity (owned by the selected operation), then the answer to this question is yes (the operation is acting as contractor). The commodity

must remain an asset of the selected operation. It is neither sold to the contractee operation, nor is ownership transferred to that operation.

Examples of these types of contracts include:

- a cow/calf producer who has calves fed out through a feedlot.
- a dairy producer who pays another operation to raise replacement heifers.
- a hog farrowing operation that contracts with another operation to raise feeder pigs up to slaughter weight.

Column 1 Commodity Contracted Out

Record the type of commodity that was placed on another operation to be fed or raised. Include commodities that were placed on contractee operations in 2001 and were still under contract on January 1, 2002.

Column 2 Livestock Code

Record the livestock code from the respondent booklet that relates to the commodity identified in column 1.

Column 3 Market Value of Commodities under contract on Jan. 1, 2002

Record the estimated market value of all this operation's commodities **from 2001 and previous years** that were **placed** on contractee operations and were still under contract as of January 1, 2002.

DO NOT include this value in Section 20, Assets.

Column 4 Estimated Market Value of Commodities Placed

Using the market price at the time the commodity was placed, record the estimated value of the contracted commodities this operation **placed** on contractee operations **during 2002**. If more than one arrangement existed, or if arrangements existed for more than one commodity, record each one on a separate line.

Column 5 Production Expenses and Fees

Record the total amount this operation paid to contractees for labor and management fees and reimbursements for expenses.

Column 6 Gross Receipts from Sales of Contracted Items

Record the gross income to this operation from sales of commodities produced under contract by other operations (quantity times market price) during 2002. **DO NOT record these sales anywhere else in Section 14.** This item will be zero for dairy replacement heifers that are removed back to the respondent's (contractor's) operation and not sold.

Column 7 Market Value of Items under Contract on December 31, 2002

Record the estimated market value of commodities still under contract as of December 31, 2002.

DO NOT include this value in Section 20, Assets.

Item 7 Type of Operation

For this question, make sure the respondent refers to the list of Farm Type Codes in the Respondent Booklet. Ask the respondent to select the category which represents the largest portion of this operation's 2002 gross income.

Government payments should be distributed among the categories according to the type of program in which the operator participated.

When the respondent reports that sales for two of the categories are equal, ask which group is more important and is the primary production activity.

Operations primarily engaged in producing short-term woody crops should be counted as farms and classified in "Cut Christmas Trees and Short Rotation Woody Crops" category. Short-term woody crops are softwood trees (hybrid poplar, cottonwoods and pines) reaching maturity in 10 years or less and typically are used for paper production.

A farm primarily engaged in raising dairy heifers for herd replacements is classified as a "Cattle and Calves" operation because no milk or dairy products are being produced.

LIVESTOCK ON SHARES

***** **Note** *****

Please review the instructions below carefully.

The production of livestock, primarily cattle, “on shares” is common in Montana, North and South Dakota, Nebraska, and other states. For example, individuals who own cows place them on someone else’s land. The land operator cares for the cows and calf crop. The cattle owner and land operator share the calf crop in a 50-50, 60-40, 70-30, or other agreed to arrangement.

The parties involved usually do not consider these arrangements to be contracts. However, for the past few years, these situations have been coded as production contracts (for the land owner) along with additional coding specific to these type of arrangements. This coding scheme has caused a great deal of confusion for enumerators, state survey statisticians, headquarter statisticians, and analysts. It has also been very difficult to create edit logic to verify the coding is correct. For these reasons, procedures for recording and coding livestock on shares has been changed as indicated below. The following approach simplifies collecting, editing, coding, and validating livestock on share arrangements, while maintaining the integrity of the cost and returns data.

Following is an example of a ‘common’ livestock on shares arrangement. After the scenario are examples of how the data should be coded, from both the cattle owner and the land operator perspective.

Livestock on Shares Example

A cattle owner has a deal with a land operator to raise calves on shares. The cattle owner supplies 100 head of cows. The land operator takes care of the cows and provides all necessary inputs. They agree the land operator will receive 70% of the calf crop and the owner of the cattle will receive 30%. For purposes of this example, there are 100 calves produced, therefore, the land owner’s share is 70 calves and the cattle owner’s share is 30 calves. The land owner decides to keep 5 of his calves and sells the rest for \$500 each. The cattle owner sells all of his calves and averages \$500 / head.

CODING FOR THE LAND OWNER

If the land owner was sampled (the most common situation), the information would be recorded as follows:

Section 10 - Cattle and Calves

Record the 5 head of calves he kept in item 1c, column 1 (item code 0564=5). If the cows were still on his place at the end of the year, record 100 head in item 1c, column 2 (0565=100).

Section 14 - Commodity Marketing and Income

Account for the cash sale of the calves in item 4c [0822=32500 (65 head * \$500 / head)].

Section 19 - Operating and Capital Expenditures

Account for the expenses paid by the land owner (the operator) for caring for the cows and raising the calves.

Section 20 - Assets

Account for the value of the 5 calves the land owner kept in item 2d or 2e. Do not account for the value of the cows because he does not own them.

CODING FOR THE CATTLE OWNER

If the cattle owner was sampled the information would be recorded as follows:

Section 10 - Cattle and Calves

None of the 'livestock on shares' should be included in this section because the cows are not on this operation. The cows will be accounted for on the land operators questionnaire.

Section 14 - Commodity Marketing and Income

Account for the cash sale of the calves in item 4c [0822=15000 (30 head * \$500 / head)].

Section 19 - Operating and Capital Expenditures

The cattle owner did not have any expenses for the cattle on shares in this example.

Section 20 - Assets

Account for the asset value of the 100 cows in item 2d. This is contrary to the questionnaire instructions of "Owned By and Located On this operation", but the asset value of the cows must be accounted for.

Section 15 - CCC Loans and Federal and State Farm Program Payments

CCC Loans

The Commodity Credit Corporation (CCC) was created in 1933 to help stabilize and support farm prices and income, and to help maintain balanced supplies and assure orderly distribution of agricultural commodities. These questions account for all of the operation's CCC loan transactions during the reference year. This allows us to get a complete and accurate accounting of the farm's income.

The Federal Agriculture Improvement and Reform Act of 1996 (1996 Act) requires that a nonrecourse marketing assistance loan and loan deficiency payment (LDP) program be administered for the 1996 through 2002 crops of 16 commodities. The Farm Service Agency (FSA), on behalf of the Commodity Credit Corporation (CCC), administers nonrecourse marketing assistance loans for wheat, corn, grain sorghum, barley, oats, soybeans, minor oilseeds (oil-type sunflowerseed, other-type sunflowerseed, flaxseed, canola, rapeseed, safflowerseed, and mustard seed), rice, upland cotton, and extra long staple (ELS) cotton. Market loan repayment and loan deficiency payment provisions apply to each of these commodities except ELS cotton.

The Farm Security and Rural Investment Act of 2002 expanded the list of commodities eligible for nonrecourse marketing assistance loans and loan deficiency payments to include peanuts, graded wool, nongraded wool, mohair, dry peas, lentils, and small chick peas.

Loans provide eligible producers with interim financing on their eligible production and facilitate the orderly distribution of loan-eligible commodities throughout the year. Instead of selling the crop immediately at harvest, a nonrecourse loan allows a producer who grows an eligible crop to store the production, pledging the crop to pay bills when they come due without having to sell the harvested crop at a time of year when prices tend to be lowest. Later, when market conditions may be more favorable, a producer may sell the crop and repay the loan with the proceeds of the sale.

Marketing assistance loans for each of the 16 commodities are nonrecourse in nature. That is, a producer has the option of delivering to CCC the quantity of a commodity pledged as collateral for a loan as full payment for that loan at loan maturity. Market loan repayment provisions specify, under certain circumstances, which loans may be repaid by a producer at less than principal plus accrued interest and other charges, with repayment of some portion of the relevant interest and principal being waived.

Alternatively, the LDP provisions specify that, in lieu of securing a loan from CCC, a producer may be eligible for an LDP. Market loan repayment and LDP provisions are intended to prevent delivery of loan collateral to CCC. In so doing, these provisions considerably reduce the Federal Government acquisition of stocks that might otherwise occur. Such stocks tend to make U.S.-produced commodities less competitive in form of storage costs.

Loan rates are established annually at the national level. The national rates are based on a combination of statutory formulas and limits, and, to some extent, Secretarial discretion. With the exception of rice, national loan rates for each marketing assistance loan commodity are adjusted to the local level (county or warehouse) to reflect spatial differences in markets, transportation costs, and other relevant factors.

Statutory language in the 1996 Act requires that wheat, feed grain, rice, and oilseed loans mature on the last day of the ninth month following the month in which the loan is made; upland and ELS cotton loans mature after ten months, beginning on the first day of the month in which a loan is made. Although the statutory language on maturity for cotton loans differs from that of the other marketing assistance loan commodities, all of the commodities basically have the same length of time that loans on each may be outstanding. Note that a loan is outstanding if a producer has secured the loan from CCC, but has not settled the loan, either through repayment or delivery of the collateral to CCC.

A producer may repay a loan anytime after the loan is made through that loan's maturity date. The quantity of a commodity pledged as collateral for a loan may not be delivered to CCC in lieu of repayment prior to loan maturity.

Market loan repayment and LDP provisions do not apply to ELS cotton. Thus, ELS cotton loans must be repaid at full principal plus accrued interest and other charges. A producer does have the option of delivering ELS cotton to CCC.

Market loan repayment provisions are relevant to the other 15 commodities. These provisions have several common features, but, due to statutory requirements and practical considerations, these provisions also differ in several respects among the various commodities.

Market loan repayment provisions are active when the applicable alternative loan repayment rate, as determined by CCC, is less than the per-unit principal plus accrued interest, other charges, and, in the case of upland

cotton only, per-unit storage costs, for a given outstanding loan. The per-unit principal is the applicable loan rate at which CCC makes a loan to a producer. The applicable loan rate is the relevant crop year's base loan rate for the location where the commodity is stored, adjusted for per-unit premiums and discounts. Accrued interest, for the purposes here, is the amount of per-unit interest that has accrued through a particular day on which the repayment rate is being determined.

The actual loan repayment rate, except in the case of upland cotton, is the lesser of the applicable loan rate plus accrued interest, or the applicable alternative repayment rate that is announced by CCC. The applicable alternative repayment rate is the alternative repayment rate after all relevant adjustments for premiums, discounts and location have been made. The same set of premiums and discounts applied to the base loan rate for a given loan are also applied to the alternative repayment rate for that same loan. The alternative repayment rate is determined by different methods for the commodities in question, and is announced at different times and is effective for different time intervals for the various commodities.

Any portions of the interest and principal that do not have to be repaid because of the market loan repayment provisions (on a day when such provisions are active and a producer repays a loan) are waived. The portion of the principal, if any, that is waived when a loan is repaid is referred to as a marketing loan gain for the producer.

The market loan repayment provisions apply to a given nonrecourse marketing assistance loan through the maturity date of that loan. Any repayment after the loan maturity date must be made at full principal plus accrued interest.

Farmers who have placed a crop under loan can transfer the loan to someone else. When they do this, they are no longer responsible for loan repayment. (This cannot be done in all areas of the country.) If the farmer did this, any money received above the face value of the loan (equity or premium payment) should be recorded in all other farm income, Section 16, item 9.

If a loan was taken out in 2002, has a 2003 maturity date and has not had any action taken on it, there will be an outstanding balance. Record the total outstanding balance in item 3.

Item 1 CCC Loans Received

Record the gross amount of loans received in 2002. This should be equal to the amount of the loan rate (price per unit) times the quantity placed under

loan.

Item 2 CCC Loans Repaid

The amount spent to repay loans should be equal to loan rate times the quantity redeemed. Do not include any interest or storage charges that were repaid. Interest should be reported in Section 19, item 18b. Storage charges should be recorded as marketing expense in Section 14, column 3.

Item 3 Value of Outstanding CCC Loans on December 31, 2002

Record the face value of CCC loans outstanding. This equals the amount of the crop under loan (from any crop year) times the loan rate for that crop.

Item 4 Receive Federal or State Farm Program Payments

Record a '1' if the operation did receive Federal or State Farm Program payments during 2002. Skip to Section 16 if this operation did not receive any payments.

Item 5 Federal Farm Program Payments

The Farm Security and Rural Investment Act of 2002 was signed into law by the President on May 13, 2002. Although the budget framework for the legislation extends over 10 years through 2011, the new law covers 6 years, governing Federal farm programs through 2007. During 2002, farmers may have received payments under both the 1996 Farm Act and the 2002 Farm Act. Record all payments received in 2002 under both Acts.

Item 5a Production Flexibility Contract Payments

The Agricultural Market Transition Act (AMTA) was established under the Federal Agricultural Improvement and Reform Act of 1996. AMTA removed the link between income support payments and farm prices by providing for production flexibility contracts, whereby producers who applied during the one-time sign up received seven annual fixed but declining production flexibility contract (PFC) payments for fiscal year 1996 through fiscal year 2002. Payments are independent of farm prices and crop production, enabling farm commodity prices to be determined by market factors rather than government subsidies and production controls. Participating producers were required to comply with highly erodible land and wetland conservation requirements, as well as fruit and vegetable planting restrictions in order to receive payments. Farmers may refer to these as PFC payments, AMTA payments, or "Freedom to Farm" payments.

Item 5b Direct Payments

Direct payments under the 2002 Farm Act are similar to production flexibility contract (PFC) payments of the 1996 Farm Act. The payment rate for direct payments is fixed for each crop and is not affected by current production or by current market prices. Direct payments to farmers are based on historical acreage and on historical yields. Commodity coverage is expanded to include soybeans, other oilseeds, and peanuts.

Direct payments differ from PFC payments in that the 2002 Farm Act sets fixed payment rates on a per unit basis for the entire life of the act (table 1). In contrast, the 1996 Farm Act fixed total expenditure levels for each fiscal year. Payment levels were allocated among contract commodities according to percentages specified in the 1996 Act. PFC payment rates for individual commodities were then derived, based on the commodity-specific budget allocations, the contract acreage enrolled, and the program yields for that commodity. Although direct payment rates are higher than PFC payment rates for 2001 and 2002, direct payment rates are lower than the average PFC rates under the 1996 Farm Act. Under the direct payment program, eligible producers receive annual payments. The payment is equal to the product of the national payment rate of the applicable crop, the producer's payment acres (85 percent of base acres) for that crop, and the producer's payment yield for the crop. For example, the direct payment for an individual corn producer is:

$$DP_{\text{corn}} = (\text{Direct payment rate})_{\text{corn}} \times (\text{Payment yield})_{\text{corn}} \times [(\text{Base acres})_{\text{corn}} \times 0.85]$$

To receive payments on crops covered by the program, a producer enters into annual agreements for crop years 2002-07.

Item 5c Counter-cyclical Payments

Under the 2002 Farm Act, a new program of countercyclical payments (CCP) provides price-dependent benefits for covered commodities whenever the effective price for the commodity is less than its target price. This program was developed to replace most ad hoc market loss assistance payments that were provided to producers during 1998-2001. Payments are based on historical acreages and yields and are not tied to current production of the covered commodity.

The new legislation establishes a target price for each covered crop. When

the higher of the loan rate or the season average price plus the direct payment rate is below the target price, a CCP is made, at a rate equal to that difference. Equivalently, CCPs are made when the higher of the loan rate or the season average price is below the target price minus the direct payment rate.

The payment rate for corn CCPs would be:

$$(\text{CCP payment rate})_{\text{corn}} = (\text{Target price})_{\text{corn}} - (\text{Direct payment rate})_{\text{corn}} - (\text{Higher of commodity price or loan rate})_{\text{corn}}$$

For example, the corn target price for 2002 is \$2.60 a bushel, the direct payment rate is \$0.28 a bushel, and the loan rate is \$1.98 a bushel. If the season average corn price is \$2.20 a bushel (above the loan rate), the \$2.60 target price minus \$2.48 (\$2.20 price plus \$0.28 direct payment rate) gives a payment rate for CCPs of \$0.12. This payment rate can be alternatively expressed as \$2.32 (the \$2.60 target price minus the \$0.28 direct payment rate) minus the \$2.20 season average price.

This alternative expression also indicates that the price cutoff where the CCP rate becomes zero is at \$2.32, not the \$2.60 target price. Thus, when the season average price is above \$2.32 (the target price minus the fixed direct payment rate), no CCP is made. When the season average price is below the target price minus the fixed direct payment rate, a counter-cyclical payment is made, with the CCP rate increasing as prices fall. The maximum CCP rate of \$0.34 a bushel in this example is attained when prices are at or below the loan rate.

Item 5d Loan Deficiency Payments (LDPs) / Marketing Loan Gains

Record the total dollar amount the operation received in 2002 from government loan deficiency payments and marketing loan gains.

Under the 1996 Act, loan deficiency payments (LDPs) are payments made to producers who are eligible to obtain a loan, but agree to forgo obtaining a loan for a quantity of a commodity in exchange for a payment. Producers who have entered into a production flexibility contract are eligible to obtain LDPs on wheat, corn, grain sorghum, barley, oats, upland cotton, and rice. Producers may obtain LDPs on any production of oilseeds whether or not they have entered into a production flexibility contract.

The 2002 Farm Act continues the commodity loan program with marketing loan provisions. Commodity loan rates are fixed under the act. Rates are set

for 2002-03 and then reduced slightly for 2004-07 for many commodities. Under the 1996 Farm Act, the Secretary had discretion to set loan rates within ranges determined by formula subject to minimum and maximum levels specified in the law.

Commodity loan programs with marketing loan provisions are available for wheat, rice, corn, grain sorghum, barley, oats, upland cotton, soybeans, and other oilseeds under the 2002 Farm Act. Marketing loan provisions are extended to peanuts, mohair, wool, honey, small chickpeas, lentils, and dry peas. Nonrecourse loans are available for extra-long staple cotton, but the repayment rate is set at the loan rate plus interest. Marketing loans provide loan deficiency payments and marketing loan gains to farmers of loan commodities when market prices are low. Marketing loans also reduce revenue risk associated with price variability. Commodity loan programs allow producers of designated crops to receive a loan from the Government at a commodity-specific loan rate per unit of production by pledging production as loan collateral. After harvest, a farmer may obtain a loan for all or part of the new commodity production.

When market prices are below the loan rate, farmers are allowed to repay commodity loans at a loan repayment rate that is lower than the loan rate (except for extra-long staple cotton). Marketing loan repayment rates are based on local, posted county prices for wheat, feed grains, and oilseeds, on prevailing world market prices for rice and upland cotton, and on weekly prices for pulses and peanuts. Each day, other than weekends and holidays, the Federal Government calculates and posts loan repayment rates, except for other oilseeds, rice, upland cotton, pulses, and peanuts, which are calculated weekly. When a farmer repays the loan at a lower repayment rate, the difference between the loan rate and the repayment rate represents a program benefit to producers and is called a marketing loan gain. In addition, any accrued interest on the loan is waived. When a marketing loan gain is received on a given collateralized quantity, that quantity is not eligible for further loan benefits.

Alternatively, loan program benefits can be taken directly as loan deficiency payments. Farmers may choose to receive marketing loan benefits (except for extra-long staple cotton) through direct loan deficiency payments (LDPs) when market prices are lower than commodity loan rates. The LDP option allows the producer to receive the benefits of the marketing loan program without having to take out and subsequently repay a commodity loan. The LDP rate is the amount by which the loan rate exceeds the loan repayment rate and thus is equivalent to the marketing loan gain that could alternatively be obtained for crops under loan. When an LDP is paid on a portion of the crop, that portion cannot subsequently be used as collateral for

another marketing loan or LDP.

Item 5d(1) Loan Deficiency Payments for soybeans

Record the dollar amount of the total (item 5d) loan deficiency payments and marketing loan gains that were for the soybean enterprise.

Item 5e Net Value of Commodity Certificates

Commodity certificates are available for use in conjunction with the commodity loan program. Certificates can be purchased at the loan repayment rate for loan commodities. The certificates are available for producers to immediately exchange for crop collateral pledged to the CCC for a commodity loan. Record the net value of payments received above the cost of the commodity certificates.

Item 5f Peanut Quota Compensation Payments

The 2002 Farm Act substantially revamped the peanut program. Under previous legislation, the peanut program was a two-tier price support program based on marketing quotas and nonrecourse loans. Production for domestic edible consumption was constrained by an annually established marketing quota, which was eligible for the quota loan rate (\$610 per short ton in 2001). Marketings of nonquota (additional) peanut production were permitted only for export or domestic crush; nonquota production was eligible for a lower loan rate (\$132 per short ton in 2001).

Under the 2002 Farm Act, the peanut marketing quota system is eliminated. Peanuts are treated similarly to other program crops, such as grains and cotton, with direct payments and counter-cyclical payments. Producers with a history of peanut production during 1998-2001 are eligible for these programs. Also, a single marketing assistance loan program for all peanut production replaces the two-tier price support program.

Farmers no longer have to own or rent peanut quota rights to produce for domestic edible consumption. Owners of peanut quota under prior legislation will receive compensation payments for the loss of quota asset value. Payments may be made in five annual installments of \$0.11 per pound (\$220 per short ton) during fiscal years 2002-06, or the quota owner may opt to take the outstanding payment due in a lump sum. These payments are based on the quota owner's

2001 quota, regardless of temporary leases or transfers of quota, so long as the person owned a farm eligible for the peanut quota. Continued eligibility for peanut quota compensation payments remains with the established quota

owner regardless of future interest in the farm or whether the person produces peanuts.

Item 5g National Dairy Market Loss Payments

The 2002 Farm Act extends the milk price support program and the dairy export incentive program, leaves the milk marketing order system unchanged, and adds a new counter-cyclical payment. Under the provisions of the 1996 Farm Act, the dairy price support program was scheduled to end on December 31, 1999. However, subsequent legislation extended the program.

The 2002 Farm Act calls for national dairy market loss payments, which will be administered as the Milk Income Loss Contract (MILC) program, to provide a safety net for dairy producers from December 2001 through September 2005. A monthly direct payment is to be made to dairy farm operators if the monthly Class I price in Boston (Federal Order 1) is less than \$16.94 per hundredweight. Payments are to be made on up to 2.4 million pounds of milk per fiscal year per operation, which corresponds to the production from about 135 cows. Record payments received under this program.

Item 5h Agricultural Disaster Payments

Include all market loss or disaster assistance payments received from federal farm programs. **Exclude** Federal Crop Insurance indemnity and other indemnity payments recorded in Section 16, item 6.

Item 5h(1) Disaster Payments for soybeans

Record the dollar amount of the total (item h) disaster payments that were for the soybean enterprise.

Item 5i Conservation Reserve Program (CRP) Payments

Record the total amount this operation received in 2002 for participation in the Conservation Reserve Program (CRP).

Item 5j Wetland Reserve Program (WRP) payments

Record the total amount this operation received in 2002 for participation in the Wetlands Reserve Program (WRP).

Item 5k Environmental Quality Incentive Program (EQIP) Payments

Record the total amount of payments received from participation in the Environmental Quality Incentive Program (EQIP).

Item 5l Other Federal Agricultural Program Payments

Record the total dollar amount received in 2002 from all other federal farm programs.

Item 6 State and Local Farm Program Payments

Record the total dollar amount received in 2002 from all state and local farm programs. Include government payments for the sale of development rights (a common practice in Northeast states). Exclude payments received from private, non-profit, or other non-governmental entities.

Item 7 Landlord Share of Government Payments

Record the total amount of government program payments all landlord's received for the acres you rented from them. For share rental arrangements, the landlord's share of commodity program payments should be proportional to crop share.

Section 16 - Income from Farm-Related Sources

Item 1 Custom Work for Others

Include income received by the operation for work this operation or its employees did for others using the operation's machinery such as plowing, planting, spraying, harvesting, preparation of products for market, etc. Exclude custom work which was considered separate from the operation and which had its own set of books.

Item 1a Custom Work Paid Under a Share Rental Agreement

Record the **dollar amount** of custom work for others (item 1) that was from landlords as part of a share rental agreement.

Item 2 Grazing of Livestock

Include any income this operation had from grazing of another operation's livestock on a per head or gain basis. Exclude any contract arrangements previously recorded.

Item 3 Forest Product Sales

Record the total 2002 income from sales of all forest products from the total acres operated. Include timber sales, pulpwood sales, firewood sales, etc.

Exclude maple syrup and Christmas tree sales; they should be reported as crop sales.

Item 4 Sales of Farm Machinery and Vehicles

INCLUDE:

- (1) all direct sales of machinery used for farming, such as tractors, combines, farm machinery, and equipment.
- (2) farm share of cars and trucks sold.

Exclude items traded in for other items since the value of these is deducted from the purchase price.

Item 4a Sales of Machinery to Farmers

Record the **dollar amount** of sales of farm machinery and vehicles (item 4) that was for sales directly to other farmers.

Item 5 Recreation on the Operation

Include income received for recreation on the operation in 200 including things such as hunting, fishing, petting zoos, horseback riding, on-farm rodeos, etc.

Item 6 Federal Crop Insurance

In 1996, Catastrophic Crop Insurance replaced disaster assistance. Under the new law, the Federal Crop Insurance Reform Act of 1995, farmers are required to obtain at least the basic catastrophic level of crop insurance coverage if they want to participate in most USDA programs. Information on crop insurance indemnity payments, combined with expense data for purchases of crop insurance reported earlier, will be used to assess the impact of the new crop insurance program on farmers.

Record the amount which was received from Federal crop insurance indemnity payments in 2002. If more than one payment was received, total the payments.

Also record the amount of insurance payments collected for losses to insured property that were not part of the payments covered by FCIC. Include the farm share of insurance payments received for repair of vehicles owned by the operation.

If members of the operator's family received any insurance payments or workman's compensation for illness or injury, include this income in under off-farm income (Section K, item 21). Include hail insurance indemnity payments.

Item 6a Federal Crop Insurance Payments for soybeans

Record the dollar amount of the total (item 6) federal crop insurance indemnity payments that were for the soybean enterprise.

Item 7 Other Insurance Indemnity Payments

Record the amount which was received from all other (non-federal) crop insurance indemnity payments in 2002. If more than one payment was received, total the payments.

Item 8 Patronage Dividends and Refunds from Co-ops

Record the amount of patronage dividends resulting from ownership of

shares in cooperatives in 2002. Include cash, equity dividends and patronage dividends returned to this operation by cooperatives. Include dividend payments received for shares in farmer-owned commodity processing plants, such as ethanol plants. These are frequently referred to as “value-added” shares. Sugarbeet ‘retains’ when received should be included.

Item 9 Other Farm Related Income

It may be helpful to prompt the respondent by referring to the list of “Other Farm Income” items in the respondent booklet.

INCLUDE:

- (1) sales of livestock manure, straw and other by-products.
- (2) allotment or quota leases.
- (3) any Federal Excise Tax (FET) refund claimed, if the FET was included in fuels purchase cost.
- (4) hedging profits or losses.
- (5) refunds claimed for marketing charges which were withheld. (For example, Cotton Inc. refunds or refunds from the Dairy Refund Payment Program.)
- (6) equity or premium payments on CCC loans transferred to someone else (money received above the face value of the loan).
- (7) real estate tax rebates for land preservation.
- (8) renting or leasing of livestock.
- (9) renting or leasing of tractors, trucks, etc.
- (10) road tax refunds.
- (11) sale of water. In areas of the West, operations with irrigation rights have been able to sell a portion of their annual water allotment to municipal, commercial, and other industrial users.
- (12) sale of soil.
- (13) tobacco settlements.
- (14) animal boarding.
- (15) all other farm related income not included in 1-8.

Section 17 - Direct and Certified Organic Sales

Item 1 Sales Directly to Consumers

Record the gross value of sales if this operation grew or raised any crops, livestock, poultry, or their products that were sold directly to individual consumers for human consumption. Examples of these sales are roadside stands, farmers markets, or pick your own, etc.

Item 2 Sales of Certified Organically Produced Commodities

If this operation sold any certified organically produced commodities, report the gross value of sales. Certified organic crops are those that were certified by a Federal, state, or private certification agency.

Section 18 - Fertilizers and Chemicals Applied

Record the number of acres that were treated with fertilizers, manure, insecticides, herbicides, fungicides, nematicides, pesticides, growth regulators, or other chemicals used on this operation during 2002 (rock phosphate, lime and gypsum are included as fertilizers). Also record acres treated with chemicals to thin fruit or defoliate. For all acres treated with chemicals it will be necessary to record all acres treated regardless of who provided the materials, i.e., farm or ranch operator, landlord, custom sprayers, cooperatives, or contractors. If more than one application of fertilizer or chemicals were applied, record the acreage only once. Record in whole acres.

Commercial Fertilizer and Soil Conditioners

Item 1 Acres of cropland fertilized in 2002

Record the acres of all cropland fertilized with commercial fertilizer in 2002. Cropland used solely for pasture should be excluded.

Item 2 Acres of pastureland and rangeland fertilized in 2002

Record the total number of acres of pastureland and rangeland, including cropland pastured, which commercial fertilizer was used in 2002.

Manure Used

Item 3 Acres which animal manure was applied in 2002

Record the acres of cropland and pastureland which animal manure was applied in 2002. Animal manure will include beef, dairy, swine, horse and exotic animals raised in captivity. Poultry manure will include all egg and meat birds, turkey and other fowl raised in captivity. Manure will include solid or liquid form. Exclude municipal sludge.

Chemicals Used

Record the acres treated with sprays, dusts, and other materials. The same acres can be reported in more than one item listed. If chemicals are applied to more than one crop raised on the same land, count the acres once for each crop. Record all land treated, even if the crop was later abandoned.

Item 4a Acres Treated to Control Insects

Record the acres treated with chemicals to control insects on crops including hay and pastureland. Exclude acres treated only with parasitic insects or acres on which mechanical methods only were used to control insects.

Item 4b Acres Treated to Control Weeds

Record the acres treated with chemicals to control weeds, grasses or brush. Include acres treated with both pre-emergence and post-emergence applications. Exclude area in ditches, fence rows, road banks, etc., that were treated.

Item 4c Acres Treated to Control Nematodes

Record the acres treated to control nematodes.

Item 4d Acres Treated to Control Diseases

Record the acres treated to control diseases (blight, smut, rusts, etc.) in crops and orchards.

Item 5 Acres to Control Growth and Defoliate

Record the acres treated to control growth, thin fruit, or defoliate.

Section 19 - Operating and Capital Expenditures

What's this Section for? How is the information used?

This section provides the data used to develop estimates of farmer's and rancher's **costs** of doing business -- the expense side of an income statement. Income statements of the farm sector, along with balance sheets and financial ratios, are developed from this survey and provided to the Congress by the USDA in the annual report of the Status of Family Farms. These income statements are widely available through ERS publications such as *Agricultural Outlook*, the quarterly *Agricultural Income and Finance Situation and Outlook Report*, and the annual *Farm Business Economics Report*. Each of these reports are also available via the Internet to anyone interested in farm sector financial performance. NASS also publishes a report on *Farm Production Expenditures* each July.

Data from the farm sector accounts are provided to the Bureau of Economic Analysis (BEA), an agency within the Department of Commerce, where they are used to estimate the Nation's gross domestic product (GDP) accounts. These data insure that BEA can accurately reflect the value of agricultural goods produced in the United States relative to the other industries. Information for non-farm industries comes from IRS sample data, Census' Surveys of Population and Income, non-farm business surveys conducted by the Bureau of Labor Statistics, by the Federal Trade Commission and by BEA. Data from non-farm industries are published in BEA's Survey of Current Business.

Under- or over-reporting of costs would limit USDA's ability to accurately report the cost of producing various crop and/or livestock commodities. Since all crops and livestock produced by the farm are reported, one use of data from this section is to assess how costs are changing for different types of farms. Changes are tracked over time so USDA and Congress have the best information to understand what is taking place in agriculture today.

In this section, each major cost item is obtained--seed, fertilizer, chemicals, feed, purchased livestock, veterinary and medicines, custom services and work, labor costs including wages, taxes, benefits and services provided, fuel, utilities, repairs, overhead expenses such as insurance, accounting, attorney fees, interest, and depreciation. The detail allows us to compare and quantify, item by item, cost per unit indicators. The ability to examine expenditures this closely improves the quality of both the individual and aggregate estimates of farm expenses.

While it takes longer to ask the detail of the cost statement, leaving out some costs would make net income appear larger than it in fact is! If we did not ask for cost by item, we know from experience that respondents fail to report items, particularly items not typically in their record books.

More detail is asked on some items:

! **Breeding stock** is separated from other cattle, calves, hogs, pigs, sheep and lambs. This is done because purchases of breeding stock are an addition to the farm's capital, much like a truck. Operators can place breeding stock on a depreciation schedule and claim a deduction on their taxes. Thus, these purchases are not a part of ordinary operating expenses. Breeding stock is included in the balance sheet and the depreciation is included in the income statement.

Although poultry farms may also have breeding stock, all poultry is recorded in the item for all poultry and other livestock.

! **Non-cash items such as depreciation, inventory adjustment, and non-cash benefits paid to workers.** Although not a cash outlay, most farm operators are familiar with depreciation because it is a deduction that can be claimed on their 1040F tax form. Many farmers seek the advice of an accountant or tax advisor on how much depreciation they will claim on their buildings, equipment and breeding stock and over how many years. The amount of depreciation during a year shows what has happened to the value of a farm's capital equipment (like trucks, tractors, implements, buildings, etc.).

The entire cost of capital items cannot be deducted as a business expense in the year they are purchased or built. Rather, the cost is spread out over their useful life. Depreciation measures the cost of using capital items during a particular year (how much they declined in value). Depreciation is a critical component of net farm income; one of the key statistics published using ARMS information. Depreciation and net farm income provide measures of how individual farmers are doing, as well as measures of how the entire farm economy is doing.

Depreciation is also used in the farm household statistics so self-employment income from farming matches the Commerce Department definition of self-employment income from a non-farm business. This allows income from farm businesses to be compared with non-farm business income by the Commerce Department, which has responsibility for statistics on all aspects of the U.S. economy.

Other non-cash items such as non-cash expenses for workers and the value of inventories are collected as part of the net cash income estimate.

Costs of Production (Version 2)

Most of the information necessary to compute cost-of-production for Soybeans were collected in the Phase II portion of ARMS conducted in the fall. However, several questions are included in Phase III, Soybean questionnaire (Version 2) to collect data used to compute cost-of-production. It is necessary to ask these questions in the spring because: (1) the farmer does not have a full 12 month accounting of the expense items at the time of the fall interview; (2) some costs are for farm overhead items and information about all enterprises on the farm helps allocate these costs; or (3) some data analyses can only be done when considering total farm and not simply field level costs which were collected in the fall.

Farm overhead costs for such items as farm supplies and tools, general business expenses, taxes, interest, and insurance are collected in the spring and allocated to the selected commodity based on their relative value of total farm production. Production costs for seed, fertilizer, chemicals, and other input items are used to examine the production costs and profitability of the entire enterprise instead of only for a selected field. For the purposes of cost-of-production estimation, farm overhead is that portion of costs not directly attributable to any particular enterprise, but that must be paid for by all enterprises. Many of these items are obvious, such as general business expenses, taxes, insurance, and interest, and are easily measured. However, two items, electricity and repairs, are more difficult to measure. To simplify our measurement we have designated that electricity use and repairs for irrigation are not part of farm overhead. Therefore, questions are included in Version 2 to separate the amounts spent for these items. These amounts will be deducted from the total and the remaining electricity and repair costs will be allocated to the cost-of-production commodities.

General Instructions

ALL EXPENSES FOR THIS OPERATION (defined by the total acres recorded in Section 1, item 5) paid in 2002 should be included in this section. This includes expenses for the Operator, Partners, Landlords and Contractors.

Exclude expenses not related to the farm/ranch, expenses for performing custom work for others (if separate set of books are used for custom business), and household and living expenses.

Ask the respondent to use farm/ranch records and explain that the interview will probably be shorter if these records are used. You are far more likely to get accurate information from records than from respondents who are relying on memory or guess-work. The questionnaire generally reflects common record keeping systems. In addition, many of these expenses are line items on the IRS 1040F. If the respondent cannot give exact dollar figures, BEST ESTIMATES are acceptable.

Expenses for Landlords and Contractors

Expenses paid by landlords and contractors are recorded in this section. These figures are added to the expenses provided by operators for their farms to develop estimates of the total costs incurred to produce crops and livestock during the calendar year. In some situations, landlords and contractors provide a relatively large share of some expense items such as property taxes, purchases of livestock, feed, and farm supplies.

It is even more important to have a good estimate of contractor and landlord expenses when the operation's expenses are expanded to represent all farms. This gives us the estimate of total farm production expenses used to calculate net farm income. If landlord or contractor expenses are incomplete or understated, then total expenses will be understated. When that happens, the farm sector of the economy appears to be in better financial shape than it is.

Expense data reported for landlords are combined with the gross rent reported in Section 1 for cash rent and share rent land to develop an estimate of the net rent earned by landlords. Landlords' net rent is similar in concept to farmers' net income -- both measure economic well-being.

The expenses reported for contractors are combined with an estimate of the

value of product removed under production contracts (quantity removed under contract times an average price for the state), to develop an estimate of contractors' share of net farm income.

DO NOT CONTACT LANDLORDS to complete this section. Contact contractors only when instructed to do so by the State Office.

Under most production contracts, the contractor usually either **pays** most of the production expenses or **reimburses** the contractee for the expenses while the commodity is on the contractee's operation. Sometimes reimbursement for these expenses is added to the amount paid to the contractee for services. Settlement sheets or other contract documents usually break out reimbursed expenses. Reimbursed expenses should be included in this section.

Sometimes the contractor charges the operator for some expenses the contractor originally paid. Examples of this are sometimes found in production contracts for processing vegetables, where the contractor originally paid for items such as seed and chemicals. Then the contractor charges the operator for their costs, as deductions from the gross value on the settlement sheet. These expenses should be recorded here.

If the operator cannot provide settlement sheets (or otherwise report contractor expenses), explain in notes the type and amount of services provided by the contractor. Record the contractor's name, address and phone number so the State Office can contact the contractor to get the information. **This contact should be made only through (or by) the State Office to avoid the possibility of several enumerators contacting the same contractor.** Enumerators assigned to complete any of the follow-up interviews with contractors can get the information on expenses paid by the contractor using a blank questionnaire or by using a contractor expense worksheet provided by some State Offices.

Most operators will know what expenses were paid for by their landlords. If for some reason, the operator cannot provide these numbers, **DO NOT CONTACT THE LANDLORD(S)**. If the operator does not know the amount paid by their landlords, they should know which items were paid. If this happens, provide detailed notes explaining which items were paid for by the landlords so the State Office can provide an estimate for these expenses.

Expenses in this section are divided into three columns: Operator and Partners, Landlords, and Contractors. Be sure to record the expenses in the correct column. Probe to verify the respondent has reported costs associated with each item that were paid for by the landlord or contractor.

Item 1 Seeds, Plants, Trees, etc.

This item refers to the cost of any purchases in 2002 whether they were entirely used or not. For example, a farm may have purchased \$1,000 of seed but only planted \$800 of it. In this case, record the \$1,000. Make sure the respondent accounts for all purchases of seed, sets, plants, trees, etc., not only the amount used to plant the crop harvested. These expenses are often a line item in record books (and on the IRS 1040F). Note that operations can have these expenditures even when they did not have any harvested acres. Be sure the operator remembers to include any expenses for seed for pastures, for crops planted in 2002 for harvest in 2001 or later years, etc.

INCLUDE:

- (1) expenditures for cleaning or treating homegrown seeds or plants.
- (2) expenditures for trees or shrubs used as windbreaks or for reforestation (if the operation did not consider this a capital expense).
- (3) seed expenses for cover crops planted on idle land.
- (4) expenditures for plants purchased and transplanted to grow as a crop (for example, tobacco transplants).
- (5) technology fees for purchasing genetically altered seed.

EXCLUDE:

- (1) expenses for items purchased for direct resale.
- (2) value of homegrown seed.
- (3) tree purchases that were considered capital expenses (land improvements). These should be recorded in item 32.

Item 1a Amount of Seed Expense for Soybeans
V2 only

Record the dollar amount of the total (item 1) seed and plant expense that was for the Soybean enterprise.

Item 2 Fertilizer, Lime, and Soil Conditioners

This expense is a line item in almost all farm record books (and on the IRS 1040F).

INCLUDE expenses for:

- (1) all commercial fertilizer
- (2) fertilizer-pesticide combinations
- (3) pre-emergence herbicides mixed with fertilizer sold as one product
- (4) trace elements (micro nutrients) such as zinc and copper
- (5) lime and all soil conditioners, purchased manure, cottonseed hulls,

sludge, gypsum, sulfur, marl, peat, and other conditioners
(6) application costs if materials were custom applied.

Item 2a **Total Fertilizer Expense for Soybeans**
V2 only

Record the dollar amount of the total (item 2) fertilizer expense that was for the Soybeann enterprise.

Item 3 **Agricultural Chemicals**

Chemical expenses are recorded as a line item in most record books (and the IRS 1040F). Include crop, livestock, dairy, poultry, and general farm use chemicals.

INCLUDE expenses for:

- (1) insecticides, herbicides, fungicides, defoliant, nematicides, fumigants, growth regulators, and rodenticides used on crops, pastures, seeds, crop storage buildings or seed beds for the control of all types of weeds, diseases, insects, rodents, fungi, nematodes and other predators.
- (2) all sprays, dusts, granules or other materials.
- (3) application costs if materials were custom applied.
- (4) carrier materials such as fuel oil, solvents or wetting agents mixed with pesticides.
- (5) all pesticides applied to crops or buildings even if all or part was paid by the government.
- (6) all sprays, dips, dusts, dairy pesticides, udder antibacterial disinfectants, and other chemicals purchased for use on livestock. If the respondent records these items under supplies, try to get them broken out and include them here.

EXCLUDE expenses for:

- (1) the value of pesticides in fertilizer-pesticide combinations (record in item 2).
- (2) cleaning chemicals for equipment and buildings on dairy and other livestock enterprises (record these expenses in item 13).

Item 3a **Total Custom Application Expense**

Record the dollar amount of the total (item 3) agricultural chemical expense that was for custom application only.

Item 3b **Total Agricultural Chemical Expense for Soybeans**
V2 only

Record the dollar amount of the total (item 3) agricultural chemical expense that was for the Soybean enterprise.

Livestock Expenses Items 4-8

Purchased feed, livestock purchases, livestock leases and livestock expenses such as breeding and veterinary services are usually recorded as line item expenses in record books. You may have to probe to break figures out for some of the expense categories.

Exclude all expenses incurred by feedlots and other types of contractees that fed this operation's livestock on a custom basis. Expenses for which this operation reimbursed feedlots and other contractees should be recorded in Section 14, item 6, column 5. If this operation is a feedlot, include only expenses for which it was **not** reimbursed in the Operator column. Expenses for which the operation was reimbursed should be recorded in the Contractor column.

Purchases of livestock and poultry during 2002 should include the price of the animals plus commission, yardage, insurance and fees.

In large integrated operations livestock or poultry are usually transferred from one production phase of the operation to another production phase. Although this is not a true purchase, we need an estimate of the value of the livestock or poultry at the points they move between production phases to accurately gauge the net value of production. An example of this is a hatchery that receives hatching eggs from another part of the integrated operation. We would obtain an estimated value or "book value" of the hatching eggs in this item. Without an estimated cost of hatching eggs to the hatchery, the net value of the hatchery output would be overstated. This practice is in line with accounting practices of nonfarm corporations that assess the "profitability" of each phase of production. This makes it possible to compare profitability of farms with non-farm businesses at the state and national level.

Livestock Purchases

Item 4a Breeding Stock

INCLUDE expenses for:

- (1) BEEF animals to be used as breeding stock or herd replacement for this operation, regardless of age.
- (2) MILK cows.
- (3) DAIRY animals to be used as breeding stock or herd replacement for this operation, regardless of age.
- (4) all gilts, sows and boars purchased for breeding purposes.
- (5) all ewes, rams and lambs purchased for breeding purposes.

Item 4b All Other (Non-breeding) Cattle, Calves, Hogs and Pigs

INCLUDE expenses for:

- (1) any cattle or calves not purchased for breeding herd replacement or expansion.
- (2) cattle placed in a feedlot.
- (3) all other hogs and pigs such as feeder pigs and market hogs.

Item 4c Chickens and Turkeys Purchased

Record the total cost for all chickens and turkeys purchased by the operation or transferred from one production phase of the operation to another production phase in 2002. Transfers are not a true purchase, but we need an estimate of the value of the poultry moving through the operation.

Include poultry raised under contract only if the operation is considered to have purchased the birds. In most contract arrangements, the contractee does not purchase the birds. In this case, record the value of the poultry at the time it was placed on the operation as a contractor expense.

The respondent should have settlement sheets from its contractor for each flock that list these expenses. Expenses are listed either as a total for each item or on a per pound basis. Total expense for the year is determined by the number of flocks or total pounds of birds raised. If the operator cannot provide a settlement sheet or report the expenses, find out how many birds the operation grew under contract in 2002, and explain with a note.

Item 4d Other Livestock, Poultry, Fish, Bees, etc.

INCLUDE expenses for:

- (1) all sheep and lambs, other than for breeding stock.
- (2) mules, goats, all horses and ponies, etc.
- (3) ducks, geese, guineas, pigeons, etc.
- (4) hatching eggs.
- (5) bees purchased.
- (6) rabbits, mink and other fur bearing animals.
- (7) catfish or other fish raised commercially or used for home consumption.
- (8) milk and eggs purchased to fulfill marketing agreements.
- (9) dogs used to work livestock or as guard dogs for the operation.
- (10) all other livestock or products not already included.

Exclude expenses for animals kept only as pets.

Item 5 Leasing Livestock

INCLUDE expenses for:

- (1) Renting or leasing of livestock by this operation.
- (2) Renting bees and bee hives.

Item 6 Purchased Feed

This expense is a line item in most farm record books (and the IRS 1040 F).

Include all feed grains, hay, forages, mixed or formula feeds, concentrates, supplements, premixes, salt, minerals, animal by-products and all other feed additives and ingredients.

Item 7 Bedding and Litter

Record the amount spent by the operation in 2002 for bedding and litter for livestock, dairy and poultry.

INCLUDE expenses for:

- (1) straw, hay, etc.
- (2) sawdust, wood chips, corn stalks, etc.
- (3) all other bedding and litter items.

Item 8 Medical Supplies, Veterinary, and Custom Services for Livestock

INCLUDE expenses for:

- (1) feed processing, grinding and mixing services (cost of feed should be included in item 6). If the respondent includes custom feed processing with feed costs in farm records, try to get this item broken out and include it here.
- (2) veterinary services or supplies.
- (3) miscellaneous livestock and poultry medical services and supplies (regardless of where purchased).
- (4) sheep shearing.
- (5) horse-shoeing for work horses used on the operation.
- (6) removal of dead animals.
- (7) branding.
- (8) castrating and caponizing.
- (9) artificial insemination and breeding.
- (10) performance testing.
- (11) seining of fish.
- (12) semen.

Items 9 - 13 Fuels, Utilities, and Purchased Water (Farm Share Only)

These questions ask for the total spent for the farm share of utilities, fuels and irrigation water. Farm record books (and the IRS 1040F) have an entry for total gasoline, fuel and oil expenses. Only the FARM SHARE should be reported, which is whatever the operation took as its business expense on its tax form and/or income statement. One way to help the operator report here, especially if his records are itemized differently, is to remind him of how the costs would have been incurred, such as for operating irrigation pumps, drying equipment, motor vehicles, machinery, etc.

For farm share of utility expenses, include monthly or annual charges to maintain service even when a utility is not being used (stand-by fees). Also include emergency electric guarantee fees, etc.

If farm and home meters are separate, exclude costs for water and/or electricity for the home except in situations where the farm office is in the home. In this case, include the farm share of home water and/or electricity expense. If some or all of the farm buildings shared the same meter as the home, include only the farm's share of the costs in this item.

INCLUDE expenses for:

- (1) all fuels used in autos, trucks, tractors, self-propelled machinery (combines, swathers, etc.), irrigation pumps, elevators, chain saws, etc. Include the FARM SHARE ONLY.
- (2) all fuels for heating and lighting farm buildings.
- (3) fuels used to heat a farm office (including the cost of coal or wood).
- (4) fuels used for drying or curing crops (including the cost of coal or wood).
- (5) fuel for vehicles and machinery used both on this operation AND for custom work or machine hire. (Income from custom work and machine hire will be reported as farm-related income in Section 16, item 1).
- (6) aviation fuels.
- (7) Federal excise fuel taxes. (Refunds of Federal excise fuel taxes paid should be reported as other income in Section 16, item 9.)
- (8) Purchased irrigation water and the costs of electricity or other fuel associated with irrigating.
- (9) All farm share expenses for other utilities including telephone service and water other than irrigation.

EXCLUDE expenses for:

- (1) fuel for machinery used only for custom work where separate books were kept and income from custom work was considered to be from a separate business.
- (2) petroleum products used as carriers with pesticide sprays. (These should be included in item 3 in this section.)
- (3) fuel used in motor vehicles for non-farm use and in other engines or machinery used for non-farm purposes.
- (4) fuels used for heating or cooking in the operator's residence.
- (5) fuel provided to farm employees for non-farm use as a non-cash benefit.

Item 9 Fuel Expense
V2 only

Record the farm share of the total fuel expense including diesel fuel, gasoline and gasohol, natural gas, LP gas (propane and butane), all other fuels (coal, fuel oil, kerosene, wood, etc), and oils and lubricants (grease, hydraulic fluids, motor oils, transmission fluids, etc.).

- Item 9a** **Diesel Fuel**
V1 only
- Record the farm share of expenses for diesel.
- Item 9b** **Gasoline and Gasohol**
V1 only
- Record the farm share of expenses for gasoline and gasohol.
- Item 9c** **Natural Gas**
V1 only
- Record the farm share of expenses for natural gas.
- Item 9** **LP Gas**
V1 only
- Record the farm share of expenses for LP gas (propane, butane).
- Item 9e** **Oils and Lubricants**
V1 only
- Record the farm share of expenses for oils and lubricants. Include grease, hydraulic fluids, motor oils, transmission fluids, etc.
- Item 9f** **All Other Fuels**
V1 only
- Record the farm share of all other fuels. Include coal, fuel oil, kerosene, wood, etc.
- Item 9(1)** **Fuel Expense for Irrigation**
V2 only
- Record the farm share of total fuel expenses for irrigation.
- Item 9(1a)** **Fuel Expense for Water Pumped From Wells**
V2 only
- Record the portion of total fuel expense was for water pumped from wells.
- Item 9(2)** **Total Fuel Expense for Soybeans**
V2 only
- Record the dollar amount of the total (item 9(2)) fuel expense that was for the Soybean enterprise.
- Item 10** **Electricity**
- Record the farm share of the total amount spent for electricity, including irrigation. Include electricity for the farm office, barns and other farm

buildings. If the farm office is in the home, include only the farm's share of the home electricity expense. Include monthly or annual charges to maintain service even when electricity is not being used. Include emergency electric guarantee fees, etc.

Item 10a **Electricity for Irrigation**
V2 only

Record the dollar amount of the total (item 10) electricity expense that was for the irrigation.

Item 10a(1) Electricity Expense for Soybeans
V2 only

Record the dollar amount of the total (item 10a) electricity for irrigation that was for the Soybean enterprise.

Item 10a(2) Electricity Expense for Water Pumped from Wells
V2 only

Record the dollar amount of the total (item 10a) electricity for irrigation that was for **water pumped from wells**.

Item 10b **Electricity for Drying**
V2 only

Record the dollar amount of the total (item 10) electricity expense that was for the drying.

Item 10b(1) Electricity Drying Expense for Soybeans
V2 only

Record the dollar amount of the total (item 10b) electricity for drying that was for the Soybean enterprise.

Item 10c **Electricity for Specialized Livestock Production Facilities**
V2 only

Record the dollar amount of the total (item 10) electricity expense that was for the specialized livestock production. Include specialized production for dairies, feedlots, poultry houses, swine buildings, etc.

Item 11 **Purchased Irrigation Water**

Record the total costs of purchased irrigation water acquired from any off-farm water source to irrigate crops on the farm. Include any drainage assessments, delivery charges, or other fees associated with the purchased water, and any standby fees and/or taxes which must be paid even if no water is used.

Item 11a **Purchased Irrigation Water For Soybeans**
V2 only

Record the dollar amount of the total (item 11) purchased water for irrigation expense that was for the Soybean enterprise.

Item 12 **All Other Utilities**

Record the farm share of the total expense for telephone service and calls, water (other than for irrigation), and all other utilities not previously reported. Include monthly or annual charges to maintain service even when the utility is not being used (stand-by fees). If farm and home meters are separate, exclude all costs for utilities for the home except in situations where the farm office is in the home. In this case, include the farm share of the utility expenses for the office. If some or all of the farm buildings shared the same meter as the home, include only the farm's share of the costs.

Items 13-16 **Supplies and Repairs**

Item 13 **Farm Supplies, Marketing Containers, Tools, Shop Equipment, etc.**

Record expenses for miscellaneous supplies and equipment, marketing containers, hand tools and farm shop power equipment not placed on a depreciation schedule. (Power equipment is defined as equipment requiring fuel or electricity to operate). Exclude expenses for containers purchased for direct resale to consumers. Exclude expenses for fencing and irrigation equipment--these will be collected separately.

INCLUDE expenses for:

- (1) baling wire and twine.
- (2) carpentry supplies, electrical supplies and plumbing supplies.
- (3) mechanic's tools, pliers, wrenches, etc.
- (4) axes, bolt cutters, fencing tools, forks, picks, scoops, shovels, spades, etc.
- (5) power drills, grinders, saws, sanders, welders.
- (6) compressors.
- (7) acetylene gas, oxygen and welding rods.
- (8) chain saws.
- (9) battery chargers.
- (10) bolts, chains, nails, rope, etc.
- (11) hoists, jacks, winches, etc.
- (12) ladders.
- (13) scales.

- (14) attachments and accessories for any items in this category.
- (15) fuel tanks.
- (16) agricultural bags, canvas, polyethylene film, tarpaulins, etc.
- (17) rain gear or other protective clothing purchased for use on the operation.
- (18) other supplies and tools which are generally reusable and which are not included elsewhere.
- (19) repair of tools and other items in this category.
- (20) dairy equipment cleaning chemicals (detergents, sanitizers, etc.)
- (21) containers purchased for planting, growing, harvesting or marketing any commodity.
- (22) baskets, boxes, flats, trays, sheets, totes, bins, crates, wool bags, etc.
- (23) rental or per unit fees for containers, sheets, etc. provided by a marketing association or cooperative.
- (24) usage charges or rental fees for containers provided by a buyer, shipper, or packer.
- (25) nursery and greenhouse containers purchased for nursery production, even if they are to be resold with the plant. Exclude containers purchased for immediate resale.

Item 14 Repairs, Parts and Accessories for Vehicles, Machinery, & Equipment

Record the total FARM SHARE of expenses for materials, labor, parts and services for repair and upkeep of motor vehicles and equipment. Include the cost of accessories for machines and equipment. **If they are not listed separately in the operator's records**, family use expenses may be included.

INCLUDE expenses for all:

- (1) tune-ups or overhauls of machinery or equipment.
- (2) damage repairs even if covered by insurance settlements.
- (3) maintenance and repairs for all vehicles, machinery, equipment, implements, irrigation and frost protection equipment, etc.
- (4) parts and accessories for vehicles and equipment

Examples of these expenses include:

- (1) hitches.
- (2) wheel weights (including fluid).
- (3) mirrors, radios, etc.
- (4) tractor cabs, air conditioners, etc.
- (5) electric sensor systems.
- (6) any other accessories.
- (7) services and parts for overhauls, tuneups, tubes, tires and repair of equipment.
- (8) brake adjustments and exhaust system repairs.

- (9) front end alignments, steering adjustments, wheel balancing and replacement of shock absorbers.
- (10) replacement or repair of carburetors, fuel pumps, fuel injector systems, water pumps, electrical systems, clutches and transmissions, body work, frame repairs, painting and glass replacement.
- (11) major engine overhauls and minor tune-ups, valve and ring jobs.
- (12) replacement parts for all machinery including disk blades, cultivator sweeps and shovels, sickles, guards and baler parts.
- (13) repair of livestock or poultry equipment.
- (14) hydraulic cylinders.
- (15) frost protection system repairs and maintenance.

EXCLUDE expenses for:

- (1) accessories included in the purchase cost of vehicles, machinery, equipment, etc.
- (2) beds, boxes and hydraulic systems purchased separately from a newly purchased truck.

Item 14a Repairs, Parts and Accessories for Vehicles, Machinery, & Equipment For Soybeans

V2 only

Record the dollar amount of the total (item 14) repairs, parts, accessories for motor vehicles, machinery and farm equipment expense that was for the Soybean enterprise.

Item 15 Maintenance/Repair of Farm Buildings and Land Improvements

Record all expenses associated with maintenance of fences, buildings and other structures, and land improvements. Maintenance and repair expenses for existing land and conservation improvements are those expenses the operation has on a regular basis and which have to be done for these improvements to continue to be useful. Example: annual leveling done for irrigation systems and repairing existing dikes and ponds.

INCLUDE maintenance and repair of:

- (1) houses for hired farm/ranch labor or tenants.
- (2) all other farm/ranch buildings such as barns, shops, storage facilities, sheds, silos, bins and similar structures.
- (3) wells.
- (4) drainage facilities.
- (5) all other farm improvements.

Exclude any new construction or remodeling expense (report in items 32 or 33).

Item 15a Maintenance/Repair of Farm Buildings and Land Improvements for Specialized Livestock Production Facilities

V2 only

Record the dollar amount of the total (item 15) maintenance/repair of farm buildings and land improvements that were for specialized livestock production facilities. Include dairies, feedlots, poultry houses, and swine buildings.

Item 15b Maintenance/Repair of Farm Buildings and Land Improvements for Irrigation Equipment and Pumps

V2 only

Record the dollar amount of the total (item 15) maintenance/repair of farm buildings and land improvement expense that were for irrigation equipment and pumps.

Item 15b(1) Maintenance/Repair of Farm Buildings and Land Improvements for Irrigation and Pumps for Soybean

V2 only

Record the dollar amount of the total (item 15b) maintenance/repair of farm buildings and land improvement expense that were for irrigation equipment and pumps that for the Soybean Enterprise.

Item 16 Maintenance and Repair of the Operator's House

Record the total amount spent in 2002 for maintenance and repairs to the operator's house, if it was owned by the operation.

If the operator does not understand what is meant by 'owned by the operation', offer the definitions noted on the questionnaire. Owned by the operation can mean either the house is recorded as an asset in farm record books, used as security/collateral for a farm loan, or deeded as part of the farm.

Exclude any new construction or remodeling expense (report in item 34).

Item 17 Insurance

Include the farm share of all types of insurance including casualty insurance, crop and livestock insurance, motor vehicle liability, blanket insurance policies, etc. In most record books, insurance expense is a line item. The IRS 1040F also contains a similar expense item. Exclude premiums paid in earlier years for coverage in 2002. Also exclude premiums paid for life, health, and other payroll insurance.

Item 17a Crop Insurance

Record the dollar amount of the total (item 17) insurance expense that was for crop insurance.

Item 17a(1) Crop Insurance for Soybeans

Record the dollar amount of the total (item 17a) crop insurance expense that was for the Soybean enterprise.

Item 18a Interest and Fees Paid on Debts

Record the total amount spent by the operation in 2002 for interest and service fees for all loans owed by the operation which were secured by real estate. 'Secured by real estate' means real estate, such as land, building or a home that was used as collateral in obtaining the loan.

EXCLUDE:

- (1) interest on farm debts that was not part of this operation.
- (2) interest on the operator's residence if it is owned by the operator separately from the operation.
- (3) payments made on the loan principal amount.
- (4) interest and fees paid on debts NOT secured by real estate.

Item 18b Interest and Fees Paid on Debts NOT Secured by Real Estate

Record the dollar amount spent by the operation in 2002 for interest and service fees for all loans owned by this operation which were not secured by real estate—machinery, tractors, trucks, other equipment, fertilizer, feed, seed, or livestock and poultry, breeding stock, money borrowed for use as working capital, and interest paid on CCC loans. Exclude interest and fees paid on debts secured by real estate which are reported in item 18a.

Item 19a Real Estate Taxes

Record the amount of real estate taxes paid by the operation in 2002. This is a line item in most farm record books (and the IRS 1040F.) Exclude taxes paid on personal property (they are included in item 19b).

Some states allow homestead exemptions, old age exemptions, etc., so all land owners may not be required to pay taxes on any, or a part, of their land. If the operation is not required to pay taxes due to an exception, make a note on the questionnaire.

INCLUDE:

- (1) taxes on farm land and buildings only.
- (2) taxes paid in 2002, even if they were levied in another year.
- (3) all partners' shares of taxes when a partnership is reported.

EXCLUDE:

- (1) taxes on personal property (include in item 19b).
- (2) income taxes paid to IRS.

Item 19b Other Property Taxes

Personal property taxes may be assessed on things such as cars, trucks, farm machinery, livestock, production inputs, etc. that are not associated with land or buildings. Record the total amount this operation paid in 2002 for property taxes other than land or buildings.

Item 20 Renting and Leasing Vehicles, Tractors, Equipment and Storage Structures

Record the total 2002 expense for renting or leasing all vehicles, tractors, farm machinery, equipment and structures.

Item 21 Vehicle Registration and Licensing Fees

USDA accounts for income generated on farms in a manner consistent with that used internationally, following guidelines established by the Organization for Economic Co-operation and Development (OECD). The U.S. value-added measure includes payments-linked-to-production paid to governments as an expense category. Property taxes and vehicle registration and licensing fees are components of this category.

Record the total expense paid by the operation in 2002 for the farm share of registration and license fees for motor vehicles, trailers, etc. Also include

hazardous material (HAZ-MAT) hauling license fees required in some states to haul agricultural chemicals on public roads. If license fees associated with new vehicles were collected by the dealer when the vehicle was sold, they should be listed on the purchase agreement or bill of sale. Probe to be sure personal property taxes assessed on vehicles are not included in this item. These taxes should be recorded in item 19b.

Item 22 Depreciation for Capital Assets

Feed, seed, fertilizer, and other production inputs are typically used completely in each year, and their cost is usually considered an expense in that year. Capital assets, on the other hand, typically last for more than one year, so the cost of those assets must be allocated over the years that the asset is used. Depreciation is the portion of an asset's value that is "used up" in each year it is employed in production. In figuring net income for tax purposes, this cost usually equals the original price of an item spread over the years in the service life set for the item by the IRS. Accountants and tax advisors usually determine a depreciation schedule (over how many years will capital assets be used up) for the farmer.

Farmers often rely on the expertise of their accountant or tax advisor for this item. However, this item is available on the IRS 1040F. For this survey, use the depreciation amount claimed by the respondent on his income tax return. You may refer a respondent directly to the 1040F item, but only if he/she seems agreeable.

If the operator has been farming a long time, his equipment and breeding stock may be 'depreciated out', meaning he did not claim any on his 2002 taxes. If this is the case, make a note explaining the situation.

If the operation is a partnership, include the amount claimed by partners. DO NOT enter the CURRENT VALUE of depreciable assets.

Items 23-30 Labor Expenses

Item 23 Cash Wages Paid to Hired Workers

Record the total cash wages and bonuses paid to all hired farm and ranch labor on this operation in 2002 for agricultural work.

INCLUDE in the total amount paid:

(1) cash wages, incentives, bonuses and profit percentages paid to

- workers doing agricultural work on land in the operation in 2002.
- (2) wages paid to family members and corporate officers.
 - (3) salaries of hired managers.
 - (4) the SALARY paid to the operator. (Do not include "draws". "Drawing" is taking money out of the farm/ranch business for household expenses or other non-farm/ranch expenses.)

EXCLUDE from the total amount paid:

- (1) wages paid for housework.
- (2) expenses for contract labor (record in item 26).
- (3) money taken by the operator's household on a "draw".
- (4) Employer's share of payroll taxes including Social Security, Unemployment, Workers's Compensation, etc. (record in item 25).
- (5) benefits such as health insurance, life insurance, pensions, retirement, etc. (record in item 25).

Paid labor includes only those workers whose pay was considered a business expense of the farm/ranch operation during 2002. These workers should have gotten a W-2 form from the operation, but for some reason they may not have. The key point in this item is that if the wages paid to the workers were considered a business expense to the operation, include them here. Operators who had more than 500 work hours of farm labor in any quarter during 2002 are affected by minimum wage laws.

Paid labor INCLUDES:

- (1) agricultural workers on the payroll no matter where they worked.
- (2) agricultural workers on paid vacation or sick leave.
- (3) service workers provided to other operations by the selected operation.
- (4) family members who were paid by the operation.

In order to be counted as agricultural workers, employees must be involved in activities defined as being agricultural work.

INCLUDE as Agricultural Work:

- (1) work done ON this operation in connection with the production of agricultural products, including nursery and greenhouse products and animal specialties such as furs, fish, bees, honey, etc.
- (2) work done OFF this operation such as trips for marketing products of the operation, buying feed, delivering products to local markets or handling other farm-related business.
- (3) repairs of farm/ranch buildings and machinery when performed along with other work classified as agricultural work.
- (4) bookkeeping done by an employee of the operation.

- (5) managing a farm/ranch for a salary.
- (6) meal preparation for work crews.

Exclude from Agricultural Work:

- (1) housework such as cooking, cleaning, babysitting, etc. done in the operator's home.
- (2) operating a gasoline station, store or other such non-agricultural enterprise even if it was located on the operation.
- (3) work involved in training, boarding or renting animals such as horses and dogs unless it was part of, and cannot be separated from, the business of raising the animals.
- (4) caring for research animals.
- (5) work at a roadside stand (or farm store) UNLESS the operation produced more than 50 percent of the products sold at the stand.
- (6) work which alters the commodity produced (such as wineries, canneries, textile mills, etc.) even if it is done on the operation and the workers are paid by the operator. Make a note if the respondent cannot separate these workers and their wages from operation's total payroll.
- (7) all work provided by service firms such as cotton ginning (record as a marketing charge), commercial bookkeeping, legal and other professional services provided at a location off the farm. All of these items except the ginning should be recorded as a general farm business expense in item 31.

Item 23a Cash Wages for Soybeans
V2 only

Record the dollar amount of the total (item 23) cash wages paid to hired farm and ranch labor that was for the soybean enterprise.

Item 24 Breakout of Cash Wages Paid

The breakout of total cash wages is important to assure that the respondent includes cash wages paid to self, spouse, other operators, and other family members. The wages paid to farm and ranch labor are more obvious to the operator when he/she responds to this section. This breakout also allows for the proper allocation of cash wages to operator household income when we process the data. Record the actual dollars paid of the total cash wages paid (item 23) to people in each of the categories listed. The sum of 24a + 24b + 24c+24d MUST equal the total reported in item 23.

Item 24a The Operator

Record the amount paid to the operator (include a hired manager's salary). Exclude money taken out of the operation on a draw by the owner/operator.

Item 24b Spouse and Other Household Members

Record the amount paid to the principal operator's spouse and other members of the operator's household. Exclude salaries paid to partners (unless they live in the household) and to their household members. These should be included in item 24c. Household members include everyone who lives in the operator's house and shares the financial resources of the operator. Usually these are family members. Include people who do not live in the house if they are dependents of the operator (college students, etc.).

Item 24c Other Operators

Record the amount paid to other operators for this operation. These are persons responsible for the day-to-day management decisions for this operation, including hired managers. Exclude operators that are household members of the principal operator. These should be included in 24b.

Item 24d Everyone Else

Record the amount paid to all hired workers of the operation except those included in items 24a, 24b, and 24c. Include salaries of partners and wages paid to their family members.

Item 25 Payroll Taxes and Benefits

Record the total dollars spent by this operation for payroll taxes (Social Security, Unemployment, Workers' Compensation, etc.), life insurance, health insurance, pensions, retirement, etc. for employees of this operation. If the employees paid a share of some of these items and their share was withheld from their wages, the expense for their share should be included in items 23 and 24.

When the operator or the operator's spouse was a paid employee of the operation, and the operation paid for health insurance for the farm family as a benefit of this employment, this is a valid business expense and should be included in this item.

Item 25a Payroll Taxes and Benefits for Soybeans
V2 only

Record the dollar amount of the total (item 25) payroll taxes and benefits expense that was for the Soybean enterprise.

Item 26 Contract Labor Expense

Record the total amount spent by the operation in 2002 for contract agricultural labor.

Contract workers are paid by a crew leader, contractor, buyer, processor, cooperative or other person who has an oral or written agreement with a farmer/rancher. Record the total expenses for contract labor used in 2002.

INCLUDE:

- (1) contract expenses for workers hired to harvest fruits, vegetables, potatoes, berries and all other crops.
- (2) other agricultural work which was performed on a contract basis by a contractor, a crew leader or a cooperative.
- (3) expenses for work done by any custom operator who does not provide his own machinery and who was hired on a contract.

Exclude expenses for contract construction or maintenance of buildings and land improvements. Contract labor expenses for maintenance and repair should be reported in item 15. Contract labor expenses for all new construction should be reported in items 32-34.

Item 26a Contract Labor for Soybeans
V2 only

Record the dollar amount of the total (item 26) contract labor costs that were for the soybean enterprise.

Item 27 Custom Work

Custom work is work performed by machines and labor when it is hired as a unit. Expenses for transporting or hauling animals or other products such as milk to the processor goes here if the driver and the vehicle are hired together. Loading is probably also part of the fee. If only the labor is hired (no machines or vehicles), then the expense goes either under item 26 if the labor is contract labor, or in item 23 if the labor was seasonal hired labor.

Item 27a Custom Hauling

Record the total cost for all hauling done for this operation by a custom operator. Examples of custom hauling are paying a driver with his truck to haul grain to the elevator, livestock hauled to an auction, and milk hauled to a pooling station. At this point in the interview you will know enough about the operation to probe for specific hauling expenses the operation may have. For example, if you are interviewing a dairy farmer, probe to be sure milk hauling is included. Most dairies have an expense for custom hauling, but may overlook that expense or not consider it 'custom' work.

INCLUDE:

- (1) hauling to market.
- (2) hauling between farm/ranch parcels.
- (3) milk hauling charges. (If these were netted out of the operator's milk check, add them back to get the "net" figure we want in Section 14).
- (4) hauling of feed, seed and fertilizer to the operation.
- (5) manure hauling.
- (6) all other hauling charges for the operation.

Item 27b Other Custom Work

Most farm accounting record books (and the IRS 1040F) have a line for total expense for custom hire (machine work). Custom work is defined as work performed by machines and labor hired as a unit. Other custom work on crops would include custom planting, harvesting, leveling, and soil testing. Planting by plane or helicopter should also be included in this item.

Custom land leveling should be included in this item, however land improvement and development including conservation work, which is not custom, should be recorded in item 15.

EXCLUDE:

- (1) contract labor.
- (2) custom fertilizer, lime and/or soil conditioner applications (include in item 2).
- (3) custom applications of crop chemicals and pesticides (record in item 3) and pest scouting (record in item 31).
- (4) leasing of cars, trucks, tractors or other equipment.
- (5) custom livestock expense (report in item 8).

**Item 27b(1) Total Custom Work for Soybean
V2 only**

Record the dollar amount of the total custom work (item 27a and item 27b) expense that was for the Soybean enterprise.

**Item 28 Cash Value of Commodities Provided to Household Members As
Payment for Farm Work**

Record the value of any commodities provided to members of the household instead of payment of actual dollars. The value of the commodities is whatever the commodities could have been sold for. Include quantities of grain or other crops, head of livestock, or the value of a share of milk sales receipts provided as payment to family members.

Exclude living expenses for family members unless the expenses were considered a business expense of the operation.

**Item 29 Cash Value of all Food, Goods and Services provided to Workers who are
NOT Household Members workers**

This question only applies to workers who are not members of the operator's household. The value of heating fuels, transportation, telephone, electricity, clothing and furniture supplied to hired workers who are not members of the operator's household should be calculated in terms of what they cost the operator. The value of food produced on the farm and furnished to paid workers should be whatever the items would have been worth at local prices (at the time they were given to the workers).

Operators may not regularly keep records of this type of employee compensation. For this reason, the question specifies items which are commonly overlooked by farmers in reporting these non-cash payments. Include the value of commodities (head of livestock, bushels of grain, percent of milk check, etc.) paid to any workers in lieu of wages for farm work, including such payments-in-kind. Using the items as probes will help the respondent better consider which type and amount of these payments were made.

Item 30 Market Value of Products Used or Consumed on the Operation

Record the estimated MARKET value of all the meat and livestock products, fruit, vegetables, berries, firewood, etc. produced and **used or consumed** on this operation in 2002. Exclude home gardens if expenses were excluded earlier. Include products used or consumed by partners and their families. Also exclude any commodities provided as payment to household members for farm work reported in item 28.

Item 31 General Business Expenses

Show the respondent the list of General Business Expenses in the Respondent Booklet.

These expenses are generally recorded in the "other expense" category of most farm record books (and the 1040F). These expenses are so varied that when you ask the operator for his general business expenses he may say 'none' or itemize the ones that come to mind or include previously reported data. To gain some consistency in what is reported here, read the list of the "Includes" below and have the respondent refer to the Respondent Booklet. The purpose of this list is not to have the respondent itemize each expense to the nearest penny but to prompt him to consider various categories which define what you mean when you ask for 'other business expenses'. If an individual item is a fairly "large" expenditure, make notes explaining the expense.

INCLUDE:

- (1) fees paid for keeping farm records.
- (2) fees paid for preparing income tax returns.
- (3) travel expenses (such as lodging, meals and parking) associated with purchasing or selling commodities for farm, association or cooperative business, attending fairs where the respondent's farm products were exhibited and other farm/ranch business.
- (4) postage and telegrams for the farm business.
- (5) expenses for title searches, abstracts, recording deeds and mortgages, court costs and other legal expenses for the land operated.
- (6) fees paid to attorneys in connection with the farm/ranch.
- (7) charges for permits and licenses obtained in 2002 for production and marketing of commodities produced on the land operated. Exclude quota and allotment purchases and rentals.
- (8) fees paid on a voluntary basis to marketing associations or government agencies (federal, state or local) on the basis of sales or production, for the promotion of sales or for other specific purposes.
- (9) registration of purebred animals.

- (10) brand registration fees.
- (11) charges for sales promotion or advertising.
- (12) farm management expenses including books, papers and magazines on subjects related to crop or livestock production, market reports, farm newsletters and ag bulletins. Report only 2002 expenditures, even if these cover more than one year.
- (13) real estate agent commissions and other direct selling or buying expenses.
- (14) garbage collection or dumpster service for barns and farm buildings.
- (15) rental expense for farm office space not on the operation.
- (16) fees paid to entomologists, service companies, etc. for pest scouting.
- (17) trapping club memberships and dues. (Trapping clubs are formed to trap predator animals such as coyotes.)
- (18) stall or space rental fees for farmer's markets.
- (19) parcel post expenses or charges for marketing agricultural products.
- (20) all purchases of farm office equipment (not placed on a depreciation schedule).

EXCLUDE:

- (1) wages paid to farm employees (on the payroll) for bookkeeping (exclusively or in addition to other farm work). (WAGES AND SALARIES FOR ALL FARM EMPLOYEES SHOULD BE REPORTED IN ITEM 23.)
- (2) gasoline and other vehicle operating expenses (record in item 9).
- (3) taxes paid which were levied for general purposes.
- (4) marketing expenses and check-off fees deducted from sales of commodities paid by the operator.
- (5) expenditures for magazine or journal subscriptions for 2002 which were paid in other years.
- (6) all purchases of farm office equipment (if placed on a depreciation schedule).
- (7) potting soil and topsoil for nursery/greenhouse operations (record in item 42).

CAPITAL EXPENDITURES Items 32-41

Item 32 Land Improvements

Land improvements are those additions or improvements to the land which change it in a PERMANENT way.

Include:

- (1) expenses for improvements such as terraces, water and sediment control basins, grassed waterways, ponds, windbreaks, permanent cover, contouring, grading, filter strips, etc.
- (2) expenses for drainage improvements such as ditches, bedding, shaping, subsurface drain tile, etc.
- (3) expenses for irrigation improvements such as digging wells or ditches.
- (4) expenses for land leveling (removal of irregularities on the land surface by the use of special equipment for the purpose of improving drainage, achieving more uniform planting depths, more effective use of water and greater efficiency in tillage operations).
- (5) expenses for corrals, feedlots, feeding floors, trench silos, waste facilities, wells and equipment not for irrigation.
- (6) (in Western states) capital improvements to grazing land.

Exclude

- (1) land purchases (the value of new land purchases is reflected in Section 20, Assets).

Item 33 New Construction and Remodeling of Farm Buildings, Structures, and Dwellings (excluding the operator's dwelling)

Capital expenditures are reported in the year upon completion of building improvements. The entire cost of farm buildings is reported for the year in which the building is completed. "Completed" means the building is available for any use.

Include:

- (1) all costs for new construction or remodeling of houses for hired farm/ranch labor or tenants.
- (2) all costs to construct or remodel farm/ranch buildings, storage facilities, sheds, silos, bins and similar structures.

Item 34 New Construction and Remodeling of Operator's House

Include all costs for new construction or remodeling of the operator's house, **if it was owned by the operation**. Owned by the operation can mean either the house is recorded as an asset in farm record books, used as security/collateral for a farm loan, or deeded as part of the farm.

Item 35 Cars

Record the total cost (after trade-ins, rebates and/or discounts have been subtracted) of all the new and used cars bought for use on the operation during 2002. The total cost should include the cost of accessories purchased with the vehicle(s), special servicing, delivery charges, dealer preparation, Federal Excise Tax and sales tax.

If registration and license fees, financing charges and insurance were included in the purchase price, include them too. If these fees were separate and itemized on the bill, exclude them here and record financing charges in item 18. Record registration and license fees in item 21.

Item 35a Farm Share Percent

Often, cars are purchased for both farm and personal (home) use. This question is asked to properly allocate the correct amount of the purchase to the farm. Farm share is an estimate of the percent of total use of the vehicle that was for farm/ranch related business, or that part of the total cost of the vehicle which is the basis for claiming future depreciation expense on tax claims for the operation. If all of the vehicles purchased in item 35 are strictly for farm use, record 100 in item 35a.

Item 36 Trucks

Record the total cost (after trade-ins, rebates and/or discounts have been subtracted) of all the new and used trucks, pick-ups, sport utility vehicles, vans, campers, buses bought for use on the operation during 2002. The total cost should include the cost of accessories purchased with the vehicle(s), special servicing, delivery charges, dealer preparation, Federal Excise Tax and sales tax.

If registration and license fees, financing charges and insurance were included in the purchase price, include them too. If these fees were separate and itemized on the bill, exclude them here and record financing charges in item 18. Record registration and license fees in item 21.

Item 36a Farm Share Percent

Often, trucks are purchased for both farm and personal (home) use. This question is asked to properly allocate the correct amount of the purchase to the farm. Farm share is an estimate of the percent of total use of the vehicle that was for farm/ranch related business, or that part of the total cost of the vehicle which is the basis for claiming future depreciation expense on tax claims for the operation. If all of the vehicles purchased in item 36 are strictly for farm use, record 100 in item 36a.

Item 37 Tractors

Record the total purchase price (after trade-ins, rebates, discounts, etc.) of all new and used tractors (after any trade-in allowance, rebates and discounts were bought during 2002 for use on the operation. If the respondent's operation bought tractors in partnership with another operation, include only the amount that was this operation's share of the tractor's total cost. The total cost should include the cost of accessories bought with the tractor, special servicing, delivery charges, dealer preparation, Federal Excise Tax and sales tax. Registration and license fees should be included in the purchase price if they were not separated on the bill. If these fees were separate and itemized on the bill, exclude them here. Financing charges should have been recorded in item 18. Registration and license fees should have been reported in item 21.

Item 38 Self-Propelled Farm Equipment

Record the total purchase price (after trade-ins, rebates, discounts, etc.) of all new and used self-propelled equipment, implements and machinery (after any trade-in allowance, rebates and discounts were bought during 2002 for use on the operation. If the respondent's operation bought machinery in partnership with another operation, include only the amount that was this operation's share of the machine's total cost. The total cost should include the cost of accessories, special servicing, delivery charges, dealer preparation, Federal Excise Tax and sales tax. Registration and license fees should be included in the purchase price if they were not separated on the bill. If these fees were separate and itemized on the bill, exclude them here. Financing charges should have been recorded in item 18. Registration and license fees should have been reported in item 21.

Item 39 NON-SELF-PROPELLED Equipment, Implements and/or Machinery Purchased

Record the total purchase price for all non-self-propelled equipment,

implements and machinery (after any trade-in allowance, rebates and discounts were subtracted) bought in 2002 for use on the operation. Include purchases of livestock, dairy and poultry equipment, (including calf shelters/hutches) and irrigation equipment and pumps.

Include delivery charges and sales taxes in the net expense. If the respondent's operation bought machinery in partnership with another operation, include only the amount that was this operation's share of the machine's total cost.

Exclude expenses for equipment purchased for personal or pleasure use, such as rodeo equipment.

Item 40 Office Equipment, Furniture, and Computers

Include all capital purchases (items placed on a depreciation schedule) of farm office equipment, furniture, and computers. Any such equipment purchased but not place on a depreciation schedule should be included in item 31.

Item 41 Other Capital Expenditures

Record the total cost of all other capital items (items placed on a depreciation schedule) purchased by the operation in 2002. Make good notes as to exactly what items are included.

Exclude breeding livestock purchases. Breeding livestock purchases are reported in item 4a. Also exclude capitalized machinery repairs. Include those expenses in item 14.

Item 42 Unallocated (Misc.) Expenses

This item is used to account for any expenses the operation had in 2002 that have not been recorded elsewhere in the questionnaire. Describe each of the items recorded here. If these expenses should have been reported in another item, make the necessary corrections.

Include potting soil or topsoil for nursery/greenhouse operations.

Sections 20 & 21 - Farm Assets and Debts

What are these Sections for? How is the information used?

Data reported in previous sections are used to develop an income statement for the farm operation. Data reported in these sections are used to develop the farm's balance sheet. The balance sheet establishes the farm's financial position at a point in time by referring to the assets of the farm relative to the amount of debt it owes. For purposes of USDA's farm financial management accounting procedures, December 31 of the preceding calendar year is the reference date for the farm's balance sheet.

Using December 31 as the reference date allows the balance sheet to be related to the farm's income statement. The balance sheet shows the amount of "owned" assets the farm used in producing its crop and livestock commodities.

Correspondence between the length of term of loans and the type of assets held is also very important for evaluating the financial position of the farm. If a farm has a large amount of current debt (debt that is either payable or due in a few weeks or months), but few current assets (such as cash, accounts receivable, or crop or livestock inventories), the farmer could have to liquidate a part of his/her holdings to meet obligations as they come due. This could affect how the farm is organized, what it can produce in future years, or its future profitability. If current debt is substantially larger than current assets, farmers may even have to take "fire sale" prices for assets put on the market to meet obligations. So the match between types of debt and assets, as well as total debts and assets, are considered by USDA in evaluating the financial status of farms.

Assets tend to be classified as current or non-current based on how long they may be expected to be used in or held by the business. Land and buildings tend to be non-current assets while inventories and accounts receivable are considered current assets. Debt may be categorized similar to assets by determining the length of term of the loan and whether the loan is an operating loan, a non-real estate, or a real estate loan.

USDA uses data reported in the balance sheet along with data reported in the income statement to develop key indicators of financial health and performance for farm businesses.

These indicators include:

Solvency -- debts in relation to assets,

Liquidity -- money available to pay bills as they come due,

Profitability-- the return to management and risk of the farmer in relation to the amount of farm assets and equity used in production, and

Financial Efficiency -- how effectively the farm uses inputs to produce crops and livestock.

Balance sheets and financial ratios are reported to the Secretary of Agriculture, other policy officials within USDA, and to the Congress. Conclusions about the financial health of farm businesses affect policy decisions made by the Secretary or Congress. In addition, data which summarize findings from the survey are reported for use by the media, farm organizations, and others with an interest in agriculture.

Each year a summary report on the **Status of Family Farms** is prepared for Congress. This report, taken directly from the results of this survey, provides a perspective about the financial status of agriculture by type, size, and location of farm businesses.

Value of Land and Buildings. On average, **land** accounts for nearly three-fourths of farmers' assets. Dwellings on the farm are also assets of the farm operation. These include the operator's house (which is usually considered to be owned by the farm and included in the books of the farm) and hired labor and tenant houses. USDA uses information on dwelling values to estimate the rental value for the space they provide. This "rent" is included in the total cost of doing business.

The value of **farm buildings** is also used to help develop an estimate of capital replacement for farm sector assets. The buildings' value is assumed to be spread across the useful life of the building. A share of the building's total value becomes a production cost each year.

In addition to land and building values, balance sheets include a value for machinery and equipment owned by the farm, including cars and trucks. Livestock and crop inventories are a large part of the balance sheet for some farms. Grain and livestock farms, in particular, tend to have substantial inventories on hand at year's end.

Debt by Lender. These data are used to help establish who is providing funds to meet farmer's borrowing needs. We ask about the loan balance, interest rate, original term of the loan, and the year in which the loan was obtained. These are used to estimate the principal that must be repaid each year.

The estimate of principal repayment is combined with the amount of interest and service fees to develop an estimate of **debt service** requirements facing the farm. USDA monitors very closely the debt service commitments of farms in relation to their incomes and cash flows. Rising use of farms' debt repayment capacity gives an early warning indicator of potential financial stress.

In addition to the assets they own, farmers also operate assets they lease or rent from others. For this section, we are interested in determining the value of assets managed by the operation. The respondent is the only source available for estimates of the value of the land they rent in 2002. Therefore, we include the value of rented land in estimating the total value of assets managed by the operation.

Section 20 - Farm Assets

General Instructions

This section is different from the sections before it in the questionnaire because most of these questions focus on assets OWNED by the operation. For this section, we define assets of the operation as:

(For individual or partnership operations) the assets belonging to the operation or to the operator and partners. When the operator and/or partners rent their personal assets to the operation, exclude them as assets in this section.

(For corporations) the assets belonging to the corporation.

For this section, we also obtain information on assets MANAGED, but NOT OWNED by the operation. Record the value of land rented by the operation. Also, most of this section has a fixed reference date, December 31, 2002, rather than all of 2002.

In this section we get the MARKET VALUE of several types of assets and the amount and type of debt this operation had at the end of 2002. Get the operator's best estimate of the current market value of specific assets. If operation assets are owned by partners, include the value of assets belonging to all partners (exclude the landlord's share).

Item 1 Machinery and Equipment on the Operation

This question accounts for all machinery, equipment, and implements on this operation on December 31, 2002. **DO NOT** include machinery kept on this place for custom work use only. Inventory is also recorded, for each category, of the number manufactured in the last 5 years (1998-2002).

Item 1a - Tractors less than 40 horsepower (PTO)

Record tractors with less than 40 horsepower (PTO) used in 2001 or 2002 on this operation. Exclude garden tractors.

Item 1b - Tractors with 40 to 99 horsepower (PTO)

Record tractors with 40 to 99 horsepower (PTO) used in 2001 or 2002 on this operation.

Item 1c - Tractors with 100 horsepower (PTO) or more

Record tractors with 100 horsepower (PTO) or more used in 2001 or 2002 on this operation.

Item 1d - Self-propelled grain and bean combines

Record the number of self-propelled grain and bean combines (used for harvesting and threshing operations) on this operation during 2001 or 2002. Include all grain combines equipped with picking head attachments. Exclude all pull-type grain and bean combines.

Item 1e - Self-propelled cotton pickers and strippers

Record the number self-propelled cotton pickers and strippers used in 2001 or 2002 on this operation.

Item 1f - Self-propelled forage harvesters

Record the number of self-propelled forage harvesters used in 2001 or 2002 on this operation.

Item 1g - Hay balers

Record the number of hay balers used in 2001 or 2002 on this operation. Include both round and square balers and regular and large size balers.

Item 2 Value of Beginning/Ending Year Inventories of Machinery, Commodities, and Production Inputs, etc.

Net farm income relates to the value of production during a given year. A portion of cash sales in any year may come from commodities produced in prior years, and carried into this year as inventory. Some of this year's production may remain in inventory at the end of the year. Accurately measuring net farm income to reflect this year's production must account for changes in inventory levels. For that reason, we ask beginning and ending inventory values for crops, livestock, and production inputs.

There are three main criteria you should guide the respondent toward considering in coming up with answers to beginning or ending year inventory values:

- the types of commodities or production inputs,
- the quantity of each type on hand, and
- their market price on the date in question.

Although more accurate figures would be obtained if we collected all these pieces, it is acceptable for you to get the operator's best estimate of the **market value** of commodities or production inputs on hand at the beginning and the end of the year.

But if the operator says the market values were the same, YOU MUST PROBE for the commodity/input types, the quantity, livestock weights, and the market price on the date in question. This will ensure as accurate figures as possible. After you have probed, if the operator still says the beginning and ending year market values were the same, accept the answers. Be sure to make **good notes** of the reason why they were the same so the survey statistician understands the situation.

The value of commodities held in inventory relate to the figures reported earlier in the questionnaire related to crop production, the amount (of crops) used on farm, or the quantity (of livestock) sold, and to the sales data reported Section 14. If the commodity was produced but not sold or already used on farm, it should be in ending inventory and its value would be recorded here.

In most cases, the value of commodities or production inputs on hand at the beginning of the year **should not equal** their value at the end of the year. After finding out the value at the end of 2001 and you ask about the value at the beginning of 2002, **do not say**, "Was it (about) the same?" or "It was the about the same, was it not?".

Item 2a Value of Trucks and Cars OWNED

Record the end-of-year (on Dec. 31, 2002) estimate of the market value of the farm share of trucks and cars owned by the operation

Item 2b Value of Tractors, Farm Machinery, Equipment and Tools OWNED

Record the end-of-year (on Dec. 31, 2002) estimate of the market value of the farm share of tractors, machinery, tools, equipment and implements

owned by the operation.

Item 2c Value of CROPS Owned

Record the operator's best estimate of both the beginning-of-year and end-of-year market value of all crops stored on or off the operation. Be sure to consider the quantity on hand and market prices on the date in question.

Include the value of:

- (1) all crops owned by the operation whether stored on or off the operation.
- (2) hay and silage crops.
- (3) crops produced in 2002 and earlier years.
- (4) crops to be used for feed, seed, sales, etc.
- (5) all whole grains on hand.
- (6) all crops purchased.
- (7) crops owned by the operation which were produced under a contract but not sold as of December 31, 2002.
- (8) crops in storage which had been redeemed from CCC loan by the reference date above.
- (9) nursery and greenhouse products in saleable condition.

Exclude the value of:

- (1) crops still under CCC loans.
- (2) feed items such as cracked corn, rolled oats, etc.
- (3) growing crops.

Item 2c(1) Government Program Crops Owned and Stored

Record the value of Government program crops owned and stored on or off the operation. Include the value of wheat, corn, grain sorghum, barley, oats, soybeans, minor oilseeds (oil-type sunflower seed, other-type sunflower seed, flaxseed, canola, rapeseed, safflower seed, and mustard seed), dry peas, lentils, small chick peas, rice, upland cotton, and extra long staple (ELS) cotton

Item 2c(2) Non-Program Crops Owned and Stored

Record the value of the crops owned and stored on or off the operation which were NOT reported above in 2c(1).

Item 2 Value of Livestock Owned

For livestock, you also need to consider their weights or size. You need to

consider **all** these things on January 1, 2002, to get the market value of the beginning year inventory. Then you need to consider **all** these things on December 31, 2002, to get the market value of the end of year inventory. **It is very unlikely that all of these things are the same at the end of the year as they were at the beginning of the year.**

Include the value of:

- (1) all animals held for resale.
- (2) beef and dairy cows, bulls, steers, heifers, calves and any other cattle.
- (3) hogs and pigs.
- (4) sheep and lambs.
- (5) horses, ponies and mules.
- (6) goats.
- (7) chickens, ducks, geese, guineas, pigeons, etc.
- (8) fur bearing animals.
- (9) catfish, crawfish and other fish.
- (10) bees.
- (11) other specialty livestock.
- (12) livestock owned by this operation, but located on another operation under a "livestock on shares" arrangement. (See example following Section 14, on page 5061).

Exclude the value of:

- (1) livestock on hand not owned by the operation.
- (2) animals owned for pleasure use only (except equine).
- (3) livestock owned by this operation, but being produced by another operation under contract. The value of these animals are collected in Section 14, item 6.

Item 2d Value of Breeding Livestock Owned

Record the operator's best estimate of both the beginning-of-year and end-of-year market value for all breeding livestock (including dairy animals) and poultry owned by, and located on, the operation. Be sure to consider the quantity on hand, their size or weights, and the market prices on the date in question. Breeding livestock is asked specifically because it is considered a non-current asset on an operator's balance sheet versus a current asset. They reflect a long term investment.

The number of head on hand on Dec. 31, 2002 was reported in Sections 10 - 13. This should be the inventory for which the operator gives you the end of year value.

Item 2e Value of Other (Non-breeding) Livestock Owned

Record the operator's best estimate of both the beginning-of-year and end-of-year market value for all non-breeding livestock (including dairy animals) and poultry owned by, and located on, the operation. Be sure to consider the quantity on hand, their size or weights, and the market prices on the date in question.

The number of head on hand on Dec. 31, 2002 was reported in Sections 10 - 13. This should be the inventory for which the operator gives you the end of year value.

Item 2f Value of Production Inputs Owned

Record the operator's best estimate of both the beginning-of-year and end-of-year market value of inputs *owned* by this operation. Inputs include such things as feed, fertilizer, chemicals, fuels, purchased seed and other supplies, etc. Exclude the value of any items that should be reported in item 4a (hay, crops to be used for seed, etc.) Do not include fertilizers and chemicals already applied.

Item 2g Production Inputs Already Used for Crops (Sunk Costs)

Why do we ask this question?

Growing crops represent a substantial investment and have a significant impact on a farmer's balance sheet. As purchases of fertilizer, seed, herbicide, gas, labor, etc. are made and the resources used, either cash is diminished or liabilities are increased. It is important that an asset value still be shown. One method is to assume these cash inputs transformed into growing crops, do in fact have a value; that is, someone would pay to acquire such resources during the year. For a December 31 balance sheet and a winter wheat crop, this means a value should be placed on the growing crop. Since the actual market value is hard to determine, actual cash invested in the crop is used as the balance sheet value.

Record the amount spent up through December 31, 2002 for physical production inputs (seeds, fertilizers, pesticides, etc.) for all cover crops and crops **planted but not harvested** as of that date. Also include the amount spent for fertilizers and pesticides already applied to benefit a crop that had **not been planted yet** as of December 31, 2002.

Include the value of inputs already applied to:

- (1) nursery crops.
- (2) greenhouse crops.
- (3) mushrooms, fruit or vegetable crops.

- (4) cover crops.
- (5) winter or spring grain crops which had been planted by December 31, 2002.

Exclude the value of inputs to:

- (1) crops already harvested and on hand (these crop values should be recorded in item 2c).
- (2) crops such as Christmas trees, fruit trees, etc. where the value of the crop is included in the value of the land.
- (3) mature crops not harvested by December 31, 2002 due to weather or market conditions. An estimated value for these crops should be recorded in item 2c if they were originally intended for harvest as of December 31, 2002.

Item 2h Value of Stock in Farm Credit System and Other Farm Cooperatives

Record the value on December 31, 2002, of the stock the operation owns in the Farm Credit System and all other farm cooperatives. Be sure to include the value of shares received during the year in lieu of dividends.

As a condition of obtaining a loan, the Farm Credit System has requirements for a borrower to purchase stock in the Farm Credit System. The value of the stock is reported here.

Item 2i All Other Farm Assets

Record the operator's best estimate of the market value of all other assets of the farm/ranch, using the **Value Codes** in the Respondent Booklet. Refer the respondent to the list of items in the respondent booklet labeled, "Other Farm Assets".

Include the value of:

- (1) cash, bonds, certificates of deposit, savings and checking accounts belonging to the operation.
- (2) money owed to the operation (other than that reported in item 3).
- (3) quotas and allotments owned by the operation, if these values are not reflected in the land values reported in item 4.

Exclude the value of:

- (1) assets for which values were obtained earlier in the questionnaire.
- (2) personal assets.

Item 3 Amount Owed To The Operation

Amount Owed on December 31, 2002 (End-of-Year)

Record the total amount owed to the operation as of December 31, 2002, for all commodities sold or delivered in 2002 or previous years.

In the case of pooled commodities or other sales through cooperatives, etc., record the operator's best estimate of the income the operation will receive in future years from crops, livestock, poultry or products sold or delivered in 2002 or earlier years.

Note that the amount owed to the operation for past sales and the value of commodities held in inventory are related to the figures reported in earlier sections on production, the amount (of crops) already used on farm, or the quantity (of livestock) sold, and to the sales data reported previously.

If the commodity was produced but not sold or already used on farm, it should be in inventory and the value should have been recorded as end of the year inventory earlier in this section in item 2c. If the commodity was sold, but the revenue was not recorded earlier, then the amount of money owed to the operation for these sales goes here.

Amount Owed on January 1, 2002 (Beginning-of-Year)

Record the total amount owed to the operation as of January 1, 2002 for all commodities sold or delivered in 2001 or earlier years. In the case of pooled commodities or other sales through cooperatives, etc., record the operator's best estimate of the income the operation expected to receive in 2002 and future years from crops, livestock, poultry or products sold or delivered in 2001 or earlier years.

Value of Land and Buildings Items 4-6

Market value is the value at which the land and/or buildings could be sold under current market conditions if allowed to remain on the market for a reasonable amount of time. This value should be for the most likely purpose the land would be sold, including non-agricultural uses.

Item 1 Market Value of Land and Buildings OWNED

This information is not likely to be available in records, but most operators

should be aware of the current value of their land and buildings or comparable land and buildings.

It is not necessary for the operation to own land in order to own buildings. Operations can own buildings that are permanent structures located on rented or leased land, or they may own mobile homes, shops or offices located on rented or leased land.

Item 4a Market Value of Operator's Dwelling, if OWNED

Record the **market value** of the operator's dwelling as of December 31, 2002, if it is owned by the operation.

If the operator cannot give you an estimate of current market value, probe to get values of similar houses, or get the replacement value listed for insurance purposes. We will use these data to impute a fair rental value for the house in order to account for a house provided to the operator by the farm business.

Item 4b Market Value of Other Dwellings OWNED

Record the **market value** on December 31, 2002 of tenant and hired labor dwellings, and all other dwellings (except the operator's) owned by this operation. This includes houses/dwellings of partners, relatives, etc. The dwellings must be owned by the operation, not by the partner or relative separately from the land in the operation.

Item 4c Other Farm Buildings and Structures OWNED

Record the **market value** on December 31, 2002 of all other farm buildings owned by the operation including barns, cribs, silos, equipment shops, grain bins, storage sheds and similar type buildings. Exclude processing facilities such as cotton gins, packing sheds, commercial elevator facilities, etc. even if they are owned by and located on the operation. Probe if necessary to obtain values, but do not accept "book value" (the original cost of the building minus depreciation).

Item 4d Orchards and Trees Grown for Wood Products

Record the market value on December 31, 2002 of trees in orchards, vines in vineyards, other perennials in the field, Christmas trees, and trees cultivated for wood products. Such permanent plantings are capital assets that must be depreciated over their useful lives.

Item 4e Market Value of Land OWNED

Record the operator's best estimate of the total **market value** of land OWNED by the operation on December 31, 2002. This should correspond to the acres owned reported in Section A, item 1, unless land was purchased at the end of the year, and, thus, were not part of the operation **during** 2002. Include the value of water rights, mineral rights, permanently installed irrigation equipment, frost protection systems, grazing permits that go with the land, etc. Verify with the operator that the average value per acre is reasonable for the area by dividing the amount reported by the number of acres owned.

Exclude the value of dwellings, buildings and structures, and trees in orchards, vines in vineyards, other perennials in the field, Christmas trees and trees cultivated for wood products.

The total of 4a + 4b + 4c + 4d + 4e should reflect the total value of land and buildings OWNED by this operation on December 31, 2002. Verify this total with the operator.

Item 5 Market Value of Land and Buildings Rented FROM Others

Record the operator's best estimate of the total market value of all the land and buildings Cash Rented, Share Rented, or Used Rent Free by the operation during 2002. (This should correspond to acres reported as rented in Section 1, item 2.) Include the value of water rights, mineral rights, permanently installed irrigation equipment, frost protection systems, permanent plantings in orchards, groves, vineyards, Christmas trees, grazing permits that go with the land, etc.

Item 6 Market Value of Land and Buildings Rented TO Others

Record the operator's best estimate of the total market value of all the Land and buildings RENTED TO OTHERS. (This should correspond to acres reported as rented in Section 1, item 3.) Include the value of water rights, mineral rights, permanently installed irrigation equipment, frost protection systems, permanent plantings in orchards, groves, vineyards, Christmas trees, grazing permits that go with the land, etc.

Item 7 Percent Change of Total Market Value of Land and Buildings on the Operation.

Item 7 should indicate if land values increased, decreased, or did not change from the previous year and by what percent. First, try to get a response to the

direction (increase, decrease, no change). The direction alone provides an important piece of information when comparing this year to last year. Check the appropriate direction and enter the code in Item 7a.

If an increase or decrease is checked, proceed by asking for the percent change. The percent change is expected to be from 1 to 50. The percent change may be 50 or larger in special cases such as areas adjacent to commercial or residential developments where the value could double in one year.

Some examples of what you may get:

<u>Response</u>	<u>Action</u>
(1) 8 percent increase over last year.	Code 1, Enter 8.
(2) 3 percent decrease from last year.	Code 2, Enter 3.
(3) No change from last year.	Code 3, Leave Percent Blank.

If the respondent is unable to report the percent, write DK (don't know) next to the cell.

Section 21 - Debt

Item 1 Seasonal Production Loans

This item includes only loans taken out in 2002 and **entirely or partially** repaid during the year. For example, if an operation took out a \$100,000 operating loan and had repaid all but \$20,000 by the end of the year, record \$80,000 in item 1 as the maximum loan amount taken out and repaid during 2002. Record the \$20,000 debt balance in the item 3 table, entering code '1' in column 4.

Item 2 Screening for Debt

In almost all situations, the operation will have debt. It is unusual for an operation to not have any debt, so if the answer to this item is NO, make a good note before skipping to Section 22. If the operator has multiple operations, include debt for only this operation.

Item 3 Debt By Lender

If the operation had debt at the end of 2002, the table in this item must be completed. Include debt on the operator's house if it was owned by the operation.

Start completing the table by asking about the largest loan. Work across the columns in the table for each loan, starting with the largest loan owed and working down to the smallest loan owed, for up to five loans. Be sure the respondent includes debt secured by the operation's assets, even if the loan was for non-farm purposes.

Column 1 Lender

Refer the respondent (and yourself) to the list of Lender Codes in the Respondent Booklet.

There is no need for the respondent to report specific firms or persons with whom he/she has loans, such as '*First State Bank of Iowa*' or 'my mother-in-law'. By encouraging the respondents to use the RESPONDENT BOOKLET, you are assuring them your interests are in obtaining what types of loans are typical in their state not where they personally have particular debts.

Enter the code for the lender (and purpose) to whom the operation owed money. If more than one loan is owed to the same lender, record the loans separately if possible.

Report as Farm Credit System debt (code 1) any loans from the Federal Land Bank Association, Production Credit Associations, Agricultural Credit Associations, or any other organizations through which Farm Credit System loans are made.

Exclude loans made on the cash value of the borrower's life insurance policy from debts owed to life insurance companies (code 7). Record this type of loan under "Any Other Lenders" (code 15).

USDA's Farm Service Agency (FSA) has taken over the lending functions of the former Farmers Home Administration (FmHA). FSA provides credit to farm operators through direct loans and through guarantees of loans made by private lenders. Use code 2 only for **direct** loans made by the former FmHA and/or the new FSA. For loans made through private lenders but guaranteed by FSA, use other codes, such as 5, 6, and 7, etc.

Report as contractor debt (code 11) any loans from corporations, cooperatives, partnerships, individuals, or other organizations for which this operation produces or markets any commodity or product under contract. Poultry and other livestock contractors frequently provide financing for the construction of facilities and for the purchase of feed and other inputs. Similarly, fruit and vegetable processors often finance seed, specialized machinery, and packing and on-farm processing facilities for producers who grow for them under contract.

For code 12 and code 13, lenders are individuals; however, there is a difference in the two types of loans. For code 12 (individuals from whom land in the operation was bought under a mortgage or deed of trust) title to the land transfers immediately. For code 13 (individuals from whom land in the operation was bought under a land purchase contract) title to the land transfers after a specified portion of the purchase price has been paid, or after a certain amount of time has passed.

Include as other debts (code 17) the farm share of all unpaid bills.

Column 2 Balance Owed

Record the 2002 end-of-year balance remaining to be paid. Include both principal and unpaid interest which was delinquent.

Exclude future interest that will be owed. Only include any interest which was unpaid and/or delinquent. Exclude accrued interest that was not delinquent.

Column 3 Interest Rate

Enter the interest rate associated with the loan balance recorded in column 2. Rates should be entered to the nearest hundredth of a percent, such as 10.25, 9.50, 8.00 or 6.75 percent. You can have debt recorded in column 2 with a zero percent interest rate if no interest is charged. This is most common with very short term debt, although it is sometimes found with debt owed to family members. Write a note of explanation whenever the interest rate is zero.

Column 4 Original Term of the Loan

Enter the original term, in years, of the debt recorded in column 2. If the original term of the debt was less than one year, enter 1.

Column 5 Year Obtained

Enter the four digit year (1980, 1992, etc.) in which the operation obtained the loan or the most recent year of refinancing. For annual lines of credit, enter the year the line of credit was first established even if it was repaid each year.

Column 6 Percent for FARM Purposes

If the loan was obtained entirely for farm purposes, this item should be 100. If part of the loan was used for non-farm purposes, enter the percent of the original loan which was for farm purposes.

Column 7 Purpose of Loan

Ask column 7 for all loans. Respondents have four choices for the purpose of the loan.

- 1 **Purchase land/machinery/etc** - record this purpose for any loan which was used to make new purchases for the operation.
- 2 **Refinance, existing debt only** - the operator refinanced an existing loan to pay off debt. The operator may have chosen to refinance to obtain a lower interest rate.
- 3 **Refinance, existing debt and cash** - the operator refinanced an existing loan to pay off debt. In addition to maybe obtaining a lower interest rate, the operator received cash from equity to use for other expenses.
- 4 **Other** - seasonal operating loans and annual lines of credit, and loans based solely on the operator's equity in land, buildings, machinery, or other assets of the operation.

Item 4 Additional Debt

Space is provided to record details of five loans in the item 3 table. If the operation had more than five loans with balances outstanding at the end of 2002, enter the number of loans in addition to the five identified in the table.

Item 4a Amount of Additional Debt

If the operation had more than five loans with balances outstanding at the end of 2002, enter the total amount of outstanding debt not recorded in the table. Include both principal and unpaid interest which was delinquent.

Section 22 - Farm Labor

Item 1 **Number of Hired Workers**

Record the number of all paid farm or ranch workers, including paid family members, who worked on this operation in 2002. Hired labor includes bookkeepers, office workers, maintenance workers, field hands, machine operators, etc.

Item 1a **Worked Less than 150 days in 2002**

Record the number of hired farm or ranch workers, including paid family members and office workers, who worked on this operation **less than 150 days in 2002**. Exclude contract labor.

Item 1b **Worked More than 150 days in 2002**

Record the number of hired farm or ranch workers, including paid family members and office workers, who worked on this operation **150 days or more in 2002**. Exclude contract labor.

Item 2 **Migrant Workers**

Record the number of hired or contract workers who worked on this operation in 2002 that were migrant workers. The definition of a migrant worker is a farm worker whose employment requires travel that prevents the migrant worker from returning to his or her permanent place of residence the same day.

Item 3 **Hours Worked by the Operator, Spouse, Other Operators, and Unpaid Workers**

These items provide the information to estimate the labor required to produce agricultural products. Record the **average number of hours worked per week** on the farm/ranch for each quarter. The operator should be able to approximate the average number of hours worked per week in each quarter because the quarters roughly correspond to the seasons.

Be sure to record all of the hours of farm work. Record all work time, even for workers who only work for a few hours a week on the farm (bookkeeping, running errands, etc.). Include all work done for the farm business.

Some respondents may say they do not spend any time working on their operation. This is particularly true of those whose entire operation is enrolled in the CRP. These respondents should count the time spent on oversight, paperwork, filing income tax forms, and even the time spent completing this interview! Section 19, item 23 instructions give examples of agricultural work.

Item 3a Principal OPERATOR'S Hours of Farm Work

For each quarter, record the **average number of hours** of farm work the principal operator did **per week**. Record both paid and unpaid hours of work. These items will provide information on the extent of the farm operator's commitment to farming. Given the fact that farm operators allocate their working hours between on- and off-farm work, collecting information on the amount of hours worked on the farm by the farm operator becomes vital.

This information is critical in discerning the importance to the operator of the farming activity itself as a source of farm household income. Information on time allocation decisions from previous surveys have indicated that for many farm operators with no spouses, farm-related work activities are becoming secondary to non-farm work activities. Where spouses are present, the dominance of farming in farm household's time-allocation decisions is less apparent. To many farm operators, on-farm work may not be very important because the majority of their working hours are spent off-far. However, farming remains important to the household as a unit due to the on-farm work by the spouse and by other household members.

Since respondents indicate marital status, and also provide detailed information related to on- and off-farm work hours, analysis of this combined data (notwithstanding the impact of technology on labor usage) will provide vital information as to whether farm production activities are secondary to non-farm production activities.

Item 3b SPOUSE'S Hours of Farm Work

If the operator is married, record for each quarter, the **average number of hours** of farm work the operator's spouse did **per week**. Record both paid and unpaid hours of work. These items will provide important information on the extent of spouses' contribution toward on-farm total work hours provided by all household members. For households where a spouse is present, on-farm work by the spouse allows for the release of labor hours by the operator, which tend to be utilized, as previous surveys have indicated,

in off-farm work activities to increase the households' total income. Since the survey allows for the identification of spouse's gender and age, information on spouse's on-farm work hours provides vital information on the role of the life cycle in determining farm production and time-allocation decisions. In other words, farm operators' spouses (who tend to be women) are likely to differ in the extent and in the type of their contribution towards total family farm labor based on their stage in the life cycle. For example, the number of hours that farm spouses in the childbearing age group contribute to the operation may be similar to hours contributed in other age groups, but the allocation of their hours among various farm production activities is likely to differ. Combining information from these items on spouses' on-farm work hours along with items from below on how these hours are spent on various farm production activities will help underpin, in a much clearer way, the time-allocation decisions by household members.

Item 3c Other Operators

For each quarter, record the **TOTAL average number of hours** of farm work done **per week** by an other operators (excluding the principal operator). These include those persons responsible for the day-to-day management decisions for this operation, including hired managers. Include both paid and unpaid hours.

For multiple workers, record the TOTAL average number of hours worked per week. For example, if there are three workers who worked an average of 42, 24 and 15 hours per week respectively, the correct entry for this item is 81 hours.

Item 3d All Other Unpaid Workers

For each quarter, record the **TOTAL average number of hours** of farm work done **per week** by any unpaid workers (excluding the operator). Unpaid workers may include members of the operator's household, partners, neighbors, guests, etc.

For multiple workers, record the TOTAL average number of hours worked per week. For example, if there are three workers who worked an average of 42, 24 and 15 hours per week respectively, the correct entry for this item is 81 hours.

Section 23 - Type of Operation

This section identifies the type of operation or proprietorship that best describes how this operation was operated in 2002. Mark the type of operation that best describes this operation and any corresponding “YES” or “NO” questions.

a. FAMILY or INDIVIDUAL operation (exclude partnership and corporation) - Enter a “1” if this operation is operated by an individual, or an individual and family, or by a husband and wife. This should include farms or ranches which are family operations but are not incorporated or operated as partnerships.

b. PARTNERSHIP operation (include family partnerships) - Enter a “1” if this operation was run by two or more persons in partnership. This should not include farms or ranches run by husbands and wives (unless there is a formal agreement other than marriage license or vows). It is intended to include organizations where two or more persons have agreed to share contributions (capital and effort), decision making, liabilities, and the distribution of profits. For partnerships, enter a “1” if the partnership is registered under state law.

c. INCORPORATED UNDER STATE LAW - Enter a “1” if incorporated under state law. A corporation may be defined as a legal entity or artificial person created under the law of a state to carry on a business. It includes family corporations, but not cooperatives. For corporate entities, ask both “YES”/“NO” questions and enter a “1” if it is a family corporation or has more than 10 stockholders. A family corporation has more than 50 percent of its stock owned by persons related by blood or marriage.

d. OTHER - Enter a “1” if this operation is a cooperative, institutional farm, estate or trust, prison farm, grazing association, American Indian reservation, etc. Specify type in the response area.
Some examples are:

- **Estate** - Undivided property still in or subject to probate.
- **Trust** - The farm is operated by a person as trustee for someone else who is not of age, or may be in a hospital, institution, or is otherwise unable to carry on his/her own business. Estate or trust may be further defined as a property administered for the benefit of another individual or organization. Estate or trust may also be defined as a fund of money or property administered for the benefit of another individual or organization.

- **American Indian reservation** - The farm or ranch is owned by and/or part of an American Indian reservation and operated for the general benefit of reservation residents. Farms or places operated by American Indians owning or having allotted land should be reported in the same manner as any other farm, ranch, or place.
- **Cooperative** - If this operation is operated as a cooperative, it is defined as an incorporated or unincorporated enterprise or association created and formed jointly by the members.
- **Institution** - If this operation is operated as an institution it would be part of a school, prison, hospital, religious organization, etc.
- **Experiment station** - If this operation is an experiment station it is operated primarily for research by either a public or private agency, and perhaps, but not necessarily, in conjunction with a university or school.

Section 24 - Agricultural Activity on American Indian Reservations

Enumerator Note: Ask only for these States - Idaho, Minnesota, Montana, North Dakota, Oregon, South Dakota, and Washington

Record whether this operation had any harvested cropland or livestock on an American Indian reservation. Record the name of the American Indian reservation where the harvested cropland or livestock were located, the number of acres, and the percent of the total livestock that were located on the American Indian reservation.

Item 1 Did this operation have any cropland or livestock on an American Indian Reservation at any time during 2002?

Include agriculture on deeded acres, leased acres, other trust acres and grazing land. This is a screener question for the rest of section 24. If the response is "NO," go to section 25.

Item 2 American Indian Reservation Name and State

Enter the name of the American Indian Reservation and the two letter state abbreviation where the agricultural activity was located.

Item 3 Acres Used on This Reservation

Record how many total acres this operation had on the reservation. Include deeded acres owned or leased from others. Exclude land used on a per-head or Animal Unit per Month (AUM) basis. If all land used on the reservation is AUM grazing land, then 0 acres is the proper entry.

Item 3a Cropland Harvested Acres

Record how many of the trust and deeded acres reported in item 3 were acres on which crops were harvested.

Item 4 Livestock on This Reservation

Mark the appropriate "YES" box or "NO" box whether this operation had any livestock on the reservation on December 31, 2002. Include livestock on land used on a per-head or animal unit month (AUM) basis. If the response is "NO," go to section 25.

Item 4a **Percent of Livestock on Reservation**

If the response to item 4 was “YES,” then enter the correct percent range code that best represents the percentage of this operation’s livestock that are on the reservation. Enter **only one** code; 1-25 percent, 26-50 percent, 51-75 percent, 76-99 percent or 100 percent.

Section 25 - Operator Characteristics

The economic well-being of farm households is affected not only by income from all sources, farm and non-farm, but also by the debt they owe and by whether income can adequately support the basic needs of the farm household without having to draw down assets, sell or leave the farm.

Information on the economic well-being of farm households is needed to evaluate the effect of current and proposed policies that affect farms and rural areas. The questions in these sections provide data to learn about the relationships between people and farms. **No other source of data is available to illustrate how the financial situation of the farm and farm household varies among operators and households. The characteristic questions asked here in Section 25 provide the data needed to classify farms, operators, and households into specific groups, such as full-time farmers or retired farmers.**

Knowledge of **Age, Race, Education level, and Gender** helps USDA determine the impact of characteristics previously shown to affect the economic well-being of the individual and the household. The relationships among the financial situation of the farm business, household members and off-farm employment is addressed by asking about **Major Occupation**, and other questions about off-farm employment. These data help us provide a perspective about how important non-farm jobs are to farm families and rural areas.

Off-farm income is important to many farm households. Many farm operators and/or other members of the farm household work at least some days off the farm. It is necessary to know the income received by the household members to describe the relative importance of off-farm income to the economic well-being of the farm household. Some farm families also receive income from previous investments. Others receive retirement benefits from pensions or Social Security.

Past analysis of off-farm income data have been used by the Office of Management and Budget to help analyze proposed farm legislation. Using ARMS data, USDA looked at the proposal to limit payments to farm operator households making \$100,000 or less (in off-farm income). More than a quarter of the 2.1 million farms in the U.S. had at least one individual who received direct government farm program payments. But from the ARMS we found that **only 2 percent** of those who receive payments had off-farm incomes over \$100,000. These data were used by lobby groups, media and farm groups, as well as government officials. The collection of

off-farm employment data will continue to be important as government decides how to allocate federal funds to agriculture.

With recent changes in how the Federal government provides assistance to farms, it is more important than ever to monitor how farm households adjust to changes in farm programs.

Information is collected on assets and debt of the farm household not connected with the farm business. Non-farm assets and debts also affect the economic well-being of the farm household. Non-farm debts must be paid from the farm household's income. Non-farm assets are often used to support the farm business. The extent to which non-farm assets are available and non-farm debt exists is part of the household's overall financial status.

Policy officials within USDA as well as members of Congress have an interest in how the incomes of farm families compare with the incomes of non-farm families.

Traditionally, farm family incomes have been estimated by adding off-farm income to the net income produced by the farm. USDA believes it is no longer accurate to estimate the income of farm operator families in this manner because of the complexity of today's farm businesses.

Traditional procedures ignore that many farms support more than one family. Income sharing among partnerships and farm corporations are obvious, but many individual proprietorships also support multiple households. Also, in today's agriculture, it is fairly common for farms to have contractual arrangements to produce products for another farm or person. Assigning the contractor's net income to the farm operator would greatly overstate income and make farm families appear better off financially than they in fact are.

A key function of management is planning: how the farm will be organized, what to produce, how to produce it, what type of machinery and equipment to use, whether to hire labor, and how to market commodities or products produced on the farm. Once plans are developed farmers have to decide how to implement the plan and then they are responsible for following up to determine how well the plan worked. This follow up is one way that farmers exercise control over their businesses. A key to a farm's competitiveness is the adoption and use of cost effective practices by producers. Information about farmers' attitudes toward acceptance or mitigation of risk through the use of a variety of management strategies such as insurance or diversifying crop or livestock production will be combined with information on the use

of emergent technologies such as genetically modified seed and precision planting, chemical applications and harvesting practices, use of niche and other marketing approaches, to analyze farm cost structure, performance, and efficiency.

To correctly estimate the operator household's share of net farm income, we ask how many other households shared in the net income of the farm operation and what percentage of the net income did the operator receive. Answers to these two questions are critical to the development a correct estimate of income for farm families.

Household expenditures are used for two important reasons: (1) the estimate is incorporated in the Index of Prices Paid, and (2) it is necessary to know how much is spent on family living to develop an estimate of farmer's debt repayment capacity. Family living expenses are deducted from net income to determine how much is left over to replace equipment and to repay outstanding debt. The relationship between household income and family living expenses also provides information about how farm families have had to adjust given changes that we have observed in prices received for crops and livestock, in production, and in the costs for inputs such as fertilizer, fuel, feed, and labor.

Operator Characteristics

The operators are those persons responsible for the day-to-day management decisions for this operation, including hired managers. In the event there is more than one person involved in the day-to-day decisions, three columns have been provided to record their names and characteristics. The name of the principal operator will be listed first. Often this is the senior person that lives on the operation or the designated spokesperson for this operation.

Item 1 Individuals Involved in Day-to-Day Decisions

Record how many individuals were involved in the day-to-day decisions for this operation. Enter the number of operator(s), including the operator listed on the front of this questionnaire. Identify the operator(s) in the column(s) provided and respond to each item for each operator.

Exclude hired workers unless they are a hired manager or family member.

Item 2 Women Operators

Record how many of the operator(s) in item 1 are women.

Item 3 Names of Operators

Print the name(s) of the operator(s) in the response area.

Item 4 Sex of operator

Indicate if the operator, listed at the top of each column is male or female.

Item 5 Principal Occupation in 2002

We consider major occupation to be the occupation or work at which an individual spent more than 50% or more work time in 2001. Some farmers may call themselves retired because they are farming on a smaller scale than when they were younger. Other people who have retired from an off-farm job and now farm on a small scale may also call themselves retired. If the operator spent the majority (50 percent or more) of his/her work time in farming or ranching operations in 2002, mark the "Farm or ranch operator" box. Record what the respondent considers themselves to be.

Item 6 Living on This Operation

Record whether the operator(s) lived on this operation at any time during the last 12 months.

Item 7 Off-farm work

Record how many days the operator(s) worked at least 4 hours per day **off** this operation for pay in 2002. Include time spent working on someone else's farm. Mark the appropriate box.

Item 8 Year Started Making Decisions

Record the first year the operator(s) began to operate any part of this operation on a continuous basis. If the operator returned to a place previously operated, report the year operations were resumed. Record the date as four digits (1953, 1985, etc.).

Item 9 Age

This question gives us the chance to look at the financial situation of the farm as it relates to the operator's age. Enter the age of the operator(s) on December 31, 2002.

Item 10 Spanish, Hispanic, or Latino Background

Mark the appropriate box as to whether the operator(s) is of Spanish, Hispanic, or Latino origin or background, such as Mexican, Cuban, or Puerto Rican, regardless of race.

Item 11 Race of Operator

Refer the respondent to the list of Race Codes in the Respondent Booklet.

Enter a "1" in one or more races to indicate what the operator(s) considers himself/herself to be. This item is needed to provide factual information about minority participation in agricultural production activities.

Item 12 Live on an Indian Reservation

Indicate whether the operator(s) lived on an American Indian reservation in 2002.

Item 13 Number of Persons in the Household

This question provides information about the number of people who depend on the farm for income and are affected by its current financial situation. Record the total number of people living in the operator's household on December 31, 2002. Include the operator, spouse, children, and others living in the household. Also include those who are dependent upon the household for support, whether they are living in the household or not. Students who are away at school should be counted, if they depend upon the farm household for support.

Report the number of persons living in the operator's household(s). Count each person and operator only once in this item.

Item 14 Formal Education

This question provides the data for a look at the operation's financial situation as it relates to the education of the operator(s).

Indicate the code representing the highest level of school completed by the **operator(s)**. Vocational school, secretarial school, etc. should not be counted as formal education unless the credits can be transferred to a college or university. An associate degree should be recorded as some college.

Item 15 Activities Performed for the Farm

Enter a "1" for each activity that the operator(s) performed on the farm during 2002.

Item 16 Computer Used for This Operation

Enter a code "1" if the operator(s) of this operation used a computer for the farm business at any time during 2002. If a computer wasn't used for the farm business, skip to item 18.

Item 17 Internet Access

Enter a code "1" if the operator(s) of this operation had Internet access at any time during 2002. If this access was limited to an off site or non-residence location such as a library or internet café, do not enter a "1".

17a Hours Per Week Using Internet

Enter the average number of hours the operator(s) of this operation used the

Internet for all purposes. Include personal use.

17b Percent of Internet Usage for Farm

Enter the percentage of the total internet usage that was related to the farm business. The range of answers is 0 to 100.

Item 18 Number of Households Sharing Income

With these data we can analyze the way farm income is distributed to the farm operator's household and other households. For example, in a partnership or family corporation many farm households may share in the farm's net income. Even in proprietorships the operator may share income with another family. The sharing arrangement does not have to be a formal (legal) agreement. This is important for us to know as this directly affects the actual amount of the farm income that is realized by the operator household.

Record the number of households *besides the operator's* that shared in the net income of the farm operation in 2002. Do not include money paid to landlords, contractors or people who worked on the operation for wages.

Item 18a Percent of Income Received by Principal OPERATOR'S Household

Record the percent of the operation's net income that was received by the **principal operator and household**. Do not include net income received by partners or shareholders of the operation UNLESS THEY LIVED IN THE SAME HOUSE AS THE OPERATOR.

Item 18b Percent of Principal OPERATOR'S TOTAL Household from this Operation

Record the percent of the principal operators **TOTAL household income** which came from this operation.

Item 19 Screening Question for Hired Manager

The remaining questions in this section are **only asked of operators who are NOT hired managers**. By hired manager, we mean how this operation is managed on a day-to-day basis (not the legal status).

If the operator is the hired manager for this operation, enter a code "1" and go to the Conclusion on the back page. For the Soybean version, if the

operator is the hired manager for this operation, enter a code "1" and go to Section 26.

If the operator is not the hired manager for this operation, enter a code "3" and continue with item 20.

ENUMERATOR NOTE: If the operator has a spouse, answer columns for both the operator and spouse where applicable.

Items 20-21 Off-farm Work and Income

These questions are used to gauge the amount of operator's and/or spouses off-farm work. The respondent should consider both self-employment and work for others when answering whether the operator worked off-farm. Many farm operators may have to work off the farm to support their farming operations. The purpose of these questions is to evaluate the impact of off-farm work on the financial situation of the farm and farm households. Off-farm work opportunities have become critical to the survival of most farm families. Off-farm employment includes jobs for which wages, salary or self-employment income was earned. Include as off-farm employment any custom or contract work done on another farm if it is not considered part of this farming operation (if separate books are kept). Also include ownership or management of any off-farm business if the operator contributed hours (not just equipment or money).

Item 20 Off-farm Work

If the operator and/or spouse had a non-farm job at any time during 2002, enter "1" for item 20 and continue to items 2a - 2b.

If the operator **and** spouse did not have an off-farm job, enter a code "3" and skip to item 21.

Item 20a Weeks Worked

Record the number of weeks the operator and/or spouse worked off this operation for pay in 2002.

Item 2b Average Hours Per Week Worked

For the weeks the operator and/or spouse worked off this operation for pay in 2002, record the **average hours worked per week**. If the operator and/or spouse had more than one job, include average hours for all jobs combined. For example, if an operator worked 10 hours per week on one job and 20

hours per week on another, the average number of hours worked per week would be 30 hours.

Item 8 Off-Farm Income

The amount of off-farm/ranch income available to farm households is sizeable. To understand the economic situation of agriculture, it is important to know how much outside income is available to farm/ranch households. The breakout of cash income received is requested to assure that cash income reported on each response will have the same definition. The request for income by operator, spouse, and other household members as source recognizes that there can be multiple sources of income for the household by each household member, and that the contribution of each should be included. The request for income received by source of income including wages, salaries, income from operating any other business, cash or share rent, interest and dividends, social programs, and other sources recognizes that there are a multitude of possible sources for income a wage earner may receive depending upon their personal situation. The breakout is to assure that income from each of these sources is considered by each respondent. This also allows us to analyze how the composition of income may be affected by differences in operator or farm characteristics. Also, this detail allows us to analyze how the composition of income may change as wage earners move through their life cycle. This allows us to more accurately assess the financial health of the farm household.

For the six categories of off-farm income, record the **VALUE CODE** that represents off-farm income for the principal operator and all members of the principal operator's household in 2002.

Include:

- (1) the principal operator identified in screening.
- (2) the individual identified as the principal operator for a family corporation.
- (3) **all** other members of the principal operator's household. If an operator lives with parents, or other adults, any income earned by these household members (Social Security, off-farm jobs, net income from other farms, etc.) must be included.

Exclude:

- (1) landlord's share.
- (2) other partners in a partnership, unless they lived in the same house as the operator.

Note that for each of these items, if no income was received, "1" must be entered. When using Value Codes a code "1" indicates zero.

Item 21a Off-farm Wages and Salaries

Record the **Value Code** which best represents the GROSS cash wages, salaries, tips, paid bonuses, leave pay, etc. received by the operator and all household members in 2002 from all jobs. Include GROSS cash wages and salaries, tips, commissions, paid bonuses, leave pay and compensation for corporate officers. Also include cash wages and salaries earned by the operator and all members of the operator's household from working on other farms or ranches.

Item 21b Another Farm/Ranch

Record the **Value Code** which best represents the NET cash income earned in operating other farms or ranches. If the operation suffered a loss, the respondent should use the appropriate code and put a negative sign in front of it.

Exclude income received from land rented to others (income received as a landlord). This income should be reported in item 8f.

Item 21c Off-farm Business

Record the **Value Code** which best represents the income earned from operating any off-farm businesses.

Include:

- (1) NET income earned from businesses other than farms or ranches. If the respondent indicates that the operation suffered a loss, the respondent should use the appropriate NEGATIVE code.
- (2) income from agricultural service firms and businesses.
- (3) income from farm-related businesses not already reported, such as custom operations that are not a part of the farm business (custom operation keeps separate books).

Exclude:

- (1) income earned from other farming or ranching operations.
- (2) income from farm-related sources reported elsewhere in the questionnaire.

Item 21d Interest and Dividends

Record the **Value Code** which best represents the income earned from interest and dividends.

Include:

- (1) Interest and dividends from all investments.
- (2) Any other interest received from off-farm sources.

Item 21e Social Security, Disability, Military Retirement, etc.

Record the **Value Code** which best represents the income earned from the following:

- (1) Disability insurance
- (2) Social Security, military and other public retirement income.
- (3) Veterans Benefits, unemployment and public assistance programs.
- (4) Income from private retirement plans.

Item 21f Other Off-farm Income

Show the respondent the list of Other Non-farm Income items and Value Codes in the Respondent Booklet.

Record the **Value Code** which best represents the income earned from the following:

- (1) all other NET non-farm income (not included in items 21a-f) from sources other than this operation.
- (2) NET income from renting non-farm property.
- (3) NET income from cash or share-renting farm land to others
- (4) royalties for oil, gas and other mineral leases.
- (5) alimony, child support and other payments.
- (6) the value of commodities received in payment for farm labor and then sold, if not reported earlier.
- (7) all other income not previously reported.

Item 22 Value of Non-farm Assets

Show the respondent the list of Non-farm Assets items and Value Codes in the Respondent Booklet.

This question applies to the principal operator's household only, not to the operator's farm business. Do not include assets of the operation reported earlier in the questionnaire. Assets of the operation were recorded in Section 20. Include the value of the operator's house here if it is owned separately from the operation.

Record the **VALUE CODE** which includes the value of assets owned by the operator and members of the operator's household **SEPARATELY** from the operation on December 31, 2002.

Include:

- (1) Value of Cash, Bank Accounts, CDs, Bonds, etc.
- (2) Money owed to the household
- (3) Value of IRA, Keogh, 401K, other retirement accounts
- (4) Value of corporate stock, mutual funds
- (5) Cash surrender value of life insurance (not the death benefit)
- (6) Non-farm share of cars and trucks
- (7) Non-farm/ranch business assets
- (8) Off-Farm houses
- (9) Recreational Vehicles

Item 23 Non-Farm Debt

This question refers only to the principal operator's household **SEPARATELY** from the farm operation. Record the **VALUE CODE** which best represents the total amount of outstanding debt on December 31, 2002 (include credit card debt). Include the debt associated with the operator's house unless it was collected in Section 21. Include other debts not related to assets such as student or personal loans. Debts include all obligations incurred for non-farm purposes such as for a non-farm business. Exclude the farm share of any debt reported earlier in the questionnaire.

Item 24 Household Living Expenses

Refer the respondent to the list of Household and Family Living Expenses and Value Codes in the Respondent Booklet.

Record the **VALUE CODE** which includes the total amount spent by the principal operator's household during 2002. Be sure living expenses for all

the members of the principal operator's household are collected. The purpose of this questions is to let us look at the ability of farm families to cover their living expenses.

Include:

- mortgage and/or rent
- food
- household supplies
- utilities
- appliances and furnishings
- non-farm transportation
- medical expenses
- insurance
- Social Security self-employment tax
- contributions to retirement plans
- clothing
- education expenses
- hobbies and recreation
- gifts
- magazines
- charitable contributions
- alimony and child support
- all other household and living expenses during 2002.

Items 25-26 Minimum Family Living Expenses and Relative Household Income
V1 only

Agricultural policy in the past has focused primarily on the farm business when assessing vulnerability to adverse market conditions. Several years of low commodity prices have heightened interest in the risk of farm bankruptcy, the incidence of failed or failing farm operations, and the existence of farm households that are in poverty. Of particular interest to policy makers are cases where overall farm income has declined from the previous year's level. In these cases, the reasons for the income shortfall, coping strategies used, and the minimum income needs and minimum expenditure levels necessary to satisfy basic needs is being collected. This information, along with other survey questions that measure income and expenditures, will be used to assess the pressing economic needs of farm families.

Item 25 Minimum Family Living Expenses
V1 only

Please refer the respondent to the list of Household and Family Living Expenses and Value Codes in the Respondent Booklet. This question refers

to the minimum income needed by the principal operators household to make ends meet. Each household is expected to have a different view of what income level is needed to "make ends meet," depending on such factors as family size, age of family members, geographic location, as well as their idea of what determines a minimum standard of living.

Enumerators may remind respondent to include income necessary for all members currently in the household, but to exclude income necessary to pay farm business expenses. This information will be compared with actual expenditures for different types of households to calculate cost of living estimates and consumption shortfalls for those households in financial distress.

Item 26 **Household Income**
V1 only

Information gathered will be used to quantify the incidence of lower incomes among farm households. This question asks the respondent to compare income received by the principal operator's household in the year 2002 from all sources (both farm plus nonfarm sources) with income received from all sources in 2001. Although the Respondent is not asked to report the total income from either 2002 or 2001, make sure that the Respondent includes income from all members of the principal operator's household, and from both farm and nonfarm sources, in considering the question. If 2002 income was the same or higher in 2001 check No and skip to Item 27. If 2002 income was lower than 2001, check Yes and under item 26a enter the percentage amount of the income shortfall in 2002 compared to 2001.

Item 27 **Retiring Within 5 Years**

This question will provide important information about the characteristics of operator's who plan to retire, their farm operations, and whether or not the these operations are likely to be transferred intact. Use the definition of retired provided above for Section 25, item 5.

Section M - Soybean Marketing

V2 only

This section is used to collect information on how the 2002 soybean crop was marketed and the use of identity-preserved types of soybeans. This information will be used to enhance the reporting and analysis of enterprise cost and return estimates by incorporating marketing costs and returns into the accounts. This information will also provide a basis for investigating the extent to which identity-preserved soybeans are grown, and the costs and returns associated with identity-preserved soybeans.

Historical USDA accounts of crop enterprise costs and returns have excluded the direct affects of government programs (i.e. loan and insurance programs) and have included only production costs. The production period was assumed to end when the commodity was hauled from the field to storage or directly to market. Returns to production were then computed by valuing the commodity at the harvest period price. This method of accounting was used so that the relative returns of commodities could be compared before the impact of government programs, and before the unique market conditions of each commodity were considered. While this method has been useful for policy-making by putting each commodity on an equal footing for comparison, it does not present a complete picture of the actual costs and returns associated with each farm enterprise. It also does not provide a perspective on the impact that government policy had on the costs and returns of farm enterprises. Information collected in this section, as well as information on government payments and insurance payments and costs for soybeans collected in sections 15 and 16, will be used to present the complete cost and return picture for the soybean enterprise. These data will be used to enhance the understanding of how returns to soybean production vary across the farm sector, and to determine what factors have the greatest impact on net returns to soybean production.

With specific markets developing for identity-preserved soybeans, farmers are being required to alter production practices in order to receive the premiums offered (or to avoid the discounts charged) by these markets. However, little is known about the extent to which producers are taking steps to identity-preserve soybeans, what steps are taken, what these steps cost, and what returns accrue to these producers. These data would help to estimate how much soybeans are produced with methods to preserve identity, what identity is being preserved, and what the costs and returns are to producing identity-preserved soybeans.

When completing this section, please note that all questions refer to the

2002 soybean crop, not the soybeans marketed in 2002 that were from the previous years crop. The 2002 soybean crop was planted in the spring of 2002 and harvested in the fall of 2002.

Item 1 Month soybean crop was harvested

Report the month, numbered 1 (January) through 12 (December), in which the majority of the 2002 soybean crop was harvested.

Item 2 Month soybean crop sold for delivery

Report the number of bushels of the 2002 soybean crop sold for delivery in each month or the percent of the 2002 soybean crop sold for delivery in each month, as of the date of the interview. If the soybean crop was sold earlier in the year under contract for delivery at harvest or a later month, please report the amount of soybeans sold in the month delivered. All of the 2002 soybean crop should be counted. If some soybeans have been fed to livestock as of the interview date, report the amount in item 2j. If some soybeans are stored and not yet sold as of the interview data, report the amount in item 2k.

Item 3 Soybean marketing methods and channels

In **column 2** report the number of bushels of the 2002 soybean crop that was sold by the interview date with each of the marketing methods reported in column 1. The total should equal all the of 2002 soybean crop that was sold as of the interview date. Alternatively, report the percent of the 2002 crop that was sold by the interview date with each of the marketing methods reported in column 1. The total should equal 100%.

In **column 3** report the average price received (or to be received) per bushel for the 2002 soybean crop sold with each of the marketing methods reported in column 1.

In **column 4** report the code from the code box that indicates the marketing channel through which the 2002 soybean crop was sold. If more than one marketing channel was used with a marketing method reported in column 1, report the channel that received the majority of the soybeans.

Item 4a-c Soybean marketing tools

Record a "1" in the appropriate code box if the operation used the marketing tools indicated in items 4a-c for the 2002 soybean crop. If a marketing tool was used, indicate the net gain or loss that was associated with using that marketing tool for the 2002 soybean crop. Indicate a loss with a negative sign (-).

Put option purchase: A purchase of the right, but not the obligation, to sell a commodity at a particular price (the strike price) on or before the expiration date of the contract.

Future hedge: A futures contract is a legally binding agreement between two parties to buy or sell a predetermined amount of a commodity during a specified month (the delivery month) at a price (the future price) which is determined at the time the contract is established. A hedge is the buying or selling of a futures contract for protection against the possibility of a price change in the commodity that the farmer is planning to buy or sell.

Hedge-to-arrive (HTA) contract: The price received under a hedge-to-arrive is the futures price plus the basis (difference between the cash and futures price). The contract establishes part of the forward delivery price (the futures price), but the basis is determined at delivery.

Item 5 Identity-preserved soybean types
Column 1

Identity-preserved soybean types include soybean varieties with specific traits or characteristics that add value to the soybeans, and are produced, handled, and marketed in such a way as to preserve the purity of the unique traits or characteristics of the soybeans. The following are definitions of various identity-preserved types of soybeans:

Food grade (tofu, clear hilum): Food grade soybeans, such as tofu/clear hilum soybeans, are grown primarily for use in soymilk and tofu production. Soymilk is a protein-rich, milk-like liquid typically obtained from the soaking and grinding of whole soybeans with water. Tofu is soybean curd, resulting from the coagulation of protein from soymilk by the use of calcium sulfate, magnesium chloride, calcium chloride or other suitable coagulating agent. Typically, tofu can have a protein content ranging from 5 to 15 percent and can be eaten as is, or further processed in frying or baking or by fermentation. Tofu can also be spray-dried to act as an ingredient in other food products, serving as a dairy or meat substitute. Premiums paid for these soybeans range from \$0.15 to \$2.10 per bushel, with an average premium of

about \$.60 depending upon the variety and the yield.

IOM soybeans: IOM soybeans are grown in areas of the Midwest (including Indiana, Ohio, Michigan, and adjacent areas), and are sold as food-grade soybeans in Japan with the distinct brand name “IOM” and command price premiums in the Japanese soybean market. IOM beans, in general, refer to beans with 36 percent protein or more, 2,200 seeds per pound or less, and have a clear or light hilum. Producers do not enter into direct contracts with buyers in Japan. Handlers, however, can sort soybeans received to meet the Japanese buyers’ quality preferences, such as clear or light hilum, large seed, low foreign material, and little splits and seed damage. Japanese buyers of IOM soybeans typically specify U.S. No. 1 in their buying tenders.

High sucrose: High sucrose soybeans provide high protein and full isoflavone content but are lower in indigestible carbohydrates and abdominal discomfort often associated with soy products. These varieties also offer an improved flavor profile that makes increased percentages of soy possible in food by-products. Compared to conventional soybeans, high sucrose soybeans contain 40 percent more sucrose but 90 percent less stachyose and raffinose which are carbohydrates that cause digestive problems. High sucrose soybeans are used to produce soymilk, beverages, baked goods, puddings, cheese and meat analogs. They are available as whole beans, full fat flour, low fat flour, or soymilk powder. High sucrose soybeans typically yield 86 to 90 percent as much as normal soybeans. Premiums paid for these soybean average about \$.40 per bushel.

High protein: High protein soybeans are regular soybeans with higher than average levels of protein, a component that may help prevent a variety of cancers and significantly lower cholesterol levels for people with heart disease. Protein levels are affected by weather, so high levels cannot be guaranteed. Premiums paid for high protein soybeans range from \$0.10 to \$0.40 per bushel, with an average premium of about \$0.30.

Green vegetable soybeans: Green vegetable soybeans, called Edamame in Japan, are grown mainly to harvest the young green-shelled beans for vegetable uses, not for the mature soybean crops. Edible soybeans produce clusters of pods with green beans. Edamame is the same species as grain soybeans, but it has larger seed, sweeter flavor, smoother texture, and better digestibility. Edamame contains about 38 percent protein and is also rich in calcium, vitamin A, and phytoestrogens.

Other soyfood: Report all types of soybeans, other than food grade, IOM, high sucrose, high protein, or green vegetable, that were marketed as soyfood beans.

Low-saturated fatty acid: Low saturate soybeans contain 50 percent less saturated fat than generic soybeans and produce oil with approximately 8 percent total saturated fats. With just one gram of saturated fat per 14-gram serving, low saturate oil is similar to canola oil. Zero saturated fat levels can be reached in formulations for salad oil blends, sauces, salad dressings and other applications when low saturate soy oil is used to replace generic soy oil. Premiums paid depend on the level of saturated fat, averaging about \$0.25 per bushel for soybeans with less than 8 percent saturate, and \$0.00 if the soybeans have more than 8 percent saturate.

Low linolenic acid: Low linolenic soybeans produce an oil that has half the linolenic acid level of generic soy oil, thus reducing the need for hydrogenation, a process that produces unhealthy trans fatty acids. In some instances, low linolenic soybean oil can be used to replace hydrogenated oils completely. Low linolenic soybeans typically yield 90 to 100 percent as much as normal soybeans depending on variety and growing conditions. Average Premiums paid are about \$0.40 per bushel for soybeans with less than 3.5 percent linolenic, and \$0.00 per bushel for soybeans with 3.5 percent linolenic or more.

High oleic: High oleic soybeans offer both handling and nutritional advantages for manufacturers and consumers. Oil produced from high oleic soybeans has over 80 percent monounsaturated fat, the "good" fat, compared to 23 percent for generic soybean oil. They are also 33 percent lower in saturated fat than generic soybeans. High oleic oil contains no trans fatty acids and remains in liquid form. The high oleic acid content also makes the oil more heat-stable than regular soybean oil, which must be hydrogenated before it can be used for cooking or spray oil application. The hydrogenation process, besides adding costs, produces saturated fat and trans fatty acids which are thought to contribute to coronary heart disease. High oleic soybeans are thus promoted as "heart-healthy." High oleic soybeans typically yield 90 to 100 percent as much as normal soybeans depending on variety and growing conditions. Premiums paid are about \$0.40 per bushel for soybeans with 80 percent oleic or greater, and \$0.00 per bushel for soybeans with less than 80 percent oleic.

Other modified soy-oil: Report all types of soybeans, other than low

saturated fatty acid, low linolenic acid, or high oleic soybeans, that were marketed as modified soy-oil beans.

Certified organic soybeans: Organic farming aims to create a farming system that is sustainable through practices that avoid or largely exclude the use of synthetically compounded fertilizers and pesticides. To the maximum extent feasible, organic farming systems rely upon crop rotations, crop residues, animal manures, legumes, green manures, off-farm organic wastes, mechanical cultivation, mineral-bearing rocks, and aspects of biological pest control to maintain soil productivity, to supply plant nutrients, and to control insects, weeds and other pests. Also, they do not use genetically modified organisms (GMO's). Prices for organic food-grade soybeans have ranged from \$8 to \$15 per bushel depending on variety. Report only soybeans that met the USDA criteria for certification.

STS soybeans: The STS seed/herbicide system matches soybean varieties with specific post-emergence broadleaf herbicide. Traditionally bred, STS soybeans carry the Als1 gene, which enhances their natural tolerance to sulfonyleurea herbicides and allows them to withstand over-the-top applications of Reliance STS or Synchrony STS herbicides. Because they were developed through traditional breeding techniques, STS soybeans are not considered to be genetically modified, and their sale involves no technology fee. Weed control costs for conventional till practices are generally held to below \$20 per acre. No-till per acre weed control cost may be higher. Premiums vary from about \$0.10 to \$0.20 per bushel, and are based on the fact that STS soybeans are non-GMO.

Other soybeans marketed as non-biotech: Report all types of soybeans, other than certified organic or STS soybeans, that were marketed as non-biotech or non-GMO. Other non-biotech soybeans can be any soybean variety that has not been genetically engineered to contain genetic material from another species (Roundup Ready is the most common biotech soybean), but the soybeans must have been marketed as non-biotech. Price premiums range from about \$0.20 to \$0.25 per bushel.

**Item 5
Column 2**

Acres harvested

Report the total acres harvested of each identity-preserved soybean type.

**Item 5
Column 3**

Yield

Report the yield in bushels per harvested acre for each identity-preserved

soybean type.

Item 5 **Price received or production contract fee**
Column 4

Report the soybean price per bushel received for each identity-preserved soybean type. If the soybeans were grown under a production contract, report the per-bushel production contract fee received.

Item 5 **Produced/sold under**
Column 5

Report whether the soybean crop was produced under a production contract, sold under a marketing contract, or neither produced nor sold under a contract. The definitions of production and marketing contracts can be found in the instructions for completing section 14.

Item 5 **Premium actually received**
Column 6

Report the premium above generic soybeans in cents per bushel received for the identity-preserved soybeans. The premium actually received could be lower than that specified in the contract if certain quality traits do not meet minimum requirements or minimum purity levels are not met.

Item 5 **Premium specified in contract**
Column 7

If the soybean crop was produced under a production or marketing contract, report the premium in cents per bushel that was specified in the contract. The premium specified in the contract may or may not equal that actually received.

ENUMERATOR NOTE:

In reporting for items 6, 7, 8, and 9, first identify the type of identity-preserved soybeans that was harvested on the most acres. Complete items 6, 7, 8, and 9 for this type of soybeans.

Item 6 and 6a **Purity of non-biotech soybeans**

If the soybean crop was marketed as non-biotech, report the level of purity in terms of percent of non-biotech material that was required of the soybeans in item 6. In item 6a, indicate whether or not the soybeans met this standard of purity.

Item 7 **Labor required for identity-preserved soybeans**

For the type of identity-preserved soybeans that were harvested on the most acres, report the number of additional hours of labor that were required in the effort to preserve the soybean identity. Include hours for such tasks are cleaning equipment, keeping records, locating buyers, or other production practices. Include hours provided by you and any other paid or unpaid workers. Exclude hours provided by contract labor.

Item 8a Production costs for identity-preserved soybeans

For the type of identity-preserved soybeans harvested on the most acres, report the additional production costs per acre for seed and technology fees that was paid for the identity-preserved soybeans above that paid for generic soybeans. For example, if the identity-preserved soybean seed cost \$35 per acre and generic soybean seed cost \$28 per acre, the additional cost for the identity-preserved soybean seed would be \$7 per acre. Likewise, if a \$5 per acre technology fee was charged on identity-preserved soybeans and no technology fee was charged on generic soybeans, the additional cost for the identity preserved soybeans would be \$5 per acre.

Item 8a-b Production costs for identity-preserved soybeans

For the type of identity-preserved soybeans that were harvested on the most acres, report the additional production costs per acre seed and technology fees that was paid for the identity-preserved soybeans above that paid for generic soybeans. Include costs for such items as fertilizer, chemicals, custom operations, machine operations, irrigation, and contract labor. Exclude costs for any labor reported in item 7. For example, if fertilizer cost \$40 per acre on the identity-preserved soybeans and \$30 per acre on the generic soybeans, the additional cost for the identity-preserved soybeans would be \$10 per acre.

Item 9 a -e Segregation costs for identity-preserved soybeans

For the type of identity-preserved soybeans harvested on the most acres, report the additional segregation costs per bushel for each item that was paid for the identity-preserved soybeans above that paid for generic soybeans. For example, if an additional 2 cents per bushel was paid for transportation and marketing and 3 cents per bushel was paid for testing the identity preserved soybeans above that for generic soybeans, enter "2" cents in item 9c and "3" cents in item 9d.

Section 27 - Irrigation

What's this Section for? How is the information used?

This section is only asked in Version 2 (Soybeans).

Information on irrigated agriculture is critical for USDA's Economic Research Service to assess the impact on agriculture, at the farm and regional level, of problems/conflicts associated with water quality, water policy, wildlife, and other environmental issues facing American agriculture. Irrigation data is required across crops for a farm so that economic analysis can correctly estimate all economic costs and benefits to agriculture associated with proposed policy changes that may affect American agriculture.

Item 1 Irrigation During 2002?

Enter code '1' for operations that irrigated any cropland, alfalfa, other hay or pastureland in 2002. If the operation irrigated in 2002, complete an Irrigation Supplement which should have been provided by the State Office.

Include any land that was privately owned or rented and land rented from a public agency which received irrigation water as part of the farming operation for this farm in 2002. Exclude irrigation of home gardens.

If no cropland, alfalfa, other hay or pastureland was irrigated in 2002, go to the Conclusion.

Irrigation Supplement

This item records specific crops irrigated on the operation during 2002.

ENUMERATOR INSTRUCTION

Refer back to Sections 3 - 8. For each crop harvested during 2002, determine if it was irrigated and list the crops irrigated in Column 1 of the Irrigation Supplement. Then, for each crop irrigated, go across the table and complete columns 2 - 9 for item 2, Section 27. Ask all the Column 2 - 9 questions about one crop before going on to the next crop.

Column 1 Crop

Identify each crop irrigated during 2002 in Column 1. Alfalfa, other hay and pastureland are pre-listed at the bottom of the table because they are often forgotten. Nursery and greenhouse crops may be lumped on one line. All other crops should be reported individually (up to 5 other irrigated crops, separately). If more than five other crops were irrigated, identify the four with the most acres irrigated, then lump the rest on the last line. If more than one irrigated crop is included on the last line, then the last line should be identified as "Other Crops".

Column 2 Office Use Crop Code

Record the Crop Code found in the Respondent Booklet.

Column 3 Harvested Acres Irrigated

Report the irrigated, harvested acreage **to the nearest whole acre** for all irrigated crops, except for tobacco and potatoes. Irrigated, harvested tobacco and potato acreage should be reported to the nearest tenth of an acre. Acreage irrigated of corn and sorghum/milo harvested for silage should always be recorded on a separate line from irrigated acres harvested for grain. Irrigated wheat acreage harvested for grain should be recorded by type (durum, spring or winter). Irrigated acres of small grains harvested for hay should be recorded under Other Hay.

INCLUDE (for each irrigated crop):

- (1) Irrigated acres harvested in 2002.
- (2) Irrigated acres intended for harvest in 2002 even if harvest was delayed until 2003 due to bad weather, etc.

EXCLUDE (for each irrigated crop):

- (1) Double-counting acres from second and later harvests of any crop from a single planting, for example, multiple harvests of hay, a second or third picking of cotton, ratoon crops of rice.
- (2) Irrigated acres of 2001 crops not harvested until 2002 due to weather conditions, etc.

Make sure the respondent is not reporting planted acres by crop when you are asking only for harvested acres.

Column 4 and 5 Yield and Unit Code

In column 4, record the average yield per acre for each commodity. This is the average yield on the irrigated acres actually harvested. Record the unit reported in column 5. For example, if the respondent reported an average yield per acre of 70 bushels of wheat, you would record 70 in column 4 and in column 5 you would record "4" for bushels.

If a crop is harvested more than once during the year (for example, hay or alfalfa), then sum the average yield per acre for each harvesting. For example, if a hay crop had two harvests (cuttings) in 2002, and yield for the first harvest was 1.6 tons per acre and yield for the second harvest was 1.2 tons per acre, the total yield would be reported as 2.8 tons (1.6 + 1.2).

If the operator reports yield in a unit that is not listed, be sure to record complete information about that unit, including its weight. This allows the State Office to convert the yield into a more common unit and to also evaluate if the unit reported is commonly used for the reported commodity.

Leave the yield and unit code blank if more than one irrigated crop is included on the last line identified as "Other Crops".

Column 6 Primary Irrigation System Type

Record the primary irrigation system type for each commodity. The primary irrigation system for each irrigated crop is the system used to apply the most water during the 2002 crop season for the irrigated crop's harvested acres. Be sure to have the respondent refer to the Irrigation System Code List in the Respondent Booklet.

Column 7 Average Inches of Water Applied Per Acre

Record the average inches of water applied per acre for the growing season for each commodity. Average applied water per acre can vary significantly across commodities, ranging from a value of 1 to as high as 70 or more inches per acre. One inch of water is equivalent to the quantity of water required to cover an acre of level-land, one-inch in depth. This is approximately 27,152 gallons. If the respondent reports applied water in terms of acre-feet per acre, multiply by 12 to obtain inches per acre.

Column 8 Percent of Acres Irrigated Using Surface Water

For each commodity, record the percent of acres irrigated using surface water (not well water). This is the percent of irrigated, harvested acres

2002 Agricultural Resource Management Survey
Phase III - Interviewer's Manual

(column 3). For each commodity, percents for column 8 will be equal to, or less than, 100 percent.

**Column 9 Percent of Acres Irrigated Using Surface Water Purchased From
Off-farm Water Suppliers**

For each commodity, record the percent of acres irrigated using surface water purchased from off-farm water suppliers. This is the percent of irrigated, harvested acres (column 3), not the percent of acres irrigated using surface water (column 8). For each commodity, percents for column 9 will be equal to, or less than, 100 percent, **and** equal to, or less than, percents for column 8.

Off-farm water suppliers may include water purchased from the U.S. Bureau of Reclamation; an irrigation district; mutual, private, cooperative or neighborhood ditches; commercial or municipal water systems. Record surface water from off-farm water suppliers as it was delivered even if the original source of water may have come from groundwater wells.

Conclusion

Survey Publication

After completing the interview, ask the respondent if he/she would like to receive a copy of the survey results. The Farm Production Expenditures Report will be published in July of 2003. Enter "1" for YES.

Respondent Code

The respondent code is used to identify the person who was interviewed. Enter the code of the person providing most of the data. If the respondent was an accountant, bookkeeper or someone other than the codes listed, record the respondent's name and phone number.

Records Use

Though most farmers/ranchers have some kind of farm record keeping system, not all of them use these records in the interview. Record the response category you feel best characterizes how often the respondent's records were or were not used in the interview.

Type of Records

Respondents usually keep records in a level of detail that the complexity of their operation and enterprises require. However, the form these records take varies considerably across operations. Record the response category that best represents the records that were used the most during the interview, regardless of how much they were used.

A general ledger is something that can be bought just about anywhere (drugstore, bookstore, printing supply store, discount store, etc.). It can be used for any accounting application; it is not farm specific.

A formal farm record workbook or account book is created specifically for farm/ranch accounting. It is organized into categories to handle common farm/ranch accounts (seed expense, fuel expense, livestock purchases, etc.).

Ending Time

Record the ending time (military time) of the interview. If more than one person was interviewed or it took more than one appointment to complete the interview, times should reflect the approximate total time for the questionnaire.

Exclude the time you spend reviewing the questionnaire or verifying calculations by yourself after you have completed the interview. Be sure the ending time is after the beginning time entered on the face page.

Accurate reporting of interview time (beginning and ending time) is critical for monitoring and evaluating survey burden and cost.

Date

Record the date the questionnaire was completed. Enter the date in MMDD03 format on the lines provided in the date cell. For example, if the interview was completed on March 6, 2003, enter 3 06 in the date cell. The year 03 is preprinted in the questionnaire. It is not necessary to enter a leading zero before the month number.

Enumerator Name

After signing the questionnaire, record your enumerator ID code.

Thank the respondent for their time and effort.

*From the State Office staff and Headquarters personnel in Washington, D.C., **THANK YOU** for your continued dedication in the collection of agricultural statistics of the highest quality!!!*