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Agricultural
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Management
Survey (ARMS)

Phase III – Cost and Returns
Report

Interviewer's Manual

Chapter 1 - General

Purpose

Data collected in the Agricultural Resource Management Study (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 resource use or financial issues. topics of interest. For example, commodity versions are rotated every 5-6 years to focus on resource use and production costs for specific commodities.

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, Integrated Screening Survey (ISS), conducted from May through July, collects general farm data such as crops grown, livestock inventory, and value of sales. ISS 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 2000 ARMS Phase II, will be released in May 2001. The second report is the Farm Production Expenditures. The report, compiled from the 2000 ARMS Phase III will be released in July 2001. This report will show expenditures for the U.S., 10 farm production regions, 5 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.

Economic and Cost of Production Terminology

accounting, accrual	(CCC)
accounting, cash	confidentiality
acreage base	Conservation Reserve Program
acreage, eligible contract	(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
assets	(CSREES)
auction pool	corporation
	cost of production
balance sheet	cover crop
barrel (bbl)	cropland
base acreage	crop rotation
BLM	cull
borrowing capacity	
	date, due
call back	date, mailing
carryover	date, reference
cash receipts	date, release
cattle on shares	depreciation
check-off	direct sales
commission charges	discount
commodity	double crop
commodity, contract	drip irrigation
Commodity Credit Corporation	

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

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

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

Four questionnaire versions will be used in the 2000 ARMS Phase III. The Costs and Returns Report (CRR), Version 1, will be used in all states except Alaska and Hawaii. Five states (AR, CA, LA, MS, and TX) will complete the Version 2, Rice Costs and Returns Report. Eleven States (CA, CO, ID, MI, MN, MT, NE, ND, OR, WA, and WY) will complete the Version 3, Sugarbeet Costs and Returns Report. Twenty-two states (AZ, CA, FL, GA, ID, IL, IN, IA, KY, MI, MN, MO, NM, NY, OH, PA, TN, TX, VT, VA, WA, and WI) will complete Version 4, Dairy Production Practices and Costs and Returns Report.

<u>Version</u>	<u>Color</u>
V1 Costs and Returns Report (CRR)	White
V2 Rice Costs and Returns Report	Buff
V3 Sugarbeet Costs and Returns Report	Blue
V4 Dairy Production Practices and Costs and Returns Report	Salmon

Each questionnaire has a Face Page which identifies the selected operator and partners. Since pre-screening of respondents was done during the Integrated Screening Survey (ISS), a screening form is not printed in the questionnaire. Instead, a Screening Supplement will be used selectively where ISS 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 2000, 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 2000. 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 2000 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). 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 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 2000 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.

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 2000 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 the Integrated Screening Survey (ISS), 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 the ISS, or incomplete information was obtained on the ISS.

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 2000 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 2000 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 2000 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 2000.

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.
- 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 2000. 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 2000. 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 2000. 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 2000 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 A - Land in Farm/Ranch

Section Purpose

Section A 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,
- (5) to record the type of operation.

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 2000. Answers for these items are reported to the nearest whole acre.

For operations that were in business for only a part of 2000, collect data for the part of the year when it was still in operation. If the operation went out-of-business before December 31, 2000, 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.

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 2000.

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) Acres Rented From Others

There are three categories of rented acres: cash rented acres are recorded in item 2a, share rented acres are recorded in item 2b and acres used rent-free are recorded in item 2c.

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. (*Item 2a*)
- (2) paid for use of the land with a share of the crops (either standing or harvested). (*Item 2b*)
- (3) paid for use of the land with a share of livestock production. (*Item 2b*)
- (4) had free use of the land. (*Item 2c*)

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 2000 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 2000. 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 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 2000**

The operation's total farming/ranching operation is the total of items 1 + 2a + 2b + 2c - 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 5a **Cropland Acres**

Cropland is any land currently in crop production or land that has previously been tilled and used for crops and could be tilled again without additional improvements.

INCLUDE:

- (1) land in crop-pasture rotation and cropland used for pasture or grazing during the current year.
- (2) land in summer fallow.
- (3) idle cropland (no crops planted or harvested in current year).
- (4) cropland diverted for government programs (including CRP), unless the land is planted to trees.
- (5) fruit orchards, vineyards, nut trees, and citrus groves.
- (6) vegetables, melon crops, and other speciality food crops.
- (7) nursery crops, turf grass, sod, and Christmas trees.
- (8) land in hay crops, **excluding wild hay**.
- (9) pastureland tilled in the past if the land could be tilled again without first clearing brush, trees, undergrowth, etc.

EXCLUDE:

- (1) pasture and rangeland that has never been tilled.
- (2) wild Hay land. Although this is considered a crop, wild grasses cut for hay should **not** be included in acres of Cropland. However, you should record the acreage and production of Wild Hay in Section B, as Hay, All Other.
- (3) government program acres planted to trees.
- (4) woodland and wasteland.

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 F, item 1a.

Item 6b **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 F, item 1b.

Item 7 **Cash Rent Received for Acres Rented To Others**

Do not skip this item even if the operation rented no land out in 2000. The operation may have received income in 2000 for land rented to others before 2000, or it may have even received a pre-payment of 2001 rent in 2000.

Including rent for land and/or buildings, record the total cash rent received during 2000 for all land rented to others for cash. If rent owed to the operation for 1999 was received in 2000, it should be included here. If rent for 2001 was received in advance (in 2000), it should also be included. Government payments received in association with these acres should also be included.

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

Item 8 **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 2000. The operation may have received its share of 1999 commodities in

2000 for land it rented to others in 1999. 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 9 Cash Rent Paid for Acres Rented From Others

Including rent for land and/or buildings, record the total amount paid in 2000 to all landlords for cash rented acreage. Ask this question even if no land was rented in 2000. Why? The operation may have paid rent for 1999 or 2001 in 2000. If we skip this question just because the operation did not rent any land in 2000, we miss previous year's rent paid in 2000, or 2001 rent paid in advance in 2000. 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 C, item 5.

Exclude any government payments landlords received from these acres. These payments should be recorded in Section F, item 2.

Items 10 & 10a 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 10 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 11. If the operation does use this type of land, check YES and continue with item 10a.

In item 10a, 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 2000.

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 11) .

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 11 **Amount Paid for Pasturing Livestock on *Private* Land**

Excluding contract arrangements, record the total amount paid in 2000 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 10a.

Item 12 **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 2000 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 "Nursery, Greenhouse, and Floriculture" 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 “Beef Cattle” operation because no milk or dairy products are being produced.

Section B - Acreage and Production

Section Purpose

Acreage and production reported for crops are used to develop estimates of the value of crops produced. This information is also important to determine the types of crops grown. For example, are farms diversifying by growing a more varied mix of commodities.

Survey expansions of harvested acreage and production are compared with official NASS estimates at regional and national levels to measure how well the ARMS III sample covers the U.S. farm population.

To avoid double counting crop and livestock value of production, the quantity of hay, grain, and other commodities produced and used on the farm must be subtracted out of total production. For example, grain fed to livestock would be reflected in the value of livestock production rather than grain production.

To determine the operation's correct share of income, we need to know the value of what was given to landlords in return for land rentals. Without good estimates of landlord shares in estimating gross rents, farmers' net income would be overstated.

Item 1 Crop Acreage and Production

General Instructions

This section accounts for all crops harvested on the selected operation in 2000. All harvested acreage figures should be rounded to the nearest whole acre, except potatoes and tobacco which are reported to the nearest tenth of an acre. The yields per acre must be reported in the unit pre-printed on the questionnaire.

For operations that were in business for only a part of 2000, collect data for the part of the year when they were operating.

Column 1 Crop

The questions for crops always relate to the total acres in this operation recorded in Section A, 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 2000.

This column identifies the crops harvested on this operation in 2000. The crops are divided into four categories: Field Crops, Small Grains, Hay Crops, and Other Crops. Within each category, crops of interest are indicated. These may be specific crops, such as Corn for grain, or more general such as Nursery and Greenhouse Crops.

To ensure proper and complete reporting, for each item listed, ask the respondent, "During 2000, did you harvest any [*crop*] on the total acres (Section A, item 5) in this operation?"

Commodity Specific Instructions

Field Crops

Corn

Corn harvested for seed should be included as corn harvested for grain.

Exclude:

- (1) Sweet corn should be included, depending on usage, in either Vegetables for Processing or All Other Vegetables and Melons.
- (2) Popcorn should be included in All Other Crops.

Cotton

Record all types of cotton harvested. If cotton was grown in a "skip" row pattern, count only the land harvested for cotton, excluding the skip row acreage.

Peanuts

Include only peanuts harvested for nuts.

Exclude peanuts cut for hay; record as Hay, All Other.

Potatoes

Record potato acreage to the nearest tenth of an acre.

Exclude:

- (1) Potatoes produced for home consumption.
- (2) Sweetpotatoes should be included in All Other Crops.

Rice

Include only short, medium, and long grain varieties. Brown rice and wild rice should be reported as All Other Crops. If rice was harvested twice from the same planted acreage (a ratoon crop), count the acreage only once.

Sorghum

Exclude sorghum-sudan crosses harvested for hay; record as Hay, All Other.

Soybeans

Record only soybeans harvested for beans.

Exclude soybeans cut for hay; record as Hay, All Other.

Tobacco

Record all types of tobacco harvested in 2000. Record tobacco acreage to the nearest tenth of an acre. If "skip" rows or "sled" rows were present, record only the actual tobacco acreage.

Small Grains

Sometimes mixtures of wheat, oats, barley, and other grains are planted for use as hay, forage or silage crops. If they were harvested for hay, these mixtures should be recorded in Hay, All Other. If they were harvested as silage, they should be recorded in All Other Crops. If the crop was not harvested (only grazed), do not record it at all.

Exclude small grains cut for hay; record as Hay, All Other.

Wheat for Grain

Record all types of wheat (winter, durum and other spring) harvested for grain or seed.

Hay Crops

Record only acres cut for hay (exclude acres "harvested" by grazing).

Acreage from which only grass silage, hay silage (haylage), greenchop, or alfalfa seed were harvested should be reported in All Other Crops.

If a hay crop and haylage are harvested from the same acres, record this as double-cropping with the hay reported in the appropriate line and the haylage reported in All Other Crops.

If two or more cuttings of the same crop were made from the same field:

1. Record the acreage only once.
2. Record the average total yield from all cuttings combined. For example, if two cuttings were made from a 50 acre hay field with the first cutting averaging 2.1 tons/acre and the second cutting averaging 1.3 tons/acre. The total average yield for the 50 acre crop would be 3.4 tons/acre (2.1+1.3).
3. If hay was cut from the same land from which small grains were harvested for grain:
 - a. Record the acreage cut for hay as Hay, All Other.
 - b. Record the acreage harvested for grain in the appropriate item in the Small Grains section.
 - c. Exclude straw, except for the value of sales which is recorded as "Other Farm Income" in Section F, item 3i.

Alfalfa and alfalfa mixtures harvested for dry hay should be recorded under Hay, Alfalfa.

All non-alfalfa hay harvested for dry hay, including Wild Hay, should be recorded under Hay, All Other. Wild hay acreage should be excluded from Cropland acres (Section A, item 5a).

Other Crops

Other Oilseeds

Excluding soybeans and canola, include all other oilseeds harvested. Include crops such as flaxseed, mustard seed, rapeseed, safflower, and sunflower.

Sugarcane or Sugar beets

For the 2000 survey Sugarcane and Sugar beets are record in two different lines. Record the acreage of sugarcane or sugar beets harvested in 2000, regardless of the year planted. Exclude acreage harvested for seed.

Vegetable Crops

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.

All Other Vegetables and Melons

Include all vegetables harvested (including strawberries) that were not for processing (i.e. for fresh market) and all melon crops (watermelons, cantaloupes, and other melons).

Fruits, Nuts, and Berries

Include all bearing acreage of fruit, nut, and berry crops.

Exclude non-bearing acres, abandoned acres, and strawberries (strawberries are considered a vegetable crop).

Nursery and Greenhouse Crops

Include flowers, ornamentals, mushrooms, tobacco transplants for sale, harvested sod, Christmas trees, and turfgrass, etc.

All Other Crops

This item is for recording information on all crops not previously recorded in this section. It is a catch-all item for other crops grown on this operation.

For each other crop reported, first determine if that crop should have been reported in another item above. If so, record it and all required information in the appropriate item.

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 2000.
- (3) acreage of crops intended for harvest in 2000 even if harvest was delayed until 2001 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 Hay, Alfalfa, and as acres of All Other Crops 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 1999 crops not harvested until 2000 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 Yield Per Harvested Acre

Record the average **YIELD PER ACRE** of the harvested commodity.

Yield per acre **MUST be reported in the unit indicated inside the item code box.** If the operator reports yield 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 yield into the required unit.

Column 4 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:

- (1) any production that was (or will be) used for human consumption (record this in Section G, items 28-30).
- (2) 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 2000. This information would be recorded as follows:

Column 2 - 125	acres harvested
Column 3 - 60	yield per acre
Column 4 - 3750	operation's share used on this operation [125 acres x 60 bu/acre x 50% share x 100% used = 3,750]
Column 5 - 3938	value of landlord's share of production [125 acres times 60 bu/acre= 7,500 total bushels produced. 50% landlord share = 3,750 bushels @ \$1.05 / bu = \$3938]

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 2000. 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. At \$4.00 a bushel, the landlord's share would be worth \$14,400 and the wheat marketed by the operation would have a value of \$111,600.

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 value of the landlord's share being calculated as \$25,200 (\$10,800 more than it should be) and the value of the wheat belonging to Valley Farms as \$100,800 (\$10,800 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. The landlord received about \$5.25/bu. for his soybeans. So you calculate:

Landlord's Share (amount) of production

$$4,500 \text{ bushels} \times (1/3) \text{ share} \times 5.25 = \$7,875$$

Column 5 Landlord's Share of Production (Total Value)

Record the **TOTAL GROSS VALUE** (in dollars) of each commodity given to landlord(s) in return for use of the land. This item is very important because it is used to determine the value of the landlord's share for rent.

Exclude the landlords share of government payments that will be recorded in Section F, item 2.

Remember production is reported in yield per acre in column 3 but the landlord's share in column 5 is Total Value (dollars) received. For example, if 200 acres of soybeans were harvested which averaged 30 bu/acre and the landlord received 30% of the production, at an average of \$5.25 / bu., you would record 9450 in column 5 ($200 \times 30 \times .30 \times 5.25 = 9,450$).

In crops such as peanuts or tobacco, quotas or allotments may be rented or leased on shares from operators who do not use their full allotment or quota. Quotas for marketing peanuts or tobacco may be rented with or without land. Record the landlord's share of production for these types of share rental arrangements here.

Column 6 Seed Varieties

Show the operator the seed variety code list in the Respondent Booklet. The code list printed in the Respondent Booklet identifies various types of seed

varieties. The operator may need this visual aid as a reminder that such a variety was planted. It may also help him properly categorize the variety. Determine if one of the TYPES of seed listed was used for the 2000 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, add up the acres planted for each seed type and record in column 6.

Code 1 - 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) and BXN (cotton).

Code 2 - Non-genetically modified herbicide resistant variety. The seed variety was developed using conventional breeding techniques to be herbicide resistant. An example of a non-genetically modified herbicide resistant seed is STS (sulfonylurea tolerant soybeans).

Code 3 - Genetically modified Bt variety. "Bt" means *Bacillus thuringensis*, 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 (corn), Knockout (corn), and BollGard (cotton).

Code 4 - 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. An example would be StarLink (corn).

Code 5 - Quality enhanced (such as high-oil corn). These seed varieties have output traits that affect the grain/oilseed/lint that is produced. Examples would be High-Oil corn or High Oleic soybeans.

Column 7 Seed Varieties Code

If the operator reported using a type of seed variety in column 6, then record the code of the seed type variety planted on the most acres. If more than one type of variety was used, select the variety used on the most acres in the operation.

Production and Marketing Contracts

The following instructions should be used when completing information on marketing and production contracts for Crops (Section C) and for Livestock (Section E).

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 C, item 3 (crops) or Section E, item 3 (livestock) under the appropriate commodity. The net profit or loss from hedging should be recorded in Section F, item 3i.

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 G.

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.

Section C - Income from Crops

Item 1 Crop **MARKETING** Contracts

Column 1 Commodity

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

Record each commodity the operation marketed through a marketing contract in 2000. 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 Crop Code

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

Column 3 Contractor Code

Record the code corresponding to the type of contractor for that commodity. Refer the respondent to the list of Crop Contracts Contractor Codes in the Respondent Booklet (these codes are different from the Livestock Contracts Contractor Codes used in Section E).

The **Crops** Contractor Codes are:

- 1 **OTHER FARM(S) or FARMER(S)** -- Operating farmers that are currently running a conventional farm business and who have other farmers (frequently in the local area) produce livestock, feed or seed as inputs for use on his or her farm. An example would be a farmer who has neighbor who produces feeder pigs that are fed out on his/her farm. Large conglomerate farms or process should not be considered a "farm." Instead code them as 2-Processor or 6-Integrator.
- 2 **PROCESSOR, MILL, or GIN** -- These companies change the form of the product before passing it to the next stage.
- 3 **CO-OP or ELEVATOR** -- An organization where farmers join together for the purpose of processing and/or marketing their products. Co-ops can assemble commodities such as cranberries, citrus, rice, cotton, etc. Cotton and rice may also be marketed through a mill or gin,

which would be code 2. Elevators are most often associated with the marketing of grains.

- 4 **SEED, FEED, OR OTHER INPUT COMPANY** -- Input supply companies may contract with farmers to grow seed corn, for example.
- 5 **BROKER, CONSIGNER, OR INVESTOR** -- An agent who negotiates many contracts of purchase and sales.
- 6 **INTEGRATOR** -- Large conglomerate or corporate organization that contracts with many growers to produce a commodity. The integrator furnishes inputs for the growers, provides technical assistance, and assembles the commodity to pass on for final processing or marketing.
- 7 **ANOTHER SEGMENT OF THE SAME COMPANY** -- Multiple establishments under common ownership. A farm would be an establishment that passes the product grown to another part of the company for processing or marketing. The grower may not receive market price for the product grown, but will have the expense associated with growing the product. For example, a citrus farm may provide oranges to be packaged and sold wholesale under a brand name, which are under joint ownership with the farm. The farm may not show value of sales for the oranges because sales are recorded at the retail level.
- 8 **RETAILER** -- The farm has a contract to sell a product directly to a retail business. The contract is arranged directly with the retail business.
- 9 **OTHER** -- If Codes 1 - 8 do not fit the type of contractor identified by the respondent, use Code 9 for OTHER. Be sure to describe the contractor in notes.

Column 4 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 5 Unit Code

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

Column 6 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 7 divided by column 4 will equal column 6 ONLY when the operation was paid in full during calendar year 2000 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 2000 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.

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 4, code 7 (for bales) in column 5 and .65 in column 6, 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 7 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 2000, enter a dash and make a note.

If the operation did not receive all of the payments owed to them under the contract in 2000 (column 7 is less than column 4 times column 6), the remaining amount owed must be accounted for as an asset in Section J, item 5.

Item 2 Crop PRODUCTION Contracts

Column 1 Commodity

Show the respondent the list of Crop 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 Crop Code

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

Column 3 Contractor Code

Record the code corresponding to the type of contractor for that commodity. Refer the respondent to the list of Crop Contractor Codes in the Respondent Booklet (these codes are different from the Livestock Contractor Codes used in Section E).

Descriptions of the Crop Contractor Codes appear above in item 1, column 3.

Column 4 Quantity Removed

Record the total quantity of the commodity produced and removed from the operation under the contract **during 2000**. Always complete this column when contract production is reported so an estimate of the value of the commodity produced may be made.

Column 5 Unit Code

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

Column 6 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 7 Total Amount Received

Record the total amount received for producing the commodity under contract during calendar year 2000. **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.

If the operation did not receive all of the payments owed to them under the contract in 2000 (column 7 is less than column 4 times column 6), the remaining amount owed must be accounted for as an asset in Section J, item 5.

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 6 and 7. If the operation is not able to report book value, leave columns 6 and 7 blank and make a note. Be sure to record the quantity removed in columns 4 and 5.

Item 3 CASH SALES of CROPS

For crops sold in 2000, report in column 4, the amount received during calendar year 2000, 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 item 5.

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 G.

If marketing charges have not been deducted from the farmer's receipts, subtract them before recording net receipts in column 4. Marketing charges are recorded in item 5.

INCLUDE as Cash Sales:

- (1) crops sold in 2000, REGARDLESS OF THE YEAR PRODUCED.
- (2) 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.
- (3) **CROPS INITIALLY PLACED UNDER CCC LOAN WHICH WERE LATER REDEEMED AND SOLD DURING 2000.** 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 item 4c.)
- (3) cash sales of straw and manure. (Record these in Section F,
item 3i.)

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. Include Christmas trees in item 3c, Nursery and Greenhouse crops.

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 2000 in column 4.

Item 4 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.

Farmers can pledge feed grains, wheat, soybeans, cotton and rice as collateral to get a CCC non-recourse commodity loan. The loans they get are based on a per unit support price (loan rate) established by law for their particular commodity. Loan rates for feed grains are set at a level determined to be fair and reasonable in relation to the rate for corn, taking into consideration the feeding value in relation to corn and the average cost of transporting the commodity to market. County loan rates are established to reflect the relative local value of the commodity.

Loans mature on demand, but no later than the last day of the ninth calendar month following the month the loan was made. Any time before the final maturity date of the loan, the farmer may repay the loan amount plus any interest that has accrued. If the loan is not repaid by the final loan maturity date, the CCC takes title to the commodity as full payment of the loan and interest charges.

Farmers can reclaim title to their crops by paying back the loans along with any interest and storage charges. They usually do this when the market price is higher than the loan redemption price. The amount required to repay the loan (minus any interest and storage charges) is recorded in item 4b. When a farmer reclaims title to the commodity, he can then either sell it or store it for future sale.

If the loan is not repaid by the maturity date, it is considered forfeited. Farmers usually do this when the market price is less than the loan redemption price.

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 F, item 3i.

If a loan was taken out in 2000, has a 2000 maturity date and has not had any action taken on it, there will be an outstanding balance. Record the total outstanding balance in item 4c.

Item 4a CCC Loans Received

Record the gross amount of loans received in 2000. This should be equal to the amount of the loan rate (price per unit) times the quantity placed under loan.

Item 4b 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 G, item 18. Storage charges should be recorded as marketing expense in Section C, item 5.

Item 4c Value of Outstanding CCC Loans on December 31, 2000

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.

Marketing Expenses

The following instructions should be used when completing information on marketing charges for the sales of Crops (Section C, item 5) and for Livestock (Section E, item 4).

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 A. But, if quota or allotment rentals are reported, be sure the rent payment reported in Section A is **only for land** and not for the land and allotment or quota rental combined. Also include rental of sugar beet 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 G, 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 F, item 3i.

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 F, item 3i. **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 G, 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.

Landlords and Contractors

Marketing Expenses paid by landlords and/or contractors **MUST** also be accounted for in the appropriate column.

In most production contracts, the marketing charges are paid by the contractor. These expenses may be on the contractee's settlement sheet. If not, record the respondent's best estimate of the total marketing expenses paid by the contractor for commodities produced on the operation under contract.

Item 5 Marketing Charges for Crops

Refer to the detailed explanation of marketing charges above.

Record the total marketing charges paid by this operation, landlord(s) and contractor(s) for the sale of crops produced and sold on this operation in 2000.

Item 6 Payments in 2000 for Previous Years' Marketings (Deferred Receipts)

This item accounts for payments received in 2000 for CROPS sold or transferred **before** 2000. This is money that would have been owed to the operation at the end of 1999. 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 1999 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).

Item 6a Deferred receipts from previous years' CROP Marketing Contracts

If the operation received payments in 2000 for CROPS **marketed** under contract in previous years, record the 2000 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 6b Deferred receipts from previous years' CROP Production Contracts

If the operation received payments in 2000 for CROPS **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 6c Deferred receipts from Cash Sales of CROPS in Previous Years

If the operation received income in 2000 from cash sales of CROPS sold or transferred in previous years, record that income here.

Item 7 Segregation of GM Crops

This question determines if the operation segregates (keeps separate) crop production from GM seed from non-GM production.

This question must be answered for all questionnaires. If the operation does not produce any GM crops, enter a code '3'.

Item 8 Joining with others

Enter a code '1' if this operation has joined with others to create a legal business separate from the farm, to conduct specific functions for the farm such as purchasing feed or breeding livestock, buying inputs, providing transportation, or marketing functions. Examples would be starting a cooperative or a limited liability corporation.

Section D - Livestock Inventory

Record all livestock, poultry, and animal specialties on the total acres operated on December 31, 2000, 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, 2000.

If on December 31, 2000 livestock are 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. grazing in national forests, grazing districts, open range, or on land under permit.

Column 2 records the inventory broken out by the number owned and the number not owned (i.e. owned by someone else such as contract hogs or poultry).

Item 1a Beef Cattle

Record the number of head of cattle raised primarily for beef production, regardless of breed or type, on this operation on December 31, 2000. Include all beef cows, heifers, steers, bulls, calves and cull beef cattle inventory. Be sure to include inventory owned and not owned by the operation in the appropriate item in column 2 if they were on the total acres operated on December 31, 2000.

Item 1b Dairy Cattle

Record the number of head of dairy cattle, regardless of breed or type, on this operation on December 31, 2000. Sometimes respondents may think you only want the number of dairy cows that are being milked. Be sure to emphasize to include **all dairy cattle** including the cows, bulls, heifers, and calves. Include inventory owned and not owned by the operation in the appropriate item in column 2 if they were on the total acres operated on December 31, 2000.

Item 1c All Hogs and Pigs

Record the total number of all hogs and pigs located on the total acres operated on December 31, 2000, regardless of ownership. Be sure to include all sows, boars, feeder pigs, market hogs, and cull stock.

Item 1d Sheep and Lambs

Record the total number of all sheep and lambs on the total acres operated on December 31, 2000, regardless of ownership.

Item 1e Hens and Pullets of Laying Age

Record the total number of hens and pullets of laying age (HPLA) on the total acres operated on December 31, 2000, regardless of ownership. Include both egg and broiler type layers. Broilers and other meat-type chickens should be recorded in item 1f.

Item 1f Broilers and Other Meat-type Chickens

Record the total number of broilers, fryers and other meat-type chickens on the total acres operated on December 31, 2000, regardless of ownership. Layers are reported in item 1e.

Item 1g Turkeys

Record the total number of turkeys, of all types, on the total acres operated on December 31, 2000, regardless of ownership.

Item 1h All Other Livestock and Poultry

Record the total number of head of all livestock and/or poultry not accounted for in items 1a-g. Include things such as horses, ponies, mules, goats, bees (record number of hives), rabbits, mink and other fur-bearing animals, commercial aquaculture, and any other livestock or poultry not previously reported. Exclude horses that are part of a boarding operation.

Be sure to note the type of livestock reported in this item.

Item 2 Landlord's Share of Livestock Production

Before asking this item, probe to find out if any of the operation's share-rented acres involved livestock production.

Record the value of the share of livestock production given to landlord(s) in 2000. This value could be zero if no shared livestock were marketed in 2000. In this case, write a note to indicate that zero is valid. If the respondent does not know the value, probe for the best estimate.

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 E).

Item 3 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 1999 and were still under contract on January 1, 2000.

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, 2000

Record the estimated market value of all this operation's commodities **from 1999 and previous years** that were **placed** on contractee operations and were still under contract as of January 1, 2000.

DO NOT include this value in Section J, 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 2000**. 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 2000. **DO NOT record these sales anywhere else in this section.** 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, 2000

Record the estimated market value of commodities still under contract as of December 31, 2000.

DO NOT include this value in Section J, Assets.

Section E - Income from Livestock and Livestock Products

Refer to the detailed discussion of Marketing and Production Contracts earlier in this manual (preceding Section C). Be sure you have a clear understanding of the differences between Marketing and Production contracts before continuing.

If this operation is a contractor, record the income received from sales of commodities produced under contract by other operations in Section D, item 3, column 6 ONLY. Do not record these sales in items 1, 2, or 3.

Item 1 Livestock **MARKETING** Contracts

Column 1 Livestock or Livestock Product

Show the respondent the list of Livestock Codes in the respondent booklet. Record each commodity the operation had a marketing contract for in 2000.

Column 2 Livestock Code

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

Column 3 Contractor Code

Record the code corresponding to the type of contractor for that commodity. Refer the respondent to the list of Livestock Contractor Codes in the Respondent Booklet (these codes are different from the Crop Contracts Pricing Mechanism Codes in Section C).

The **Livestock** Contractor Codes are:

- 1 **INTEGRATOR** -- Large conglomerate or corporate organization that contracts with many growers to produce a commodity. The integrator furnishes inputs for the growers, provides technical assistance, and assembles the commodity to pass on for final processing or marketing.

- 2 **PACKER/PROCESSOR** -- These companies change the form of the product before passing it to the next stage. For example, a chicken processor would contract for live chickens, slaughter and process them, and possibly sell them under a branded name.

- 3 **CO-OP or ELEVATOR** -- An organization where farmers join together for the purpose of processing and/or marketing their products. Co-ops can assemble commodities such as milk or milk products. Elevators are most often associated with the marketing of grains.

- 4 **OTHER FARM(S) or FARMER(S)** -- Operating farmers that are currently running a conventional farm business and who have other farmers (frequently in the local area) produce livestock, feed or seed as inputs for use on his or her farm. An example would be a farmer who has a neighbor who produces feeder pigs that are fed out on his/her farm. Large conglomerate farms or processors should not be considered a "farm". Instead code them as 1-Integrator or 2-Packer/Processor.

- 5 **FEED COMPANY** -- A feed company is primarily involved with selling feed for use as an input for livestock production. While the company may sell other inputs, their primary business is the selling of feed.

- 6 **OTHER INPUT COMPANY** -- Other input supply companies include companies that supply inputs (with the exception of feed) for the production of livestock. These companies may sell feed as a minor part of their business but their primary business is the selling of other inputs.

- 7 **BROKER, CONSIGNER, or INVESTOR** -- An agent who negotiates many contracts of purchase and sales. The agent may buy hogs from many farmers and move them to a processor for slaughter.

- 8 **ANOTHER SEGMENT OF THE SAME COMPANY** -- Multiple establishments under common ownership. A farm would be and establishment that passes the product grown to another part of the company for processing or marketing. The grower may not receive market price for the product grown, but will have the expense associated with growing the product. For example, a dairy may pass milk on to a cheese, bottling or food service operation under the same ownership.

- 9 **RETAILER** -- The farm has a contract to sell a product directly to a retail business. The contract is arranged directly with the retail business.
- 10 **OTHER** – If Codes 1 - 9 do not fit the type of contractor identified by the respondent, use Code 10 for OTHER. Be sure to describe the contractor in notes.

Column 4 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 5 Unit Code

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

Column 6 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 7 divided by column 4 will equal column 6 ONLY when the operation was paid in full during calendar year 2000 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 2000 do not always show the true value of production. This price gives us the data we need to calculate the total value of commodities marketed under contract.

Be sure the unit for the price reported agrees with the unit for the quantity reported.

Column 7 Total Amount Received

Since total payments are not always received in the calendar year of production, you always have to **ask** this question 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 2000, enter a dash and make a note.

If the operation did not receive all of the payments owed to them under the contract in 2000 (column 7 is less than column 4 times column 6), the remaining amount owed must be accounted for as an asset in Section J, item 5.

If this operation is a contractor, record the income received from sales of commodities produced under contract by other operations in Section D, item 3, column 6 ONLY. Do not record these sales in items 1, 2, or 3.

Item 2 Livestock PRODUCTION Contracts

Column 1 Livestock or Livestock Product

Show the respondent the list of Livestock Codes in the respondent booklet.

Record each livestock commodity the operation had a contract to produce.

Column 2 Livestock Code

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

Column 3 Contractor Code

Record the code corresponding to the type of contractor for that commodity. Refer the respondent to the list of Livestock Contractor Codes in the Respondent Booklet (these codes are different from the Crop Contracts Contractor Codes in Section C).

Descriptions of the Contractor Codes appear above in item 1, column 3.

Column 4 Quantity Removed

Record the total quantity of the commodity produced and removed from the operation under the contract **during 2000**. Always complete this column when contract production is reported so an estimate of the value of the commodity produced may be made. Examples of this include the number of head of cattle removed from a feedlot, or the number of broilers removed.

Column 5 Unit Code

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

Column 6 Fee Received Per Unit

Record the price per unit (in dollars and cents) received for producing the commodity. If money is still owed under the contract, be sure the fee per unit includes the amount still owed to the operation.

Be sure the unit for which the fee is reported agrees with the unit in which the quantity was reported.

Column 7 Total Amount Received

Record the total amount received for producing the commodity under contract during calendar year 2000. **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. **DO NOT** include reimbursement for expenses in the fee for services.

If the operation did not receive all of the payments owed to them under the contract in 2000 (column 7 is less than column 4 times column 6), the remaining amount owed must be accounted for as an asset in Section J, item 5.

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 6 and 7. If the operation is not able to report book value, leave Columns 6 and 7 blank and make a note. Be sure to record the quantity removed in Columns 4 and 5.

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 D - Livestock Inventory

Record the 5 head of calves he kept in item 1a, column 2 (item code 0078=5). If the cows were still on his place at the end of the year, record 100 head in item 1a, column 2 (0079=100).

Section E - Income from Livestock

Account for the cash sale of the calves in item 3c [0526=32500 (65 head * \$500 / head)].

Section G - Production Expenses

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

Section J - Assets

Account for the value of the 5 calves the land owner kept in item 1b or 1c. 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 D - Livestock Inventory

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 E - Income from Livestock

Account for the cash sale of the calves in item 3c [0526=15000 (30 head * \$500 / head)].

Section G - Production Expenses

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

Section J - Assets

Account for the asset value of the 100 cows in item 4b. 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.

If this operation is a contractor, record the income received from sales of commodities produced under contract by other operations in Section D, item 3, column 6 ONLY. Do not record these sales in items 1, 2, or 3.

Item 3 CASH SALES of Livestock and Livestock Products

This item records the **net** sales of livestock and livestock products sold for cash in 2000.

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 G.

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 3.

Exclude:

- Livestock Marketing Contracts (report in item 1).
- Livestock Production Contract Sales (report in item 2).
- Landlord Shares for livestock (report in Section D, item 2).

Column 2 Number Sold and Price Per Unit (*Optional*)

This column is optional and can be used to help calculate the net dollar amount received in column 3.

Column 3 Net Dollar Amount Received

Record the Net Dollar Amount Received in 2000 for each commodity sold. Remember this is the NET amount, not the gross amount.

Item 4 Livestock Marketing Expenses

Refer to the detailed discussion of Marketing Expenses earlier in this manual (preceding Section C, item 5) before continuing.

Record the total marketing expenses associate with the sale of all livestock and livestock products in 2000. Record marketing expenses paid by the operation, landlords, and contractors in the appropriate columns.

Item 5 Payments in 2000 for Previous Years' Marketing (Deferred Receipts)

This item accounts for payments received in 2000 for Livestock or Livestock Products sold or transferred **before** 2000. This is money that would have been owed to the operation at the end of 1999. 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 1999 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).

Item 5a Deferred receipts from previous years' LIVESTOCK Marketing Contracts

If the operation received payments in 2000 for Livestock **marketed** under contract in previous years, record the 2000 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.

Item 5b Deferred receipts from previous years' LIVESTOCK Production Contracts

If the operation received payments in 2000 for Livestock **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 LIVESTOCK in previous years

If the operation received income in 2000 from Livestock sold or transferred in previous years, record that income here.

Section F - Other Farm Income

Items 1 & 2 Government Program Payments

Item 1a CRP Payments

Record the total amount this operation received in 2000 for participation in the Conservation Reserve Program (CRP).

Item 1b WRP Payments

Record the total amount this operation received in 2000 for participation in the Wetlands Reserve Program (WRP).

Item 1c EQIP Payments

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

Item 1d 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 item 3f below.

Item 1e Loan Deficiency Payments (LDP's)

Record the total dollar amount the operation received in 2000 from government loan deficiency payments.

Loan deficiency payments (LDP's) 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 LDP's on wheat, corn, grain sorghum, barley, oats, upland cotton, and rice. Producers may obtain LDP's on any production of oilseeds whether or not they have entered into a production flexibility contract.

Item 1f Transition Payments

Record the total dollar amount the operation received in 2000 for payments received for participating in the 7-year farm program. Include 2001 payments received in advance in December, 2000.

The Agricultural Market Transition Act (AMTA) was established under the Federal Agriculture Improvement and Reform Act of 1996 (commonly referred to as "The 1996 Farm Bill"). AMTA removes the link between income support payments and farm prices by providing production flexibility contracts, whereby producers who applied during the one-time sign up receive seven annual fixed but declining production flexibility contract 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 must comply with highly erodible land and wetland conservation requirements, as well as fruit and vegetable planting restrictions in order to receive payments. Farmers may also refer to these as "Freedom to Farm" payments.

Item 1g Other Government Program Payments

Record the total dollar amount received in 2000 from all other federal, 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 2 Landlord's Share of Government Payments

Record the total amount of government program payments all landlord's received for the acres you rented from them.

Item 3 Income from Farm-Related Sources

Item 3a 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 3b 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 3c Recreation on the Operation

Include income received for recreation on the operation in 2000 including things such as hunting, fishing, petting zoos, horseback riding, on-farm rodeos, etc.

Item 3d Forest Product Sales

Record the total 2000 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 3e 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 3d (1)

Record the **dollar amount** of sales of farm machinery and vehicles (item 3d) that was for sales directly to other farmers.

Item 3f Federal Crop Insurance and Other Insurance Indemnity Payments

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 crop insurance indemnity payments in 2000. 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 M, item 4). Include hail insurance indemnity payments.

Item 3g Patronage Dividends and Refunds from Co-ops

Record the amount of patronage dividends resulting from ownership of shares in cooperatives in 2000. 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 3h Tobacco Settlement Payments

Include any payments received under the Tobacco Settlement Agreement.

Item 3i 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) all other farm related income not included in 3a-h.

Section G - 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 (Versions 2, 3, and 4)

Most of the information necessary to compute cost-of-production for Rice and Sugarbeets was collected in the Phase II portion of ARMS conducted in the fall. However, several questions are included in Phase III, Rice questionnaire (Version 2) and Sugarbeet questionnaire (Version 3) 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.

Since there was not a Phase II interview completed for Dairy, it is necessary in the Phase III interview to collect all of the information related to the cost of production for the dairy enterprise. This includes detailed information on labor, purchases, placements, sales and removals, feed, housing, vehicles, trucks, tractors, machinery and equipment, and manure management.

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 Versions 2 and 3 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 A, item 5) paid in 2000 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, 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 A 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 2000 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 2000 for harvest in 2000 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 Rice or Sugarbeets**
V2, V3 only

Record the dollar amount of the total (item 1) seed and plant expense that was for the Rice or Sugarbeet 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 Rice or Sugarbeets**
V2, V3 only

Record the dollar amount of the total (item 2) fertilizer expense that was for the Rice or Sugarbeet 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, nematocides, 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 14).

Item 3a Total Custom Application Expense
V1 only

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 Commodity
V2, V3, V4 only

Record the dollar amount of the total (item 3) agricultural chemical expense that was for the commodity of interest (rice, sugarbeet or dairy).

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 D, item 3, column 5. If this operation **is** a feedlot, include only expenses for which it was **not** reimbursed. Expenses for which the operation was reimbursed should be recorded in the Contractor column.

Purchases of livestock and poultry during 2000 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 2000. 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 2000, 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 5a Leased Livestock Expense for Dairy
V4 only**

Record the dollar amount of the total (item 5) leasing of livestock expense that was for the Dairy enterprise.

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 6a Total Feed Expense for Dairy
V4 only

Record the dollar amount of the leasing of livestock expense (item 6) that was for the Dairy enterprise.

Item 7 Bedding and Litter

Record the amount spent by the operation in 2000 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 7a Bedding and Litter for Dairy
V4 only

Record the dollar amount of the bedding and litter expense (item 7) that was for the Dairy enterprise.

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.

Item 8a Medical Supplies, Veterinary, and Custom Services for Dairy
V4 only

Record the dollar amount of the medical supplies, and veterinary and custom services expense (item 8) that was for the Dairy enterprise.

Item 8a(1) Total Amount Spent on bST
V4 only

Record the dollar amount the dairy enterprise spent on bST.

Item 8a(2) Total Amount Spent on DHIA Fees
V4 only

Record the dollar amount the dairy enterprise spent on Dairy Herd Improvement Association (DHIA) fees.

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 F, item 3a).
- (6) aviation fuels.
- (7) Federal excise fuel taxes. (Refunds of Federal excise fuel taxes paid should be reported as other income in Section F, item 3i.)
- (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, V3, V4 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 9d 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, V3, V4 only

Record the farm share of total fuel expenses for irrigation.

Item 9(1a) Fuel Expense for Water Pumped From Wells
V2, V3, V4 only

Record the portion of total fuel expense was for water pumped from wells.

Item 9(2) Total Fuel Expense for Commodity
V2, V3, V4 only

Record the dollar amount of the total (item 9(2)) agricultural chemical expense that was for the commodity of interest (rice, sugarbeet or dairy).

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, V3, V4 only

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

Item 10a(1) Electricity Expense for Commodity
V2, V3 only

Record the dollar amount of the total (item 10a) electricity for irrigation that was for the commodity of interest (rice or sugarbeet).

Item 10a(2) Electricity Expense for Water Pumped from Wells
V2, V3 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, V3, V4 only

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

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

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

Item 10c Electricity for Specialized Livestock Production Facilities
V2, V3, V4 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 10c(1) Electricity for Dairy Enterprise
V4 only

Record the dollar amount of the total (item 10c) electricity for specialized livestock production that was for the dairy enterprise.

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 Commodity
V2, V3 only

Record the dollar amount of the total (item 11) purchased water for irrigation expense that was for the commodity of interest (rice or sugarbeet).

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.
- (6) 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 Commodity
V2, V3, V4 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 commodity of interest (rice, sugarbeet, or dairy).

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 item 32).

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

V2, V3, V4 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 15a(1) Maintenance/Repair of Farm Buildings and Land Improvements for Dairy Livestock Production Facilities

V4 only

Record the dollar amount of the total (item 15a) maintenance/repair of farm buildings and land improvement expense that were for **dairy** livestock production facilities.

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

V2, V3, V4 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 Commodity

V2, V3 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 commodity of interest (rice or sugarbeet).

Item 16 Maintenance and Repair of the Operator's House

Record the total amount spent in 2000 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 32).

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 2000. 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 18 Interest and Fees Paid on Debts

Record the total amount spent by the operation in 2000 for interest and service fees for all loans owed by the operation. Include land secured by real estate, such as land, building or a home that was used as collateral in obtaining the loan. Also include loans not secured by real estate -- machinery, tractors, trucks, fertilizer, feed, etc.

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.

Item 19a Real Estate Taxes

Record the amount of real estate taxes paid by the operation in 2000. 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 2000, 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)

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 2000 for property taxes other than land or buildings.

Item 20 Renting and Leasing Vehicles, Tractors, Equipment and Storage Structures

Record the total 2000 expense for renting or leasing all vehicles, tractors, farm machinery, equipment and structures.

Item 21 Vehicle Registration and Licensing Fees

Record the total expense paid by the operation in 2000 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

Since farmers often rely on the expertise of their accountant or tax advisor for this item, they may feel reluctant to report this. 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 2000 taxes. If this is the case, make a note explaining the situation.

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.

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 2000 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 2000.
- (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 2000. 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 2000 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 24 Breakout of Cash Wages Paid

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 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 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 Everyone Else

Record the amount paid to all hired workers of the operation except those included in items 24a and 24b. 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 Commodity
V1, V2, V3 only**

Record the dollar amount of the total (item 25) payroll taxes and benefits expense that was for the commodity of interest (rice, sugarbeet, dairy).

Item 26 Contract Labor Expense

Record the total amount spent by the operation in 2000 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 2000.

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 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 E).
- (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
V2, V3, V4 only

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-27h Other Custom Work
V1 only

Record the dollar amount spent by the operation for each type of custom work expense. Record hauling in 28a.

Item 27b(1) Total Custom Work for Commodity
V2, V3, V4 only

Record the dollar amount of the total custom work (item 27a and item 27b) expense that was for the commodity of interest (rice, sugarbeet, dairy).

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 2000. 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 2000 for production and marketing of commodities produced on the land operated. Exclude quota and allotment purchases and rentals.

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- (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 2000 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 2000 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.

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 2000. 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 2000. 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 2000 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 2000 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 2000 for use on the operation. Include purchases of livestock, dairy and poultry equipment, 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 placed 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 2000. Make good notes as to exactly what items are included.

Item 42 Unallocated (Misc.) Expenses

This item is used to account for any expenses the operation had in 2000 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.

Section H - Farm Labor

Item 1 **Hours Worked by the Operator, Spouse, 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 G, Item 23 instructions give examples of agricultural work.

Item 1a **OPERATOR'S Hours of Farm Work**

For each quarter, record the **average number of hours** of farm work the operator did **per week**. Record both paid and unpaid hours of work.

Item 1b **SPOUSE'S Hours of Farm Work**

V1 only

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.

Item 1c All Other Unpaid Workers
V2, V3, V4 only

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.

Item 2 Allocation of Work Hours on Operation
V1 only

Item 2 will be used to estimate how farmers allocate labor hours to farm production, marketing and overhead activities. Production activities include not only field work repair and other machinery related activities, particularly given the complexity of today's farm production systems. Labor allocation will vary by type and size of farm operation thus field work, repairs and other labor uses are asked separately. Likewise, past survey data indicate that operator's and spouses allocate labor differently. A use of these data will be to report how farmer's now allocate their labor to farm tasks and to report on the contributions of spouses to the farm in a variety of ways, including both their on-farm and off-farm jobs. Knowing how the operator and the operator's spouse allocate their time is also an important variable in helping explain differences in the financial performance of farm operations.

All (100 percent) of the operator's time should be allocated in column 1 in items 2a-2g. The allocation of the spouse's time should be reported in column 2. The reported percentages in column 1 and in column 2 must add to 100 percent.

If no farm/ranch work is recorded for the spouse in item 1b above then enter dashes '-' in column 2 for items 2a-2g.

For item d, include record keeping required for state and federal administrative items (taxes etc.) here if these records are also used in the operation of the business.

Section I - Dairy Enterprise Labor

This section is only asked on the Dairy (Version 4) questionnaire.

These items provide the information necessary to estimate the labor required on a dairy operation. Item 1 collects the hours worked (both paid and unpaid) by the operator and the hours worked by all unpaid workers on the Dairy enterprise. Item 2 records the hours worked by all paid workers on the Dairy enterprise. Items 3 and 4 records the average wage paid to full-time and part-time workers respectively.

Item 1a Operator's Hours Worked on the Dairy Enterprise

For each quarter, record the average number of hours the operator worked on the Dairy enterprise per week. Record BOTH paid and unpaid hours.

Item 1b Hours Worked By Unpaid Workers on the Dairy Enterprise

For each quarter, record the TOTAL average number of hours of farm work done on the Dairy enterprise 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.

Item 1b (1) Hours Worked By Children Under Age 16

Even though the workers were “unpaid” there is a value associated with the labor they performed. To accurately reflect the true cost of a dairy operation, a value per hour will be applied to all unpaid labor. Because, in general, children under age 16 are paid a lower wage than older workers, this question is asked so an adjustment can be made to the value derived for unpaid labor.

Record the percentage of the hours worked by all UNPAID workers (excluding the operator) that was performed by children under age 16.

Item 2a Hours Worked By Full-time Paid Workers on the Dairy Enterprise

For each quarter, record the average number of hours all full-time paid workers worked on the Dairy enterprise per week.

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 2b Hours Worked By Part-time Workers on the Dairy Enterprise

For each quarter, record the average number of hours all part-time paid workers worked on the Dairy enterprise per week.

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 3 Average Wage Paid to Full-Time Workers

If full-time workers were reported in item 2a, record the average wage paid to all full-time workers on the Dairy enterprise.

Report both the wage rate (in dollars and cents) and the unit code related to the appropriate frequency (per hour, per day, per week or per month).

Item 4 Average Wage Paid to Part-Time Workers

If part-time or seasonal workers were reported in item 2b, record the average wage paid to all part-time or seasonal workers on the Dairy enterprise.

Report both the wage rate (in dollars and cents) and the unit code related to the appropriate frequency (per hour, per day, per week or per month).

Sections J & K - 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 all assets managed by the operation. The respondent is the only source available for estimates of the value of the land they rent and the particular machinery leased by the operation in 2000. Therefore, we include the value of rented land and leased machinery in estimating the total value of all assets managed by the operation.

Section J - 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 and machinery leased by the operation. Also, most of this section has a fixed reference date, December 31, 2000, rather than all of 2000.

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 2000. 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).

Value of Land and Buildings Items 1-3

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 1a **Market Value of Operator's Dwelling, if OWNED**

Record the **market value** of the operator's dwelling as of December 31, 2000, 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 1b **Market Value of Other Dwellings OWNED**

Record the **market value** on December 31, 2000 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 1c Other Farm Buildings and Structures OWNED

Record the **market value** on December 31, 2000 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 1d Orchards and Trees Grown for Wood Products

Record the market value on December 31, 2000 of trees in orchards, vines in vineyards, other perennials in the field, Christmas trees, and trees cultivated for wood products.

Item 1e 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, 2000. 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** 2000. 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 1a + 1b + 1c + 1d + 1e should reflect the total value of land and buildings OWNED by this operation on December 31, 2000. Verify this total with the operator.

Item 2 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 2000. (This should correspond to acres reported as rented in Section A, 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 3 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 A, 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 4 Value of Beginning/Ending Year Inventories of Machinery, Commodities, and Production Inputs, etc.

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 Sections C and E. 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 2000 and you ask about the value at the beginning of 2000, **do not say**, "Was it (about) the same?" or "It was the about the same, was it not?".

Item 4a 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 2000 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, 2000.
- (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 4b Value of Breeding Livestock Owned

For livestock, you also need to consider their weights or size. You need to consider **all** these things on January 1, 2000, to get the market value of the beginning year inventory. Then you need to consider **all** these things on December 31, 2000, 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.**

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.

The number of head on hand on Dec. 31, 2000 was reported in Section D. This should be the inventory for which the operator gives you the end of year value.

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 D, item 3.

Item 4c Value of Other (Non-breeding) Livestock Owned

For livestock, you also need to consider their weights or size. You need to consider **all** these things on January 1, 2000, to get the market value of the beginning year inventory. Then you need to consider **all** these things on December 31, 2000, 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.**

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, 2000 was reported in Section D. This should be the inventory for which the operator gives you the end of year value.

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.

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 D, item 3.
- (4) breeding stock

Item 4d 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 4e 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, 2000 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, 2000.

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, 2000.

Exclude the value of inputs to:

- (1) crops already harvested and on hand (these crop values should be recorded in item 4a).
- (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, 2000 due to weather or market conditions. An estimated value for these crops should be recorded in item 4a if they were originally intended for harvest as of December 31, 2000.

Item 4f Value of Trucks and Cars OWNED

Record the end-of-year (on Dec. 31, 2000) estimate of the market value of the farm share of trucks and cars owned by the operation

Item 4g Value of Tractors, Farm Machinery, Equipment and Tools OWNED

Record the end-of-year (on Dec. 31, 2000) estimate of the market value of the farm share of tractors, machinery, tools, equipment and implements owned by the operation.

Item 4h Value of Stock in Farm Credit System and Other Farm Cooperatives

Record the value on December 31, 2000, 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 5 Amount Owed To The Operation

Amount Owed on January 1, 2000 (Beginning-of-Year)

Record the total amount owed to the operation as of January 1, 2000 for all commodities sold or delivered in 1999 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 2000 and future years from crops, livestock, poultry or products sold or delivered in 1999 or earlier years.

Amount Owed on December 31, 2000 (End-of-Year)

Record the total amount owed to the operation as of December 31, 2000, for all commodities sold or delivered in 2000 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 2000 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 4a. 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.

Item 6 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 5).
- (3) quotas and allotments owned by the operation, if these values are not reflected in the land values reported in item 1.

Exclude the value of:

- (1) assets for which values were obtained earlier in the questionnaire.
- (2) personal assets.

Section K - Debt

Item 1 **Seasonal Production Loans**

This item includes only loans taken out in 2000 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 2000. 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 so check YES and continue with the table in item 3.

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 L.

Item 3 **Debt By Lender**

If the operation had debt at the end of 2000, 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.

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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 2000 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.

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 Loan Guaranteed by Government Agency

Ask column 7 for any loan not made directly by the former Farmers Home Administration (FmHA), which is now part of the Farm Services Agency (FSA) or the Small Business Administration (SBA) (i.e. ask column 7 if column 1 is NOT code 2 or 3).

The loan must be guaranteed by a government agency (State or Federal). If a loan is guaranteed by someone other than a government agency, the answer to this question should be "4 - Not guaranteed by a Government Agency".

This column **MUST** be coded unless column 1 is a 2 or 3. The valid codes for this column are:

- 1 Loan guaranteed by FSA/FmHA
- 2 Loan guaranteed by the SBA (Small Business Administration)
- 3 Loan guaranteed by Other Government Agency
- 4 Loan Not Guaranteed by Government Agency

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 2000, 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 2000, enter the total amount of outstanding debt not recorded in the table. Include both principal and unpaid interest which was delinquent.

Sections L & M - Farm Operator & Farm Household

Information on the economic well-being of farm households is needed to evaluate the effect of current and proposed government farm policies. 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 the relationship, if any, of operator and household characteristics to the financial situation of the farm and farm household.**

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 can be addressed by asking about **Major Occupation**, and other questions about off-farm employment.

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. Farm families also receive substantial income from previous investments. Still, 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 in its proposal of a "means test" of whether farm operators should receive government farm payments. 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 farm operators, it is more important than ever to monitor farm households to study how they 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 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.

The Federal Agriculture Improvement Act of 1996 placed more risk management responsibility on farmers/ranchers. Farmers were provided flexibility to adjust their farm production plans to respond to market supply and demand conditions. A key to market competitiveness is the adoption and use of cost effective practices by producers. Information about farmers' attitudes toward risk acceptance or mitigation 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, diversification, 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 is critical to the development of an income estimate for farm families that can be compared to the incomes of all U.S. households.

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.

Section L - Farm Operator

Item 1 Operation's LEGAL Status

In this item we want to record the operation's **legal** status. This does not mean how decisions are made for the operation on a day-to-day basis. Therefore, the answer to this question may be different than the answer to the question on day-to-day decision-making in the screening section of this questionnaire.

Individual (Sole or family proprietorship)

This type of operation exists when one person (operator) is responsible for making management decisions for the operation. Include partnerships which are NOT LEGALLY ESTABLISHED.

Legal Partnership

Two or more individuals are LEGALLY joined together to carry on the operation. Each partner contributes money, property, labor or skills and shares in profits or losses according to some percentage agreed upon by the partners. To be recognized as a partnership, the relationship of the partners must be LEGALLY established. Husband and wife partnerships should be classified as individual/family proprietorships unless they are legally established. Exclude joint operations which involve livestock only (with no land operated in partnership) and landlord-tenant arrangements.

Family-held Corporation

This is a legal form of incorporation in which more than 50% of the stock in the operation is owned by people related either by blood or by marriage. The operator of these operations may be paid a salary, but these operations usually report that day-to-day decisions are made by an individual or by partners.

A Non-family Corporation

This is a legal form of organization separate from its owners. It is created under the laws of individual states. For these operations, the operator is almost always considered a hired manager.

Other

If this operation is any other kind of organization not readily classified in the above-mentioned categories, enter code "5". Some examples are:

- a. Estate**-- Undivided property still in, or subject to, probate.
- b. 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.
- c. Cooperative** -- this place is operated as a cooperative. It is defined as an incorporated or unincorporated enterprise or association created and farmed jointly by the members.

Item 1a Stockholders

This question is only asked if item 1 above is a code "3" or "4".

Indicate with the appropriate code (1=Yes or 3=No), if the corporation has more than 10 stockholders.

Item 2 Major Occupation in 2000

We consider major occupation to be the occupation or work at which an individual spent more than 50% or more work time in 2000. 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.

Item 3 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 **operator's** current age.

Item 4 Year Started Making Day-To-Day Decisions

This question shows how long the operator has worked as an operator, making day-to-day decisions for **any** farm or ranch. Experience in farming can be an important indicator of financial success on the farm. The operator should enter the year that he/she began making day-to-day decisions for any farm or ranch, not just the one that we are collecting data for right now. Record the date as four digits (1953, 1985, etc.).

Item 5 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.

Enter the code representing the highest level of school completed by the **operator**. 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 6 Race or Origin

Refer the respondent to the list of Race Codes in the Respondent Booklet. The purpose of this question is to examine the relationship between the financial situation of the operation and the race or ethnic origin of the operator.

Item 7 Gender of Operator
V1 only

Record the appropriate code for the gender of the **operator**.

Item 8 Spouse Makes Day-to-Day Decisions
V1 only

This question determines if the operator's spouse is also an operator, defined as making day-to-day decisions for the farm or ranch. The purpose of this question is to determine the extent to which the farm household depended on farm employment.

If the operator and spouse are separated and the spouse does not depend financially on the operator's household, the code '2 - No Spouse' should be used.

Item 9 **Number of People in Household**
V1 only

Record the total number of people living in the operator's household on December 31, 2000. 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.

Items 10-12 Farm Business Management Plans and Management Activities

The management of farm businesses includes activities such as developing and implementing plans such as which crop and livestock to produce, the types of equipment and production systems to use, how to market, how to finance, and how to structure the ownership of the business, including whether to rent or buy land. A part of an operator's management function includes steps to plan the farm's activities as well as steps to put into action the plan that is developed. Collection of data related to business planning will enable us to identify planning strategies, processes, and actions most frequently used by farmers. Data in the Farm Business Management section of the ARMS, along with other financial performance measures, will also help us to identify the correlation between financial performance of the farm and farm management planning activities.

Item 10 Long Term Plan

A long term business plan involves the development of a set of goals or objectives for the farm that indicate where the farm will be, what it will look like and how it will operate at a future point in time (here stated as 5 years or more). It must include a clear statement (or clear idea if not written) of where the operator(s) want the farm to be in the next five years. Typically the plan will include decisions on what to produce, how to produce it, scale and methods of operation, marketing channels and linkages, financial and organizational structure. Specific items that may be considered in developing a plan are listed in item 12.

Item 10a Written Long Term Plan

Enter a code "1" if the long term plan is in a written format.

Item 11 Short Term Operational Plan

An operational plan provides specific details on how the farm business will operate over a 1 to 2 year period. The operational plan may include the year-to-year steps taken to achieve the objectives or goals included in the operator's longer-term plan. Examples of specific items that the operator(s) may consider in developing an operational plan are listed in item 12.

Item 11a Written Short Term Plan

Enter a code "1" if the short term plan is in a written format.

Item 12 General Instructions

Item 12 must be asked if the answer to item 10 or 11 in yes.

This question lists items that an operator may have considered in developing their short and/or long term business plans. Enter code '1' for the non-shaded cells in column 1 for activities that the operator(s) considered in developing his/her short term farm business plan. Enter code '1' in column 2 for activities considered in developing the operator's long term plan.

Items 13-16 Management Practices

Items 13-16 are included to obtain data on farm management practices used by farmers in operating their businesses. Questions 13 and 14 focus on marketing and purchasing practices that farmers may be using in their businesses. The types of practices will likely vary by both type and size of farm and could affect the both the level of receipts and expenses of the farm. Questions 15 and 16 are focused on production practices that farmers may be using in their crop and/or livestock enterprises. These practices may affect both the type and level of production expenses.

Each of the questions in column 2 must have an answer indicating the importance of the practice to this operation.

Each of the questions in column 3 must be answered with either a '1' indicating YES or a dash (-) indicating a NO response.

There is a column for the importance of the practice to the operation and a column to indicate if the operator is using the practice. All the questions must be completed for both columns.

For example, in item 13e, ask, "How important are the use of contracts?" Record your answer then ask, "Are you currently using contracts?"

Items 17-20 Internet Usage

Internet and computer use by farmers, as in the rest of the country, has grown rapidly in the past several years. USDA is interested in assessing which farm households are adopting this new technology and which ones are not, and the extent to which farms are relying on the internet to carry out their business transactions. Farms making purchases and sales over the internet may or may not make payment online. Aside from using the

internet as a purchasing or marketing tool, we ask about any other ways, such as gathering information or communicating with creditors and USDA agencies, that farm households are using the internet to their advantage as part of their business.

Item 17 Use of the Internet

Record a "1" if the operator used the Internet as part of the farm business and continue with item 18. If the operator does not use the Internet for the farm business, use codes 2 - 5 to record the reason why the Internet is not being used. If the code is not "1", go to Section M.

Item 18 Input Purchases in 2000

This is a screening question to determine if the operation purchased any inputs over the Internet in 2000. Offline payment for internet input purchases also qualifies.

In the event that the operation did not purchase any inputs over the Internet in 2000, check "No" and skip to item 19.

Column 1 Type of Input

Column 1 included types of inputs the operator may have purchased during the year.

Column 2 Dollars Spent

For each type of input listed in column 1, record the total dollars spent in 2000. The purchase must have been made over the Internet.

Column 3 Cost Savings

Record in terms of percent, the estimated cost savings the operator had by making the purchase over the Internet versus making the purchase through retail and wholesale businesses. If there was not a price savings, enter a '-' and write a note.

Column 4 Future Internet Activity

Record the operator's future plans for purchasing the item 1 input over the Internet. For each input purchased in 2000, a response is required for column 4.

Item 19a Crop Sales Over Internet

Record the amount received by this operation for direct sales of crops over the Internet. Offline payment for internet sales also qualifies.

Item 19b Livestock Sales Over Internet

Record the amount received by this operation for direct sales of livestock over the Internet.

Item 20 Internet Activities in 2000

Record a "1" if the operation used the Internet to perform any of the listed activities in 2000.

Each of the questions must be answered with either a '1' indicating YES or a dash (-) indicating a NO response.

Section M - Farm Household

Item 1 Screening Question for Hired Manager

The 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.

If the operator is not the hired manager for this operation, enter a code "3" and continue with item 2.

Item 2 Off-farm Work by Operator

The next four questions are used to gauge the amount of operator's off-farm work. The respondent should consider both self-employment and work for others when answering whether the operator worked off-farm.

If the operator had a non-farm job at any time during 2000, enter "1" for item 2 and continue to items 2a and 2b.

If the operator did not have an off-farm job, enter a code "3" and skip to item 3.

Item 2a Weeks Worked by Operator

Record the number of weeks the operator worked off this operation for pay in 2000.

Item 2b Average Hours Per Week Worked by Operator

For the weeks the operator worked off this operation for pay in 2000, record the **average hours worked per week**. If the operator 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 3 Off-farm Work by Spouse

Record whether the operator's spouse worked off this operation for pay at any time during 2000. Again, both self-employment and work for others should be included. If the operator's spouse work off the farm for pay during 2000, enter "1" for item 3 and continue with items 3a and 3b.

If the operator's spouse did not work off the farm for pay during 2000, enter code '3' and skip to item 4. If the operator was not married, enter code '2' proceed to item 4.

Item 3a Weeks Worked by Spouse

Record the number of weeks the operator's spouse worked off this operation for pay in 2000.

Item 3b Average Hours Per Week Worked by Spouse

Record the average hours worked per week by the operator's spouse for the weeks the spouse worked. Again the average for all jobs combined should be reported.

Item 4 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.

For the seven categories of off-farm income, record the **VALUE CODE** that represents off-farm income for the operator and all members of the operator's household in 2000.

Include:

- (1) the operator identified in screening. If the operation is a partnership, and the responding partner cannot get this information for the partner identified as the operator in screening, the responding partner should report the information for himself/herself.
- (2) the individual identified as the operator for a family corporation.

- (3) **all** other members of the 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 4a Off-farm Wages and Salaries
V1 only

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 2000 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 4b Another Farm/Ranch
V1 only

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 4d.

Item 4c Off-farm Business
V1 only

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 4d Rental of Farm Land
V1 only

Record the **Value Code** which best represents the income earned from the rental of farm land.

Include:

- (1) NET income from renting farm property
- (2) NET income from renting out an entire farm.

Include the net amount the household receives from the gross amount of farmland rental income reported in Section A, items 7 and 8. Also include rental income from farmland associated with other operations this operator or members of the household participate in. Government payments received on rented farmland should be included when calculating NET rent from farm properties. If a net loss resulted, the respondent should use the appropriate code and put a negative sign in front of it.

Include:

- (1) NET income from renting farm property
- (2) NET income from renting out an entire farm.

Item 4e Interest and Dividends
V1 only

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 4f Social Security, Disability, Military Retirement, etc.
V1 only

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.

Item 4g Other Off-farm Income
V1 only

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 4a-f) from sources other than this operation.
- (2) NET income from renting non-farm property.
- (3) royalties for oil, gas and other mineral leases.
- (4) income from private retirement plans.
- (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.

Net income from renting FARM property should be reported in item 4d.

Item 4 Total Off-Farm Income
V2, V3, V4 only

Record the **Value Code** which best represents all the cash income from off-farm sources received by the operator and all household members in 2000. If total off-farm income was negative, the respondent should use the appropriate code and put a negative sign in front of it.

Include:

- (1) off-farm pay before taxes.
- (2) net cash income from operating another farm or ranch.
- (3) net cash income from operating any other business.
- (4) net cash income from cash or share renting farm land to others, including land rented from this and all other operations.
- (5) gross income from interest and dividends.
- (6) income from disability, military retirement, Social Security, unemployment, Veteran's benefits, and other public retirement and public assistance programs.
- (7) all other non-farm sources of income.

Item 5 Other 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.

If YES, a code "1" should be entered and items 5a and 5b should be completed. If NO, a code "3" should be entered then continue with item 6.

Item 5a Number of Households Sharing Income

Record the number of households *besides the operator's* that shared in the net income of the farm operation in 2000. Do not include money paid to landlords, contractors or people who worked on the operation for wages.

Item 5b Percent of Income Received by OPERATOR'S Household

Record the percent of the operation's net income that was received by the **operator and the operator's 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 6 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 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 J. 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, 2000.

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 7 Non-Farm Debt

This question refers only to the operator's household SEPARATELY from the farm operation. Record the **VALUE CODE** which best represents the total amount of outstanding debt on December 31, 2000 (include credit card debt). Include the debt associated with the operator's house unless it was collected in Section K. 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 8 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 operator's household during 2000. Be sure living expenses for all the members of the 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 2000.

Item 9 **Minimum Family Living Expenses**
V1 only

This question refers to the minimum level of expenditure needed by the household to make ends meet. Each household can differ on what their minimum level of household consumption is. Be sure that expenses for all family members are included, but this amount should exclude 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.

Refer the respondent to the list of Household and Family Living Expenses and Value Codes in the Respondent Booklet.

Item 10 **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 household in the year 2000 from all sources (both farm plus nonfarm sources) with income received from all sources in 1999. Although the Respondent is not asked to report the total income from either 2000 or 1999, make sure that the Respondent includes income from all members of the household, and from both farm and nonfarm sources, in considering the question. If 2000 income was the same or higher in 1999 check No and skip to Item 13. If 2000 income was lower than 1999, check Yes and under item 10a enter the percentage amount of the income shortfall in 2000 compared to 1999.

Item 11 **Reason For Lower Income**
V1 only

For those households with lower incomes compared to the previous year, we ask for the principle cause of the lower income in 2000. Offer potential reasons, in order, from the list. These are related to specific conditions of either the farm or non-farm economy, or to individual reasons. If none of the reasons offered satisfy the Respondent, enter category 9 – other.

Item 12 **Compensation For Lower Income**
V1 only

For those households with lower incomes compared to the previous year, we ask for the principle way that they have coped with the income shortfall.

Offer the Respondent potential strategies, in order, from the list. These are related to specific measures taken by the household either to reduce the level of spending or increase the amount of cash available to the household. If none of the strategies satisfy the Respondent, enter category 8 – other.

Items 13-14 **General Instruction**
V1 only

The next two questions on retirement and farm business succession plans are designed to complement questions in the Farm Operator section of the questionnaire. The Farm Operator section provides demographic information about the operator, including questions that provide information about the years of experience the operator has in making day-to-day decisions for any farm or ranch. The questions are designed to be responsive to key concerns about what will happen to farms as a unit when the current operator retires. This is accomplished by obtaining information about retirement plans, and whether a succession plan exists. This information will enable us to be responsive to requests for information from policy makers concerned about the future of farm businesses.

Item 13 **Retiring Within 5 Years**
V1 only

This question in combination with item 14 will provide important information about the characteristics of operator's who plan to retire, their farm operations, and whether or not these operations are likely to be transferred intact. Use the definition of retired provided above for Section L, item 2.

Item 14 **Succession Plan**
V1 only

Succession is an important issue to farmers and policymakers. Responses to this question will provide information about farms that will be transferred intact when the current operator(s) retire.

Item 15 **Important Values**
V1 only

The success of a farm/ranch can be measured by different criteria. Record the code that indicates how important the operator thinks the items in question 15 are. The operator should rate each of these topics independently without trying to combine them. Don't go back and change an answer after you've asked another of these questions.

Read the list of answers for each item. If the operator answers using a code rather than the words, verify the answer by re-reading the explanation of the code. For example, if the operator says code 2, verify that the operator means "important". If the operator forgets the choices, read the whole list again.

Because these are opinion questions, you must be sure that you don't influence the operator's answers. Don't offer your own opinion. If the operator seems confused about the answer, re-read the item and the responses. Don't try to explain what is meant by the question; we want the operator's own opinion.

Dairy Production Practices (Sections N-W)

Sections N-W are only in the Dairy questionnaire (Version 4) and relate to production practices on the dairy enterprise.

What are these sections for? How is the information used?

Cost of production surveys are conducted for selected commodities on a rotating basis (every 4-6 years), to obtain data on production practices and the amount and costs of inputs used. The last Dairy Cost of Production survey was conducted for 1993. Since then, there has not only been change in overall economic conditions, but changes in dairy legislation that will affect farmers' decisions with regard to how they will allocate resources both within the farm unit and among farm and other competing interests. Data collected on the 2000 Dairy questionnaire will be used to describe important financial, structural, and environmental aspects of dairy production.

The 1996 Federal Agriculture Improvement and Reform Act phases out dairy price supports and provides for reform of the Federal milk marketing order system. Eliminating the guarantee of a floor under milk prices changes the magnitude and character of the risk dairy farmers face. Since 1940, policy has allowed dairy farmers in most of the country to produce whatever quantities they wished and pass them on to their cooperatives for marketing. Cooperatives could take almost unlimited quantities and sell excess output to the U.S. Department of Agriculture's Commodity Credit Corporation (CCC).

With price supports gone in the near future, the supply-balancing function of CCC purchases of butter, cheese, and nonfat dry milk will disappear. In addition, as a participant in the General Agreement on Tariffs and Trade Uruguay Round, the United States is committed to reducing border protection and to increasing access of dairy imports to the U.S. market. Consequently, milk producers will have to adjust to markets that are more dependent on the forces of supply and demand. That being the case, milk producers' business structure, management, and performance have become major issues. The ARMS will provide the only national database suitable for addressing these issues and other issues important to milk producers, researchers, and policymakers.

Section N - Dairy Screening, Inventory and Milk Production

Item 1 Peak 2000 Milk Cow Inventory

Record the largest number of dairy cows milked on this operation, **regardless of ownership**, at any time in 2000.

Item 2 Enumerator Action - 10 or more Milk Cows

We are only interested in operations that had 10 or more milk cows on the operation at any time in 2000. Therefore, if the answer to item 1 is less than 10, go to the Conclusion on the back page. If the answer to item 1 was 10 or more, continue with item 3.

Operations were selected for the Phase III Dairy survey based on the data reported in the Integrated Screening Survey (ISS). Operations that reported 10 or more milk cows (and those that indicated they raised milk cows but the number was unknown) on ISS were eligible for the Phase III Dairy survey. Therefore, if less than 10 milk cows are reported in item 1, indicate in notes why there is a difference from the ISS which indicated they had 10 or more milk cows.

Item 3 Months in Dairy Business

Record the number of months during 2000 this operation was in the dairy business.

Item 4 Years Producing Milk

The experience level of the operation is a factor which can help explain why one operation is more efficient than another. These data will also be used to identify operations that have recently entered the dairy industry and study how these new entrants differ from operations that have been in business several years.

Record the number of years this operation has been producing milk.

Item 5 Years Expecting to be Producing Milk

Information from this item will be used to identify operations soon to be exiting the dairy industry and study how these operations differ from those planning to remain in business for several years. These data, along with

information about industry entrants (item 4), will provide insight about the future structure of the dairy industry.

Enter the code which represents how long this operation expects to be producing milk.

Item 6 Dairy Cattle Inventory

In this table we get a description of the dairy operation as it existed at the beginning and end of 2000. This lets us see if the operation was expanding or reducing its size, and also gives some idea of the culling and marketing patterns the operation follows.

Item 6a Milk Cows

Record the total number of cows on hand that were being milked as of the date in column 2 or column 3. **Exclude dry cows.** Cows generally are milked for 305 days and are “dry” (not giving milk) for the remainder of the year.

Item 6b Dry Cows

Record the total number of dry cows on hand as of the date in column 2 or column 3.

Item 6c Breeding Bulls

Record the total number of breeding bulls on hand as of the date in column 2 or column 3. Include all breeding bulls and bull calves weighing 500 pounds or more that were being kept for breeding. Include "marker bulls" that were used to detect heat (estrus) in cows.

Column 2 Beginning of Year Inventory

For each category listed in column 1, enter the number of head on hand on January 1, 2000. Include milk cows, dry cows and breeding bulls that the selected operation was raising for another operation..

Column 3 Ending of Year Inventory

For each category listed in column 1, enter the number of head on hand on December 31, 2000. Include milk cows, dry cows, and breeding bulls that the selected operation was raising for another operation.

Item 7 Milk Production

Item 7a Milk Sold

Record the total number of **hundredweights** of milk the operation **produced and sold** during 2000. If milk is reported in pounds, divide the figure by 100 to get hundredweights. If milk is reported in gallons, multiply by 8.56 to get pounds and then divide by 100 to get hundredweight.

This figure will probably have to be gotten by adding up the total amounts marketed from each of the statements the operation received during the year from the co-op or other business through which the operation is marketed its milk.

Item 7b Milk Used on the Farm

Record the total number of hundredweights of milk **produced and used** on the operation during 2000. Most of this milk is usually fed to calves, but include milk produced and used for human consumption.

Item 7c Milk Wasted, Dumped or Lost to Contamination

Record the total number of **hundredweights** of milk produced on the operation that was wasted (lost when the milk lines are cleaned, etc.) or lost due to contamination during 2000.

Item 7d Enumerator Action - Total Milk Produced

Record the sum of Items 7a + 7b + 7c. Check with the operator for reasonableness.

Item 8 Average Marketing Charges Paid

Record the average amount in dollars per hundredweight (cwt) that this operation paid for milk sold in 2000. Include involuntary co-op dues. Exclude milk hauling.

Section O - Purchases and Death Loss

This section collects information on:

- Purchases
- Heifers Kept for Breeding
- Death Loss

Item 1 Purchases During 2000

The table in this item collects information for purchases of dairy animals by the operation during 2000.

Item 1a Milk Cows

Include:

- (1) All cows that have had at least one calf, regardless of breed, kept primarily to produce milk for human consumption, either for home use or for sale.
- (2) Milk cows, both dry and those being milked.
- (3) Heifers being kept for milk that have calved at least once.

Exclude:

- (1) Cows kept primarily to raise or nurse calves. These are considered beef cows.
- (2) Heifers that have not calved.

Item 1b Replacement Heifers Weighing 500 Pounds or More

Include heifers of all breeds kept primarily to produce milk for human consumption, either for home use or for sale. If they are already bred but have not calved, they should be included in this category. **Exclude any that will only be kept as nurse cows to raise calves.**

Item 1c Breeding Bulls Weighing 500 Pounds or More

Include all bulls and young males for breeding over 500 pounds purchased or placed on the operation in 2000.

Item 1d Replacement Calves Under 500 Pounds

Include all dairy animals under 500 pounds, regardless of sex, that were purchased or placed on this operation in 2000 **regardless of intended use**.

Column 2 Number of Head Purchased

For each of the four categories of dairy animals listed in column 1, record the total number of head purchased by the operation during 2000.

Column 3 Amount Spent for Purchases

Record the total dollar amount paid by the operation to purchase the dairy animals recorded in column 2. Include commissions, and other such charges paid as part of the purchases. Do not include transportation costs.

Item 2 Heifers Kept for Breeding

Enter the number of **heifers born on this operation in 2000 which were kept for breeding**. Include those which have been sold or culled but were originally intended to be used for breeding.

Item 3 Death Loss

Item 3a Death Loss of Milk Cows

Record the total number of milk cows that died on this operation during 2000. If the respondent cannot answer this question directly, it can be calculated by multiplying the milk cows on the operation times an average death rate for milk cows.

The normal death rate for milk cows is between 1 and 2 percent of the total. A death rate of more than 2 percent or no deaths at all, should be explained in notes.

Item 3b Death Loss of Replacement Heifers Weighing Over 500 Pounds

Record the total number of replacement heifers weighing 500 pounds or more that died on this operation in 2000. If the respondent cannot answer this question directly, it can be calculated by multiplying the replacement heifers on the operation times an average death rate.

The normal death rate for replacement heifers is between 1 and 2 percent of the total. A death rate of more than 2 percent or no deaths at all, should be explained in notes.

Item 3c Death Loss of Breeding Bulls

Record the total number of breeding bulls weighing 500 pounds or more that died on this operation in 2000.

Item 3d Death Loss of Calves Under 500 Pounds

Record the total number of calves weighing under 500 pounds that died on this operation in 2000.

The normal death rate for calves is between 2 and 10 percent of the total per six-month period. A death rate of more than 10 percent or no deaths at all, should be explained in notes.

Section P - Sales and Other Income

The purpose of this section is to collect information on the marketing and income patterns of the dairy operation.

Item 1 Sales of Dairy Animals

The data in this table provides information on the operation's marketing patterns of breeding stock, cull stock, breeding animals and calves.

Column 1 Type of Dairy Animals

Most of the categories in this column have been described previously. Cull cows and bulls are animals no longer used for breeding.

Column 2 Number Sold

For each category listed in column 1, enter the total number sold from this operation in 2000.

Column 3 Amount Received for Sales

Enter the total amount received (net of marketing charges) for sales of each category of dairy animal sales reported.

Column 4 Average Weight

For each category, enter the average weight of the dairy animals sold during 2000.

Item 2 Marketing Charges

Considering all the operation's sales of dairy animals in 2000, record either the average per head or total dollars paid for all commissions, marketing charges, etc. **Exclude transportation charges.**

Item 3 Income From Renting or Leasing Dairy Stock

Enter the total amount received in 2000 from renting or leasing dairy cows and/or bulls to other dairy operations.

Item 4 Income From Renting Space to Other Dairy Operations

Enter the total amount received in 2000 from renting dairy cattle housing, milking facilities, feed storage facilities, etc to other dairy operations.

Item 5 Income From Co-ops as Patronage Dividends

Enter the total amount of dividends received in 2000 from all dairy Co-ops of which you were a member.

Item 6 Income From Assessment Rebates, Refunds and Other Sources

Enter the total amount received in 2000 (e.g., payments under the Dairy Market Loss Assistance Program).

Item 7 Capital Retains Withheld by Co-ops

Enter the total amount of profits withheld by all dairy Co-ops, of which you were a member in 2000, for capital replacement and/or improvement (e.g., purchases of new equipment, land, and/or buildings; repairs to older equipment, buildings, etc.).

Section Q - Dairy Feed, Pasture, and Bedding

Feed is the most important and expensive input in dairy production, therefore it is essential we collect complete information about the operation's feed usage and expense.

Item 1 Screening Question for Purchased Feed

This is a screening question to determine if the operation purchased any feed or feed supplements for the dairy animals on this operation in 2000. Unless the operation grew all of the feed fed to the dairy animals, this question will always be "Yes".

In the unlikely event that the operation did not purchase any feed or supplements, check "No" and skip to item 2.

Column 1 Type of Feed

Show the respondent the list of Purchased Feed Type Codes in the Respondent Booklet.

Record the name and code for each type of feed or feed supplement the operation fed to its dairy animals in 2000. Exclude feed grown on the operation and fed to the dairy cattle (this is reported in item 2).

Column 2 Total Amount Fed

For each type of feed or feed supplement listed in column 1, record the total quantity fed to dairy cattle on the operation in 2000. Exclude homegrown feed.

Column 3 Unit Code

Enter the code for the unit in which the quantity in column 2 was reported.

Column 4 Frequency Code

For each type of feed listed in column 1, enter the frequency which the amount of feed in column 2 was fed.

Column 5 Total Cost of Feed

Record the total cost of each type of feed fed to dairy cattle on this operation in 2000. This total cost is the amount spent for all of 2000, rather than the amount per unit in column 4.

Column 6 Feed Storage Facility

Show the respondent the Feed Facility Type Codes in the Respondent Booklet.

For each type of feed reported, record the code which represents the type of storage facility that was used.

Item 2 Homegrown Feed

This item accounts for feed grown on this operation that was fed to the dairy cattle on this operation in 2000.

If no homegrown feed was fed to the dairy cattle on this operation, check the appropriate box and go to item 4.

Column 1 Type of Homegrown Feed

Show the respondent the Homegrown Feed Type Codes in the Respondent Booklet.

Record the name and code for each type of feed grown on this operation and fed to dairy cattle on this operation in 2000. Exclude feed that was purchased.

Column 2 Total Amount Fed

For each type of feed listed in column 1, record the total quantity fed to dairy cattle on the operation in 2000. Exclude feed purchased.

Column 3 Unit Code

Enter the code for the unit in which the quantity in column 2 was reported.

Column 4 Frequency Code

For each type of feed listed in column 1, enter the frequency which the amount of feed in column 2 was fed.

Column 5 Feed Storage Facility

Show the respondent the Feed Facility Type Codes in the Respondent Booklet.

For each type of feed reported, record the code which represents the type of storage facility that was used.

Item 3 Pasture and Grazing

This item accounts for pasture or cropland used to graze dairy cattle in 2000.

If no pasture or cropland was used to graze dairy cattle, check the appropriate box and go to item 5.

Column 2 Acres Owned

Record the number of acres owned for each column 1 crop or land type that dairy cattle grazed on during 2000.

Column 3 Acres Rented or Leased

Record the number of acres lease for each column 1 crop or land type that dairy cattle grazed on during 2000.

Column 4 Dollars Spent to Rent Pasture

If any column 3 acres were reported, record the total dollars spent to rent/lease the column 3 acres.

Item 4 Rotational Grazing Strategy

If the operation used any pastures during 2000 ask question 4. If not, go to item 5.

In a rotational grazing strategy, pastures are divided and fenced into several paddocks, with the size of the paddocks adjusted to herd size so that

livestock requirements will be met and the pasture maintained at a productive level. Under this system, the number of animals must be adjusted to the available forage and the expected time required for regrowth of the forage. For example, if during the grazing season, and average regrowth period of 30 days and a grazing period of 5 days are required, then a 35-acre area must be subdivided into 7 areas of 5 acres each. Each area is grazed intensively for 5 to 7 days and at intervals of 3 to 5 weeks. The length of the regrowth period depends primarily on time of year, moisture, soil fertility, and species.

Item 5 Bedding

This item accounts for bedding grown/produced on this operation or was obtained free that was used on this operation in 2000. Exclude any bedding that was purchased in 2000.

If no bedding was grown/produced or obtained free and used on this operation, check the appropriate box and go to Section R.

Column 1 Type of Bedding

Column 2 Amount Used

For each type of bedding listed in column 1, record the total quantity used on this operation in 2000 for the dairy cattle.

Column 3 Unit Code

Enter the code for the unit in which the quantity in column 2 was reported.

Column 4 Frequency Code

For each type of bedding listed in column 1, enter the frequency which the amount of bedding in column 2 was used.

Column 5 Market Value of Bedding

If the bedding was purchased, the purchase cost of the bedding used should be recorded as the market value. If the bedding was homegrown or obtained free-of-charge, record the operator's best estimate of the market value of the bedding used. Make sure to record the value in the same unit/frequency that was reported in columns 3 and 4.

Section R - Housing

Housing on many dairy operations is a major capital expenditure. Information about the housing facilities will help to explain the cost and expenditure profile of the operation and provide insight into the efficiency of various types of operations.

The table in this section will only be blank in the extremely rare situation in which all dairy cattle remained outside for 24 hours a day without shelter.

Item 1 Dairy Housing Facilities

Information will be collected on facilities used for gestating cows and heifers, for calving, as a nursery, and for feeding dairy cattle (column 1). Exclude milking facilities (this is to be reported in Section S).

If dairy cattle are kept in pastures or dirt/dry lots, record any structures in the lots used for dairy shelters.

Column 1 Types of Facilities

Show the respondent the Dairy Facility Type Codes in the Respondent Booklet.

Enter the code for each type of facility used by the operation. More than one facility of the same type can be included on a single line if it has the same frame type, floor type, and manure handling system (columns 3, 4, and 5 are the same).

Column 2 Number of Facilities

Record the number of facilities of this type on this operation. This column allows for more than one type of the same facility to be recorded on one line.

Column 3 Frame Type

Show the respondent the Frame Type Codes in the Respondent Booklet.

Enter the code which represents the type of frame of the facility listed in column 1. Be sure to record the type of frame, and not the type of siding.

Column 4 Floor Type

Show the respondent the Floor Type Codes in the Respondent Booklet.

Enter the code which represents the type of floor of the facility indicated in column 1.

Column 5 Manure Handling Method

Show the respondent the Manure Handling Codes in the Respondent Booklet.

Enter the code which represents the type of manure handling method that was used in this facility. If the facility did not have a method for handling manure, use code "37 - other".

Column 6 Capacity

For each of the facilities listed in column 1, enter the total number of head that these facilities can house. If the operation has more than one facility of the same type (column 2 is greater than 1), enter the combined capacity.

Column 7 Average Age of Facility

Enter the number of years since the facility(ies) listed in column 1 was last remodeled or renovated. If the facility has not been remodeled or renovated, record the current age (in years) of the structure. If the facility is less than one year old, enter a "1".

Section S - Milking Facilities

Milking Facilities on many dairy operations is also a major capital expenditure. Information about the milking facilities will help to explain the cost and expenditure profile of the operation and provide insight into the efficiency of various types of operations.

Item 1 Dairy Milking Facilities

Information will be collected on facilities used for milking. Exclude housing facilities (this was reported in Section R).

Column 1 Types of Facilities

Show the respondent the Milking Facility Type Codes in the Respondent Booklet.

Enter the code for each type of facility used by the operation. More than one facility of the same type can be included on a single line if it has the same frame type, floor type, and manure handling system (columns 3, 4, and 5 are the same).

Column 2 Number of Facilities

Record the number of facilities of this type on this operation. This column allows for more than one type of the same facility to be recorded on one line.

Column 3 Frame Type

Show the respondent the Frame Type Codes in the Respondent Booklet.

Enter the code which represents the type of frame of the facility listed in column 1. Be sure to record the type of frame, and not the type of siding.

Column 4 Floor Type

Show the respondent the Floor Type Codes in the Respondent Booklet.

Enter the code which represents the type of floor of the facility indicated in column 1.

Column 5 Manure Handling Method

Show the respondent the Manure Handling Codes in the Respondent Booklet.

Enter the code which represents the type of manure handling method that was used in this facility. If the facility did not have a method for handling manure, use code "37 - other".

Column 6 Number of Stalls

For each of the facilities listed in column 1, enter the total number of stalls in all of these facilities. If the operation has more than one facility of the same type (column 2 is greater than 1), enter the combined number of stalls.

Column 7 Number of Milking Units

For each of the facilities listed in column 1, enter the total number of milking units in all of these facilities. If the operation has more than one facility of the same type (column 2 is greater than 1), enter the combined number of milking units.

Column 8 Average Age of Facility

Enter the number of years since the facility(ies) listed in column 1 was last remodeled or renovated. If the facility has not been remodeled or renovated, record the current age (in years) of the structure. If the facility is less than one year old, enter a "1".

Item 2 Times Per Day Herd Milked

For 2000, enter the total number of times the herd was milked in a 24-hour period. The range for this number is between 1 and 3.

Item 3 Hours Milking System in Operation

For 2000, enter the total hours the milking system was in use during a 24-hour period. The range for this number is between 1 and 24.

Item 4 Frequency Milked Picked Up

For 2000, enter the total number of times milk was picked up from the farm. The code for this number is 1 for once a day, 2 for every other day, and 3 for more than once a day.

Item 5 Number of Bulk Tanks

For 2000, enter the total number of bulk tanks used to store milk.

Item 6 Automatic Takeoffs

For 2000, enter a 1 if the milking machine automatically removed the teat cups once the milk flow stops.

Item 7 Holding Pen with Udder Washer

For 2000, enter a 1 if the operation used automatic udder washing devices that spray a sanitizing solution to clean the udder before milking.

Item 8 Computerized Milking System

For 2000, enter a 1 if the operation used a computerized milking system that permits electronic data collection (e.g., pounds of milk daily, percent milkfat, percent protein, somatic cell count, weight, etc.).

Item 9 bST Injections

Enter the number of cows injected one or more times with bST (the hormone bovine somatotropin) in 2000.

Item 9a Times Injected Per Month

If the answer to 9 is greater than 0, then ask how many times per month the cows in question 9a were injected with bST.

Item 9b Increase of Milk Production

If the answer to 9 is greater than 0, then ask for the percentage increase in milk production attributed to the use of bST. If unsure, ask for the operator's best estimate. If necessary, ask for the average milk production before (Qbefore) and after (Qafter) using bST and compute the percentage increase as:

$$\text{percentage increase} = [(Q_{\text{after}} - Q_{\text{before}})/Q_{\text{before}}] * 100$$

Item 10 Acres Used For Dairy Operation

Enter the total number of acres of land used for the dairy enterprise during 2000. Include acres used for pasture, corrals, building sites, manure storage, etc. Exclude acres used for crop production to feed and bed the dairy cattle and acres to which dairy manure was applied.

Section T - Vehicles, Trucks and Tractors

The purpose of this section is to account for all trucks, tractors, and other motor vehicles used for dairy production on this operation in 2000.

Include all trucks, tractors, and other motor vehicles owned, rented, leased, or borrowed and used for activities associated with dairy production such as feed handling, manure handling and spreading, and hauling dairy cattle.

Exclude anything provided by custom operators and any vehicles, trucks, and tractors used to grow feed on this operation even if the feed was fed to the dairy animals.

VEHICLE USE

Column 1 Vehicle Type

Two categories of vehicles are pre-coded. Line (a) accounts for all pick-ups, cars and sport utility vehicles. Line (b) accounts for all terrain vehicles (ATV's), carts, and motorcycles.

Column 2 Number of Vehicles

For the categories listed in column 1, enter the total number of vehicles used on the operation for dairy production in 2000.

Column 3 Percent for Dairy Production

Record the percent of the total farm use of the vehicles reported in each line that was for dairy production.

TRUCK USE

Column 1 Truck Type

Record the make and model of each truck used on the operation in 2000 for dairy production. Exclude pick-up trucks (they should be recorded above under Vehicle Use).

There is no coding associated with the trucks listed in this column. This is merely an aid to help you and the respondent identify each truck used in the dairy production on this operation.

Column 2 Fuel Type

For each truck listed in column 1, record the code which represents the type of fuel used.

Column 3 Size of Truck

For each truck listed in column 1, record the code which represents the size of the truck as identified by the number of axles.

Column 4 Percent for Dairy Production

Record the percent of the total farm use of each truck reported in column 1 that was for dairy production.

TRACTOR USE

Column 1 Tractor Type

Record the make and model of each tractor used on the operation in 2000 for dairy production.

There is no coding associated with the tractors listed in this column. This is merely an aid to help you and the respondent identify each tractor used in the dairy production on this operation.

Column 2 Size of Tractor

For each tractor listed in column 1, record the code which represents the size of the tractor as identified by the codes listed.

Column 3 PTO Horsepower

For each tractor listed in column 1, record the power take-off (PTO) horsepower rating. If the operator is unsure about the PTO rating, record his best estimate. Be sure the make and model are correctly listed in column 1 so the State Office can look up the PTO rating if it is unknown.

Column 4 Fuel Type

For each tractor listed in column 1, record the code which represents the type of fuel used.

Column 5 Percent for Dairy Production

Record the percent of the total farm use of each tractor reported in line 1 that was for dairy production.

Section U - Machinery and Equipment

The purpose of this section is to get a listing of the machinery and equipment this operation used on the dairy enterprise in 2000. Machinery and equipment are capital items in which most operations have fairly large investments so it is important to allocate the appropriate portion to the production of dairy cattle and milk.

Item 1 Machinery and Equipment Used

This table lists all the machinery equipment used on the dairy operation in 2000. Do not list machinery and equipment unless they were used on the dairy enterprise.

Columns 1 & 2 Machinery and Equipment Type and Code

Show the respondent the list of Feed Handling Equipment Codes, Manure Handling Equipment Codes, and Other Machines and Equipment Codes in the Respondent Booklet.

Record the name (column 1) and code (column 2) of each piece of machinery or equipment used on the operation for the dairy enterprise. This includes feed handling equipment, manure handling and spreading equipment, scales, portable loading ramps, sprayers, trailers, generators, alarm systems, pressure washing equipment, etc.

If the operation had more than one of the same type of equipment or machinery, they can be listed on the same line by coding column 3 with the number of the same items.

Exclude machinery and equipment used to grow crops on the operation even if the feed was fed to the dairy animals.

Column 3 Number of Column 1 Items

Enter the number of machines or pieces of equipment of the same type recorded in column 1.

Column 4 Percent for Dairy Production

Record the percent of each item reported in column 1 that was for dairy production.

Section V - Dairy Manure

The primary purpose of this section is to get information on the methods and facilities used to handle or dispose of dairy manure. Dairy manure may be considered both a waste product and a fertilizer by-product of dairy production. As a fertilizer material, it can provide income to the operation and can also reduce the operation's fertilizer expenditure. As a waste material, the cost of handling it is an expense to the operation. Also, manure handling procedures and facilities are of interest because of the potential (real or perceived) environmental impact they may have on water resources and rural communities.

Item 1 Manure Handling Facilities

In this table information will be collected about the type of dairy manure facilities used, the construction of those facilities, and the frequency with which manure is removed.

This item begins with a screening question to determine if the operation has manure storage facilities. The overwhelming majority of dairy operations will have these facilities. The only time you may encounter an operation without manure storage facilities is a relatively small operation with the dairy cattle primarily on pastures or dirt lots. In the unlikely event that the operation does not have manure storage facilities, check "No" and go to item 2.

Column 1 Type of Manure Storage Facilities

Show the respondent the list of Manure Storage Type codes in the respondent booklet.

Enter the name and the appropriate code of each manure storage facility this operation has for the dairy. If there are more than one of the same type of facility, they can be recorded on the same line by coding column 2 with the number used.

Column 2 Number of Facilities

Enter the number of manure storage facilities of this type recorded in column 1.

Column 3 Capacity

Enter the total storage capacity of the item listed in column 1. If the operation has more than one of the same type of facilities accounted for on the same line (column 2 is greater than 1), record the total capacity of all structures.

If the respondent is unable to provide the storage capacity of lagoons, ask for the acres covered with lagoons and the average lagoon depth. Use the work area provided above the table to compute the acre feet capacity.

Column 4 Unit

Record the unit code of the capacity reported in column 3.

Column 5 Construction Material of Facility

Show the respondent the list of Manure Storage Construction Material Codes in the respondent booklet.

Record the code which represents the type of material the facility indicated in column 1 is made of. If lagoons are used, record the material code of the lagoon lining.

Column 6 Average Age of Facility

Record the average age (in years) of the facility identified in column 1. If more than one facility of the same type is reported on the same line (column 2 is greater than 1), record the average age of all the facilities.

Column 7 Frequency of Manure Removal

Record the average time, in months, that the operation goes without removing manure from the facility indicated in column 1.

Item 2 Store or Stacked Manure

Enter a code "1" if any manure was stored or stacked in an open area where dairy cows reside.

Item 3 Location of Dairy

This item collects information on the location of the dairy relative to houses and drinking water wells.

For each of the items 3a-3b, record the distance of the dairy from the item indicated. In the first column record the distance and in the second column record the unit code associated with that distance.

If the operation has more than one site on its dairy operation, consider the dairy site closest to the item of interest.

Item 4 Dairy Manure Applied on This Operation

If the operation did not apply dairy manure to any of the acres operated in 2000, skip to item 13.

Item 5 Acres of Cropland Dairy Manure was Applied To

Record the number of Cropland acres, **on this operation**, that dairy manure was applied to during 2000. If manure was applied to the same acres more than once during the year, count these acres only once.

Item 5a Crop Manure Applied To

Specify the crop planted on the majority of the acres the dairy manure was applied to. The State Office will fill in the appropriate code in the Office Use box.

Item 6 Acres of Pastureland and Hay Land Dairy Manure was Applied To

Record the number of pastureland and hay land acres, **on this operation**, that dairy manure was applied to during 2000. If manure was applied to the same acres more than once during the year, count these acres only once.

Item 7 Furthest Distance Dairy Manure Hauled/Pumped

Record the furthest distance dairy manure was hauled or pumped to be applied on the recorded item 5 or item 6 acres. Record the distance in tenths of miles.

Items 8 Reducing Commercial Fertilizer Application

If the operation applied commercial fertilizer to any of the same (item 5 or item 6) acres on which dairy manure was also applied, this item records if commercial fertilizer application rates were reduced on those fields. Enter a code "1" if application rates were reduced, a code "2" if commercial fertilizer was not applied on the item 5 or item 6 acres, or enter a code "3" if the application rates were not reduced.

Item 9 Written Nutrient Management Plan

Enter a code "1" if this operation follows a written nutrient management plan for the acres which dairy manure is applied.

Item 10 Manure Application

This item records in which form the dairy manure was applied **on this operation**. Record the percent of the total dairy manure in 2000 that was either applied in solid form, applied in semi-solid form, applied in liquid form, or not applied at all. The sum of the percents in items 10a + 10b + 10c + 10d must equal 100.

Item 11 Solid/Semi-Solid Manure Incorporation

If any dairy manure was applied in solid or semi-solid form (item 10a or 10b is greater than zero) then ask this question. Otherwise, skip to item 12.

Record the percent of the solid dairy manure applied on this operation that was incorporated within 24 hours.

Item 12 Liquid Manure Incorporation

If any dairy manure was applied in liquid form (item 10c is greater than zero) then ask this question. Otherwise, skip to item 13.

Record the percent of the liquid dairy manure applied on this operation that was incorporated within 24 hours.

Item 13 Manure Testing

If the operation tested the dairy manure for nitrogen and/or phosphorus record a code "1" in the appropriate item.

Item 14 Manure Removed From This Operation

There are basically two ways dairy manure can be disposed of – either by using it on the operation or by removing it from the operation. The last few questions have focused on manure usage on the operation. This item collects information about manure that was removed from this operation.

The first question records the percent of dairy manure that was removed from this operation in 2000. This would include manure that was sold, hauled off, or given away. If no dairy manure was removed from this operation then go to item 16.

Item 14a Manure Sold

Of the total dairy manure removed from this operation, record the percent that was sold.

Item 14a (1)

Record the dollar amount this operation **received** for selling dairy manure in 2000.

Item 14b Manure Hauled Off

Of the total dairy manure removed from this operation record the percent that was hauled off the operation for a fee. Exclude manure that was given away free of charge.

Item 14b (1)

Record the dollar amount this operation **paid** to have dairy manure removed from this operation in 2000.

Item 14c Manure Given Away

Of the total dairy manure removed from this operation record the percent that was given away free of charge.

Items 14a, 14b, and 14c should account for all the dairy manure removed from this operation in 2000 therefore the sum of these items must equal 100 percent.

Item 15 Arranging for Manure Removal

Enter a code "1" if a broker or other third party arranged for the manure to be removed from this operation. Only ask this question if manure was removed from this operation in 2000.

Item 16a Amount Spent to Control Odor

Record the total dollar amount this operation spent to control dairy odor on this operation by using manure additives or by any other means. Include expenses for controlling odor in manure handling facilities, dairy buildings, etc.

Item 16b Amount Spent on Fees, Permits, etc.

Record the total dollar amount this operation spent in 2000 on fees, permits, licenses, etc. related to manure management on this dairy operation.

Item 17 Manure Dust Control

Enter a code "1" if any practices were used to control manure dust on this operation.

Section W - Dairy Herd Management

This section collects information about management practices used on the dairy operation. Information from this section will be used to measure the extent to which dairy producers are using specific practices, and to examine how the use of specific practices is related to milk production costs and returns.

Items 1-10 General Instructions

Each of the questions in these items must be answered with either a "1" indicating YES or a dash (-) indicating a NO response.

For example, in item 4, ask, "Did you use preventative medicine and practices to maintain herd health?" If YES, record a "1" for the answer.

Section X - Irrigation

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

This section is only asked in Version 2 (Rice) and Version 3 (Sugarbeet).

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 2000?

Enter code '1' for operations that irrigated any cropland, alfalfa, other hay or pastureland in 2000.

Include any land that was privately owned or rented and land rented from a public agency which received irrigation as part of the farming operation for this farm in 2000. Exclude irrigation of home gardens.

If no cropland, alfalfa, other hay or pastureland was irrigated in 2000, go to Section Y (for Sugarbeet Version) or to Section Z (for Rice Version).

Item 2 Irrigation Table

This item records specific crops irrigated on the operation during 2000.

ENUMERATOR INSTRUCTION

Refer back to Section B, page 4. For each crop harvested during 2000 (in item 1), determine if it was irrigated and list the crops irrigated in Column 1 of Item 2, Section X - Irrigation.. Then, for each crop irrigated, go across the table and complete columns 2 - 9. 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 2000 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

The Crop Code will be entered in by the State Office

Column 3 Harvest Acres Irrigated

Report the irrigated, harvested acreage **to the nearest whole acre** for all irrigated crops, except for tobacco. Irrigated, harvested tobacco 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 as all wheat, regardless of 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 2000.
- (2) Irrigated acres intended for harvest in 2000 even if harvest was delayed until 2001 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 1999 crops not harvested until 2000 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.

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.

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 2000 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 Acre-Inches of Water Applied Per Acre

Record the average acre-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 acre-inches per acre. One acre-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, divide by 12 to obtain acre-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 (column 3).

**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.

Item 3 Number of Irrigation Wells Used in 2000

Record the number of irrigation wells used on the farm in 2000. Include all types and models actually used for irrigation. EXCLUDE wells used for purposes other than irrigation and wells used only for non-farm uses. If no irrigation wells were used, go to item 6.

Item 4 Number of Wells Used With Backflow Prevention Devices

Record the number of wells on the farm which used backflow prevention devices.

When chemicals are applied to the field through irrigation water, potential water-source contamination problems may occur due to accidental backflow of water containing chemicals, the accidental injection of chemicals, or both, into the water source. Backflow prevention devices involve the use of check valves and vacuum relief valves on the irrigation pump system that prevent water containing chemicals from siphoning into the water source when the irrigation pump stops. Backflow prevention may also involve interlocking the chemical injection system and the irrigation pump so that the injection of chemicals stops when the irrigation pump stops in order to prevent accidental injections.

If no wells with backflow prevention devices were used, go to item 5.

Item 4a Acres Irrigated From Wells With Backflow Prevention Devices

Record the number of harvested acres irrigated using water from the wells identified in Item 4.

Item 5 Number of Wells Used With Water Meter or Water-flow Measurement Device

Record the number of wells on the farm which used a water meter or water-flow measurement device.

A water meter, or water-flow measurement device (often referred to as a flowmeter), generally consists of a propeller-driven, flow-measurement device positioned in the center of the flowstream of the irrigation system's water-delivery pipe, but with an attached external flow-measurement unit (sometimes called a "totalizer") which records the total quantity of water flow. The flow-measurement unit may measure water quantity in terms of gallons, acre feet, acre inches, cubic feet, etc.

If no wells with water meters or water-flow measurement devices were used, go to item 6.

Item 5a Acres Irrigated From Wells With Water Meter or Water Measurement Devices

Record the number of harvested acres irrigated using water from the wells identified in Item 5.

Item 6 Additional Management Use of Irrigation System

Record the number of acres irrigated for each purpose listed in Items 6a-e. These need not sum to anything. All may be zero. Enter "DK" for Don't Know if the respondent used a practice, but does not know on how many acres.

Item 7 Management Practices Table

This item determines respondent familiarity with, or use of, several water management techniques.

Column 2 Management Practices code

Be sure to have the respondent refer to the Management Practice Code List in the Respondent Booklet. Determine respondent's level of familiarity with each water management technique identified in items 7a-c. Record the selected code. If code = 6, then proceed to column 3. If code does not equal 6, then go to the next row.

Column 3 Acres irrigated

For respondents who are currently using the technique and will continue to use (column 2 = code 6), record the number of harvested acres irrigated using the technique in 2000 in column 3.

Item 8 Improvements to existing irrigation systems

Enter code '1' for operations that made improvements in 2000 to existing irrigation systems. Include upgrades or new equipment, but do not include maintenance. Irrigation system upgrades may involve improvements such as switching a center-pivot system from using high-pressure sprinklers to using drop-tubes with attached low-pressure sprinklers. A new irrigation system may involve an investment such as switching from a gravity-flow, gated-pipe system to a low-pressure, sprinkler irrigation system.

If no improvements were made in 2000, go to item 9.

Item 8a Acres irrigated using improvements

Record the number of harvested acres irrigated in 2000 using the improvements identified in item 8.

Item 9 Offer to purchase water or water rights

Check yes (and continue to item 9a) for operations where someone made an offer to purchase water or water rights in the past five years (since January 1996). If no offers were received in the past five years, or the respondent does not know if offers were received, go to item 10.

Item 9a Purchaser's intended use

Determine the purchaser's intended use for the water. Use code 5 if the respondent doesn't know.

Item 10 Number of years water rights claims caused reduction or discontinuation of crop irrigation

Enter the number of years (in the last 10, since January 1991) in which someone with senior water right claims caused the respondent to reduce or discontinue crop irrigation for the farm. Acceptable responses are 0 through 10

Section Y - Sugarbeet Deductions and Credits

Purpose

This section is designed to get information about expenses and allowances associated with harvesting, hauling, and marketing sugarbeets, and the sugar content of the beets. Much of the information for this section will come from the respondent's settlement sheets/statements from the mill/processor. Some items listed can be both deductions and credits. This section also collects information on the use of co-op shares in sugarbeet production, and on participation in the 2000 sugarbeet payment-in-kind program.

Item 1

Column 2 Deductions

For each item listed in column 1 (and not shaded in column 2), enter the total deduction (charge) withheld from the grower's check. The operation may not have had deductions for all of the items listed.

Column 3 Credits

For each item listed in column 1 (and not shaded in column 2), enter the total credit (allowance) given to the grower. The operation may not have received credits for all of the items listed.

Item 2 Owned Co-op Shares

Sugarbeet growers in some areas may be required to either own or rent (indirectly) co-op shares for marketing their sugarbeets. Operations can have either owned or rented shares, or both, or may be in an area where co-op shares are not required. If the operation owned co-op shares, ask items 2a and 2b.

Item 2a Market value of owned shares

Enter the operator's best estimated of the current market value per acre of the owned shares.

Item 2b Acres Planted With Owned Shares

Enter the total number of sugarbeet acres planted with owned shares.

Item 3 Joint Venture or Co-grower Arrangements

If the operation had a joint venture or co-grower arrangement to use another operation's co-op shares enter a '1' and ask items 3a and 3b.

Item 3a Payment For Using Shares

Enter the total payment per acre for using another operation's co-op shares.

Item 3b Acres Planted Under Arrangement

Enter the total acres that were planted to sugarbeets under this arrangement.

Item 4 Sugar Content

Record to the nearest hundredth of a percent the average sugar content of the 2000 sugarbeet crop. Sugar content information is printed on the operator's settlement statement, and usually varies between 10.00 and 20.00 percent. If the settlement statement has figures for both "percent sugar" and "percent sugar paid" record the figure for "percent sugar paid." If the operator has more than one settlement statement, make notes about the sugar content and total tons delivered in each statement. A weighted average estimate of the sugar content needs to be computed.

Item 5 Payment-in-Kind Program

A payment-in-kind program was effective for sugarbeets in 2000. PIK programs generally require participating growers to abandon (i.e. destroy) part of their acreage in exchange for certificates of ownership for surplus commodities owned by the Federal government. This is a voluntary program therefore not all producers participate.

Item 5a Value of the Payment-in-Kind Received

Record the total dollar value of the sugarbeet payment-in-kind received for participating in the program.

Item 5b Acres Abandoned for Payment-in-Kind

Record the total sugarbeet acres that were abandoned (i.e. destroyed) in order to participate in the program.

Section Z - Rice Marketing

Item 1 **Rice harvested from this operation in 2000**

Record the total rice harvested from this operation in 2000 and the yield per acre by type (long grain, medium grain, short grain). The sum of the harvested acres for the three types of rice recorded in a, b, and c must equal the total rice harvested acres in section B, item code 0135.

Item 2 **Marketing and Storage Methods**

For sales through December 31, 2000 --

Record the respondent's percentage breakout of the way the 2000 rice crop was marketed using the 6 categories listed -- CCC loan, basis contract, cash sale, fixed price contract for deferred delivery (cash forward contract), deferred or delayed price contract, and minimum price contract. Record these percentages in a-f. Do not include any sales that were made between January 1, 2001 and the time of the survey.

For crop not sold by December 31, 2000 –

Record the percent of the 2000 rice crop that was stored for marketing after December 31, 2000.

Record this percentage in g. Include any sales that occurred between January 1, 2001 and the time of the survey.

The sum of the percentages (a+b+c+d+e+f+g) must equal 100 percent.

Item 3 **Marketing Channels**

Record the respondent's percentage breakout of the channels used in marketing the 2000 rice crop using the 8 categories listed – farmer-owned cooperative, public sale, grain dealer or broker, rice mill, direct food packager, rice processor, brewer, and exporter of rough rice. Record these percentages in a-h.

Record the percent marketed in each channel of the 2000 rice crop that was marketed as of December 31, 2000. This corresponds to the marketings reported in item 2. For example, say a producer marketed 50 percent of the 2000 rice crop as a cash sale to a rice mill prior to December 31, 2000, and stored the remaining 50 percent. IC 1878 would be recorded as 50, IC 1882 would be recorded as 50, and IC 1886 would be recorded as 100. This means that 100 percent of 50 percent of the rice crop was marketed to a rice mill.

The sum of the percentages (a+b+c+d+e+f+g+h) must equal 100 percent.

Item 4 Marketing tools for the 2000 rice crop

For each of the 3 tools listed (put option purchase, futures hedge, and hedge to arrive contract) record a yes answer as 1. Record these answers in a, b, and c.

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 2001. 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 MMDD01 format on the lines provided in the date cell. For example, if the interview was completed on March 6, 2001, enter 3 06 in the date cell. The year 01 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!!!