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Agricultural
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Management
Survey (ARMS)

Phase III – Cost and Returns
Report

Interviewer's Manual

Chapter 1 - ARMS Purpose

The ARMS Integration

The Agricultural Resource Management Study (ARMS) replaced the former Cropping Practices Survey (CPS) and the Farm Costs and Returns Survey (FCRS) in 1996. The initiative to combine these surveys came from a growing need for more information to allow detailed examination of the relationship between various production practices (such as chemical and tillage use) and farm financial conditions. Another important factor leading to the ARMS integration was to improve the efficiency of data collection by combining identical information collected in the CPS and FCRS into one survey.

Data collected in the 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.

Data Collection Phases

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

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

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

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

Some Phase II respondents 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.

Specific Uses of Data from the 1997 ARMS Phase III

Following are some specific examples of how data from the 1997 ARMS Phase III were used to address numerous issues.

Small Farms

The National Commission on Small Farms made recommendations for shaping the future of American agriculture based on information that farms have grown larger and more centralized since 1979. The Commission outlined recommendations for saving family farms using information on agricultural assets, participation in farm programs, management characteristics, marketing, household net worth, and levels of household income.

The Small Farm Commission used farm and household data to analyze potential incentive programs for small farms.

The USDA's Family Farm Report is done every year and tracks information about family farms including program availability, assessment of how tax laws may affect the structure and investment opportunities for family farms, technological developments, credit needs, economic policies, and trade policies.

Farm Service Agency (FSA) loan programs were developed for small farms using data on farm operator debt and farm sales information.

Risk management was studied by the Farm Service Agency (FSA) using data on agriculture structure, supplier information, size of farms, level of management, and sources of information data in order to provide risk management advice to small farms.

Agriculture Business

Insurance programs were developed to be more accessible to all farmers based on data about their insurance needs.

Strategies for debt and asset restructuring were developed by the Farm Service Agency (FSA) using ARMS data.

Commodity Specific

Programs like the Conservation Reserve Program (CRP) for wheat producers were reviewed and improved based on national and state level information on prices, costs, farm income, and decisions to enroll acreage in the CRP.

The Secretary of Agriculture presented information to the White House showing the financial pressures on cattle producers were increasing due to factors such as competition from other meat sources, overproduction, poor weather, and increased feed costs. Some actions taken to stabilize the cattle market due to this information include expanding beef demand through export programs, permitting haying and grazing on Conservation Reserve Program (CRP) acres, and allocating additional funds to USDA's Emergency Loan Program.

Credit programs for cattle and grain farms provided by the Farm Service Agency (FSA) were expanded and enhanced based on information on the distribution of farm debt and household income by sales class.

Regional production simulation models were constructed using information on dairy farms by production region, size, and production practice to estimate effects of prices, feed costs, and weather conditions.

The impacts of deregulation of the dairy industry were analyzed to show that the effects would be greatest on small and medium sized farms.

Disaster Relief Programs

Assistance was offered to the cattle industry after drought situations occurred in specific areas of the country that were also affected by low cattle prices and high feed costs.

Congress and Government Agencies

Information on the increased financial pressures on dairy farmers was given to Congress, showing there were low milk prices, high feed prices and tight supplies of hay and forage.

Data provided to Congress showed that large dairy operations with relatively narrow profit margins and high debt levels would experience problems in meeting principal and interest payments as a result of an extended period of low prices and lower than anticipated income.

The GAO researched demographic and finance data specific to women and other minority farmers in order to provide suggestions and guidelines to USDA, FSA and other farm related agencies on how to increase minority presence and financial stability in agriculture.

Tax Laws

Impacts of a BTU fuel tax on farmers were analyzed using financial and production information. Estate tax, gift tax, and capital gains tax law reforms were made in favor of most farmers based on analysis of average net worth by size of farm and type of farm, household assets, tax costs, production practices, and crop cost estimates.

Economic Indicators

Income estimates are used as one component for determining Gross Domestic Product (GDP) and for allocating funds to states. The prices paid index calculation requires an estimate of interest charged on a per rate basis for farm mortgage debt secured by real estate and non-real estate, and household family living expenditures.

Other

The effects of a merger of railroad companies on farmers in certain districts were studied using cost, and crop and production practices information in specific counties. Examination of regional cost differences across states, fertilizer use, crop insurance, and efficiency of growers was done using commodity specific cost of production data. This was used by university researchers to look at regional differences and similarities across the United States including production, financial condition of farm borrowers, farm size, crop insurance use and the amount of debt versus assets.

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. The legislative background on use of cost estimates by Congress are described in Exhibit 1 at the end of this chapter. Exhibit 2 displays the law mandating costs of production estimates.

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. Exhibit 5 describes the Commission in more detail.

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. (See Exhibit 3 at the end of this chapter.) 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.econ.ag.gov>

NASS publishes two reports from ARMS. The first one is called Agricultural Chemical Usage - Field Crops. This report, from data collected in the 1998 ARMS Phase II, will be released in May 1999. The second report is the Farm Production Expenditures. The report, compiled from the 1998 ARMS Phase III will be released in July 1999. 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.

Exhibit 1

Legislative Background of Cost of Production Estimates

- 1973 Cost of Production Study (see Exhibit 2)
- 1977 Estimates were to be used directly in adjusting target prices for wheat, corn, cotton, and rice.
- 1978 Emergency Farm Act modified the 1977 Act to provide that when set-aside programs were in effect the adjustments in target prices was to be based on costs of set-aside.
- 1981 Estimates were to be used only indirectly as guides to adjusting target prices for wheat, corn, cotton, and rice; for peanuts, estimates were used directly in setting support levels.
- Established a National Agricultural Cost of Production Standards Review Board comprised of 11 members appointed by the Secretary. Seven members are farmers who produce at least one major commodity, three members have extensive knowledge of production costs by virtue of their training and experience, and one member represents the Department. The responsibility of the Board is to review the adequacy, accuracy and timeliness of methods used by the Department.
- 1985 Estimates are to be used in establishing support levels for peanuts. If a wheat marketing quota is established, estimates are to be used to set loan rates and target prices. Estimates are to be used as guides to establish support levels for sugar.
- 1990 Cost of Production Review Board extended with modifications to membership requirements.
- 1995 Review Board authorization expired September 30, 1995.
- 1996 FAIR Act continues 1973 legislation but excludes use of estimates for setting peanut and sugar support rates. The tobacco support programs are continued by prior legislation and are not affected by this Act.

Exhibit 2
Cost of Production Study

United States Code, Title 7, Chapter 35A, Subchapter II
1441a. Cost of production study and establishment of current national weighted average cost of production.

The Secretary of Agriculture, in cooperation with the land grant colleges, commodity organizations, general farm organizations, and individual farmers, shall conduct a cost of production study of the wheat, feed grain, cotton, and dairy commodities under the various production practices and establish a current national weighted average cost of production. This study shall be updated annually and shall include all typical variable costs, including interest cost, a return on fixed costs, and a return for management.

Exhibit 3

References to Parity in Statutes Currently in Effect

Agricultural Adjustment Act of 1933, as reenacted and amended by the Agricultural Marketing Act of 1937: Sec. 2 (7 USC 602) & Sec. 8 (USC 608c) - Requires price parity comparisons in administering marketing orders for agricultural commodities.

Agricultural Adjustment Act of 1938, as amended: Sec. 301 (7 USC 1301) - Defines terms related to parity.

Agricultural Act of 1949, as amended:

Sec. 106 (7 USC 1445) - Sets tobacco price support level.

Sec. 201 (7 USC 1446) - Sets honey price support level.

Sec. 401 (7 USC 1421) - Authorizes price support programs.

Agricultural Act of 1954, as amended: Sec. 703 (7 USC 1782) - Sets wool and mohair price support levels.

Foreign Assistance Act of 1961, as amended: Sec. 604 (22 USC 2354) Prevents procurement of any agricultural commodity or product outside the United States when its domestic price is less than parity.

Food and Agriculture Act of 1977: Sec. 1002 (7 USC 1310) - Establishes loan levels at 90% of parity for certain commodities when export sales are suspended because of short supply determinations.

Agriculture and Food Act of 1981: Sec. 007 (7 USC 4103) - Authorizes review of parity formula by the National Agricultural Cost of Production Standards Review Board. Sec. 1204 (7 USC 1736j) - Sets price support at 100 percent of parity when national security or foreign policy interests mandate an agricultural export embargo.

Federal Agriculture Improvement and Reform (FAIR) Act of 1996: The tobacco support program are continued by prior legislation and are not affected by the 1996 Act. Section 101 (7 USC 1441) suspended permanent provisions of parity prices support formulas for tobacco, peanuts, corn, wheat, rice, and cotton.

Exhibit 4
Annual Family Farm Report to Congress

United States Code, Title 7, Chapter 55.

2266. Congressional reaffirmation of policy to foster and encourage family farms; annual report to Congress

- (a) Congress reaffirms the historical policy of the United States to foster and encourage the family farm system of agriculture in this country. Congress believes that the maintenance of the family farm system of agriculture is essential to the social well-being of the Nation and the competitive production of adequate supplies of food and fiber. Congress further believes that any significant expansion of non-family owned large-scale corporate farming enterprises will be detrimental to the national welfare. It is neither the policy nor the intent of Congress that agricultural and agriculture-related programs be administered exclusively for family farm operations, but it is the policy and the express intent of Congress that no such program be administered in a manner that will place the family farm operation at an unfair economic disadvantage.

- (b) # (1) In order that Congress may be better informed regarding the status of the family farm system of agriculture in the United States, the Secretary of Agriculture shall submit to Congress, by July 1 of each year, a written report containing current information on trends in family farm operations and comprehensive national and State-by-State data on non-family farm operations in the United States.

(2) The Secretary shall also include in each such report -
 - " (A) information on how existing agricultural and agriculture-related programs are being administered to enhance and strengthen the family farm system of agriculture in the United States;

 - " (B) an assessment of how tax, credit, and other current Federal Income, excise, estate, and other tax laws, and proposed changes in such laws, may affect the structure and organization of, returns to, and

- investment opportunities by family and non-family farm owners and operators, both foreign and domestic;
- " (C) identification and analysis of new food and agricultural production and processing technological developments, especially in the area of biotechnology, and evaluation of the potential effect of such developments on -
 - Q (i) the economic structure of the family farm system;
 - Q (ii) the competitive status of domestically-produced agricultural commodities and foods in foreign markets; and
 - Q (iii) the achievement of Federal agricultural program objectives;
 - " (D) an assessment of the credit needs of family farms and the extent to which those needs are being met, and an analysis of the effects of the farm credit situation on the economic structure of the family farm system;
 - " (E) an assessment of how economic policies and trade policies of the United States affect the financial operation of, and prospects for, family farm operations;
 - " (F) an assessment of the effect of Federal farm programs and policies on family farms and non-family farms that -
 - Q (i) derive the majority of their income from non-farm sources; and
 - Q (ii) derive the majority of their income from farming operations; and,
 - " (G) such other information as the Secretary considers appropriate or determines would aid Congress in protecting, preserving, and strengthening the family farm system of agriculture in the United States.

Exhibit 5
Commission on 21st Century Production Agriculture

1996 Farm Bill, Section 183, Subtitle G of Public Law 104-127

Provisions of the law establishing the Commission on 21st Century Production Agriculture include:

(A) Initial review--The Commission shall conduct a comprehensive review of changes in the condition of production agricultural in the United States since the date of enactment of this title and the extent to which the changes are the result of this title and the amendments made by this title. The review shall include the following:

- (1) An assessment of the initial success of production flexibility contracts in supporting the economic viability of farming in the United States.
- (2) An assessment of economic risks to farms delineated by size of farm operation (such as small, medium, or large farms) and region of production.
- (3) An assessment of the food, security situation in the United States in the areas of trade, consumer prices, international competitiveness of United States production agriculture, food supplies, and humanitarian relief.
- (4) An assessment of the changes in farmland values and agricultural producer incomes since the date of enactment of this title.
- (5) An assessment of the extent to which regulatory relief for agricultural producers has been enacted and implemented, including the application of cost/benefit principles in the issuance of agricultural regulations.
- (6) An assessment of the extent to which tax relief for agricultural producers has been enacted in the form of capital gains tax reductions, estate tax exemptions, and mechanisms to average tax load over high and low-income years.
- (7) An assessment of the effect of any Federal Government interference in agricultural export markets, such as the imposition of trade embargoes, and the degree of implementation and success of international trade agreements and United States export programs.
- (8) An assessment of the likely effect of the sale, lease or transfer of farm poundage quota for peanuts across State lines.

- (B) Subsequent review— The Commission shall conduct a comprehensive review of the future of production agriculture in the United States and the appropriate role of the Federal Government in support of production agriculture. The review shall include the following:
- (1) An assessment of the changes in the condition of production agriculture in the United States since the initial review conducted under subsection (a).
 - (2) Identification of the appropriate future relationship of the Federal Government with production agriculture after 2002.
 - (3) An assessment of the personnel and infrastructure requirements of the Department of Agriculture necessary to support the future relationship of the Federal Government with production agriculture.
 - (4) An assessment of economic risks to farms delineated by size of farm operation (such as small, medium, or large farms) and region of production.

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	

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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)
	idle land
fallow	implement
farm	improvements
farm, contract	inaccessible
farm, corporate	income, gross farm
farm, institutional	income, net cash farm
farm, noncontract	income, net farm
farmstead	income, non-farm
Farm Service Agency (FSA)	income, off-farm
Federal Agriculture Improvement and Reform (FAIR) Act	input
feeder	input provider
fertilizer	
field	landlord
financial health	landlord, non-operator
finish	landlord, operator
flat	liability
flexibility contract, 7-year	liquidity
production	loan, marketing
flexibility contract	loan, marketing assistance
forage	loan, nonrecourse
forward pricing	
free-of-charge	market value
fringe benefits	military time
futures market	
	Natural Resources Conservation Service (NRCS)
government program land	net worth
grazing land association, public or industrial (PIGA)	nonresponse
grazing allotment	nursery
grazing association	
grazing fee	oilseed crops
greenhouse	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

Three questionnaire versions will be used in the 1998 ARMS Phase III. The Cost and Returns Report (CRR), Version 1, will be used in all States. Twenty states (CA, CO, GA, ID, IL, KS, LA, MN, MS, MO, MT, NE, NC, ND, OH, OK, OR, SD, TX, and WA) will complete the Version 2, Wheat Costs and Returns Report. Twenty-two states (AL, AR, CO, GA, IL, IN, IA, KS, KY, MI, MN, MO, NE, NC, OH, OK, SC, SD, TN, UT, VA, and WI) will complete the Version 3, Hog Production Practices and Costs and Returns Report.

<u>Version</u>	<u>Color</u>
V1 Costs and Returns Report (CRR)	White
V2 Wheat Costs and Returns Report	Buff
V3 Hog Production Practices and Costs and Returns Report	Blue

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

Consistency was maintained wherever possible across versions to avoid confusion when switching from one questionnaire to another. The Wheat version is very similar to the CRR with the addition of a few questions to allocate selected expense and income items to the wheat crop and also a few questions about the marketing of the crop. The information in the Hog questionnaire will also be very similar to the CRR with added questions to allocate expense items to the hog enterprise. Since there was not a Phase II interview completed for the Hog sample, detailed production practices sections are included in the Phase III interview.

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.

For the 1998 survey, two respondent booklets will be used. One booklet will be used for the CRR and Wheat versions and a separate one will be used for the Hog questionnaire.

Respondent Burden

In order for the interview to go smoothly, and take as little time as possible, you must be thoroughly familiar with each questionnaire version you will be using.

Follow skip instructions carefully to avoid asking questions needlessly. If no skip 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 for that questionnaire version.

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 I.D. 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 just 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 of those then, did you?". Instead, say, "During 1998, 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 1998. 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 1998 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.

Some of the operators may have read about the survey in a pre-survey letter from the State office or in newspaper or farm magazine articles. They may also be familiar with the old Farm Costs and Returns Survey (FCRS), which this survey closely resembles.

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.

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 1998 and Area Frame records that were mis-classified as farms in June.

Code 5 - **OUT-OF-SCOPE**: The selected operation is 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 label 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 1998 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. They would not have much impact on the overall estimates from the survey however, because there usually are not very many of these operations and they are generally relatively small.

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 ARMS Phase I Screening Survey, the State Office will want you to complete the Screening Supplement. This may be because the screening data were collected from sources other than the Phase I Survey, the respondent to Phase I may have been someone other than the operator, or incomplete information was obtained on the Phase I Screening Survey.

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 1998 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.

Enumerator Action (Is this an Area sample?)

Area frame samples can be identified by the first digit of the POID shown on the label. If your office did not pre-check this box, refer to the POID on the label. If the first digit of the POID is a "1", this is an Area frame sample, and you should skip to item 5 on the Screening Supplement.

If the POID begins with something other than a "1" the sampled record came from the List sampling frame. If this is true, continue with item 1.

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 1998 on the total acres operated. If YES, go to item 5. 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 1998 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 1998.

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 5.

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

Item 4 Enumerator Action (OpDomStatus = 99 and Out-of-Business)

Use this item only if both of the screening questions (items 2 and 3) were answered NO. **This is not an item you ask the respondent.** Check the label on the Face Page of the questionnaire. If the State Office has not marked this, you may want to circle the OpDomStatus code on each questionnaire with a Screening Supplement before you begin enumeration. The state survey statistician will give you a label diagram showing the location of the OpDomStatus code. If the OpDomStatus is not 99 enter code '2' and skip to item 7. If the OpDomStatus is 99 enter code '1' and skip to item 9.

Item 5 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 6 **Enumerator Action (OpDomStatus=99)**

This is not an item you ask the respondent. If the operation is an OpDomStatus=99, begin the interview. If the OpDomStatus is not 99, continue with item 7.

Check the label on the Face Page of the questionnaire. If the State Office has not marked this, you may want to circle the OpDomStatus code on each questionnaire with a Screening Supplement before you begin enumeration. The state survey statistician will give you a label diagram showing the location of the OpDomStatus code.

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 1998. 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, and item 4 is blank (you did not have to complete it), enter a "1" in item code box 0923, return to the questionnaire and begin the interview.

If item 4 is code 2 (the operation on the Face Page is out-of-business), go to item 9.

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, turn the Screening Supplement over and 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 (item 4 is blank), 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 1998. 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 1998. 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 1998 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).

Item 8 Enumerator Action

If item 4 is blank, then you will **complete the interview for the operation named on the Face Page of the questionnaire**. If you have just finished verifying other operations, be sure to tell the respondent you are interviewing for the **operation named on the Face Page, then begin the interview**.

If item 4 is code 2, continue with item 9.

Item 9 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 the information we need 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 10 Enumerator Action

If other instructions have already directed you to begin the interview, do not complete this item. If the questions and skip instructions bring you to this item, follow the printed instructions carefully.

- First, on the Screening Supplement Face Page enter code "9" in cell 0921 (item 5).
- Next, go the questionnaire Face Page and enter code "3" in cell 0910.
- Finally, go the questionnaire Back Page and complete the administrative items inside the large black box including Respondent, Ending Time, Date, and Enumerator ID.

Chapter 5 - Questionnaires

Section A - Acreage

Section Purpose

Section A has six 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 account for land in government programs, and
- (6) 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 1998. Answers for these items are reported to the nearest whole acre.

For operations that were in business for only a part of 1998, collect data for the part of the year when it was still in operation. If the operation went out-of-business before December 31, 1998, 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 acres owned by the operator or operation.
- (2) all acres rented from others for cash, all acres rented for a share of the crop or livestock production, and all acres used rent-free.
- (3) 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).
- (4) 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.
- (5) 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 1998.

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. Expenses for **public land** where the operator has grazing rights, sole use, year-round use, etc. should be reported in item 10a.
- (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 1998 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 1998. 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 which this operation has enrolled in Government programs (such as acres under production flexibility contracts in the 7-year farm program, acres in Conservation Reserve, 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 1998**

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 6 **Cropland Acres**

Cropland is any tillable 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 7 **Cash Rent *Paid* for Acres Rented *From* Others**

Including rent for buildings and land, record the total amount paid in 1998 to all landlords for all cash rented acreage. Ask this question even if no land was rented in 1998. Why? The operation may have paid rent for 1997 or 1999 in 1998. If we skip this question just because the operation did not rent any land in 1998, we miss previous year's rent paid in 1998, or 1999 rent paid in advance in 1998. 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 5.

Item 7a **Rent for Wheat Land**
V2 Wheat only

Record the actual dollar amount of the cash rent (item 7) that was for land this operation planted Wheat on.

Item 8 **Cash Rent *Received* for Acres Rented *To* Others**

Do not skip this item even if the operation rented no land out in 1998. The operation may have received income in 1998 for land rented to others before 1998, or it may have even received a pre-payment of 1999 rent in 1998.

Including rent for buildings and land, record the total cash rent received during 1998 for all land rented to others for cash. If rent owed to the operation for 1997 was received in 1998, it should be included here. If rent for 1999 was received in advance (in 1998), it should also be included. Government payments received in association with these acres should also be included.

Item 9 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 1998. The operation may have received its share of 1997 commodities in 1998 for land it rented to others in 1997. 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.

Items 10 & 10a Usage fees Paid for AUM basis on PIGA land

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

Item 10 is a screening question to find out if the operation ever 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 skip 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 1998.

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 1998 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 **Land in Government Programs**

The sum of items 12a-c should account for all the land the operation has in government programs.

Item 12a **Acres in Conservation Reserve Program**

Record all acreage 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.

The Food Security Act of 1985 established the CRP to address escalating environmental concerns including soil erosion and declining wildlife populations. The Food, Agriculture, Conservation, and Trade Act of 1990 extended CRP enrollment through 1995. The 1996 Act continued CRP enrollments through 2002 and authorized participants to withdraw certain land from CRP at any time, subject to a 60-day notice period.

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. The 1996 Act provides that CCC maintain an enrollment of up to 36.4 million acres in CRP through September 30, 2002. Actual enrolled acreage will vary from year to year due to program provisions which allow for extension of existing contracts, regularly scheduled sign up periods, early termination of contracts on less environmentally sensitive acreage, and a continuous sign up for select environmental priority practice acreage. Select priority acres includes relatively small acreages where enrollment would

yield substantial environmental benefits such as filter strips, riparian buffers, grassed waterways, field windbreaks, shelter belts, living snow fences, salt-tolerant vegetation, shallow water areas for wildlife, contour grass strips, or acreage in a wellhead protection area designated by EPA.

Income received from participation in the CRP should be recorded in Section F, item 4a.

Item 12b Acreage in Wetlands Reserve Program

Record all acreage enrolled by this operation in the Wetlands Reserve Program (WRP). 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 4b.

Item 12c Acreage in Other Government Programs

Record the acreage enrolled in all other federal and/or state programs. Specify the name(s) of the program(s) in the space provided.

Item 13 **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 1998 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 item accounts for all crops harvested on this operation in 1998. 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 1998, 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 1998.

This column identifies the crops harvested on this operation in 1998. 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 1998, 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 should be recorded in 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:

- (1) Sorghum-Sudan crosses harvested for hay should be recorded as Hay, All Other.

Soybeans

Record only soybeans harvested for beans.

Exclude:

- (1) Soybeans cut for hay should be recorded as Hay, All Other.

Tobacco

Record all types of tobacco harvested in 1998. 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:

- (1) Small grains cut for hay should be recorded 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 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 6h.

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 tillable Cropland acres (Section A, item 6).

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

Record the acreage of sugarcane or sugar beets (for sugar or seed) harvested in 1998, regardless of the year planted.

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 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 1998.
- (2) acreage of crops intended for harvest in 1998 even if harvest was delayed until 1999 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 1997 crops not harvested until 1998 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 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 27-29.)
- (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 1998. 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 1998. 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

Record the TOTAL 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 5.

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 x 30 x .30 x 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.

Columns 6 & 7 Bio-engineered Seed
Version 1 only

For selected crops (corn for grain, cotton, potatoes, soybeans, wheat, canola, and vegetables), record the number of harvested acres planted with bio-engineered seed (column 6) and the code which represents the type of bio-engineered seed used (column 7).

Item 2 Organically Grown Crops
Version 1 only

Item 2 begins with a screening question to determine if this operation grew any crops which were certified organically grown in 1998. By organically grown, the **production** would have to be certified “organic” by an unbiased third party.

If the answer is No, skip to item 3. If the operation did grow certified organically grown crops, continue with items 2a-i.

For each crop identified in column 1, record the number of harvested acres which were certified organically grown in 1998. With the exception of potatoes, acreage for all crops should be recorded to the nearest whole acre. Potato acreage should be recorded to the nearest tenth of an acre.

Item 3 Awareness of Precision Farming Techniques
Version 1 only

Item 3 begins with a screening question to find out if the operator is aware of various precision farming techniques. The operator may not be familiar with the term “precision farming”, so it may be necessary to list the techniques in item 4 to make sure they understand what precision farming means.

If the answer to the screening question is No, skip items 3 and 4 and go to Section C. If the answer is Yes, continue.

In item 3, record the code of the **one** information source the operator received **most** of their knowledge about precision farming and continue with item 4.

Item 4 **Precision Farming Technologies**
Version 1 only

Even though the operator may be familiar with precision farming techniques (item 3 was “yes”) they may not have used any of the techniques on their operation in 1998. Therefore, item 4 begins with a screening question.

If the answer to the screening question is No, skip to Section C. If the answer is Yes, continue with items 4a-g.

For items 4a-g, record the total number of acres this operation used each of the precision farming technologies on. Record acres to the nearest whole acre.

Item 5 **Wheat Acreage and Yield By Type**
V2 Wheat only

In the Phase II PPCR interview, the acreage of wheat planted by type was collected. We now need to record the harvested acreage and yield by type of wheat.

The total harvested acres and yield for all types of wheat for grain were recorded earlier in the table in item 1. We now want to breakout this into the three types of wheat – winter wheat, durum wheat, and other spring wheat.

The sum of the wheat harvested acres by type ($2a + 2b + 2c$) must equal the total wheat harvested acres reported in item 1.

Item 6 **Marketing or Storage of the Wheat Crop**
V2 Wheat only

This item records how the 1998 wheat crop was marketed or stored. Items 6a-f indicate how the wheat crop was marketed. Item 6g accounts for wheat not marketed (i.e. stored) by December 31, 1998.

For each item (6a-g) record the PERCENT of the 1998 wheat production marketed (6a-f) or stored (6g). The questionnaire indicates the sum of items 6a-g must equal 100%. This is true unless the farmer hedged part of the wheat production. If hedging was involved, make a note to indicate why items 6a-g do not sum to 100%.

Item 7 **Wheat Crop Marketing Channels**
V2 Wheat only

Items 6a-f accounted for the percent of the 1998 wheat crop marketed during 1998. Of the amount marketed during 1998, record in items 7a-g, the percent marketed through each channel.

The column heading on the questionnaire, "Percent of 1998 Wheat Production" is a little mis-leading because we are actually only interested in the marketing channels for the portion of the 1998 wheat crop marketed during 1998 (items 6a-f). Therefore, the sum of items 7a-g must equal 100% because we want to account for all of the crop marketed.

Item 8 **Marketing Tools for the Wheat Crop**
V2 Wheat only

Record a "1" in the appropriate code box if the operation used the marketing tools indicated in items 8a-c for the 1998 wheat crop.

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 6h.

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 1998. 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. Use the codes from the Contractor Codes list at the top of the page. 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).

The Crops Contractor Codes are:

Code 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 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 2-Processor or 6-Integrator.

Code 2 - PROCESSOR, MILL, or GIN: These companies change the form of the product before passing it to the next stage.

Code 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.

Code 4 - SEED, FEED or OTHER INPUT COMPANY: Input supply companies may contract with farmers to grow seed corn, for example.

Code 5 - BROKER or INVESTOR: An agent who negotiates many contracts of purchase and sales.

Code 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.

Code 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 farm may provide flowers to be sold in retail stores, which are under joint ownership with the farm. The farm may not show value of sales for the flowers because sales are recorded at the retail level. In another example, a citrus farm may provide oranges to be packaged and sold wholesale under a brand name.

Code 8 - OTHER: If Codes 1 - 7 do not fit the type of contractor identified by the respondent, use Code 8 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.

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 1998 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 1998 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 1998, enter a dash and make a note.

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

Record the code corresponding to the type of contractor for that commodity. Use the codes from the Contractor Codes list at the top of the page. Refer the respondent to the list of Crop Contractor Codes in the Respondent Booklet.

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 1998**. 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, bushels, etc.

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. 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 1998. **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.

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 1998, report in column 3, the amount received during calendar year 1998, 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 3. Marketing charges are recorded in item 5.

INCLUDE as Cash Sales:

- (1) crops sold in 1998, 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 1998.** Farmers often report redeeming CCC loans for crops without showing that the crops were either sold or placed in inventory. **These crops have to be recorded one place or the other, unless they were fed to livestock.** When these mistakes occur, the farmer's income statement shows a negative value for the redemption and no offsetting positive value in sales or crop inventory. This causes us to make an incorrect (low) estimate of net farm income.

EXCLUDE from Cash Sales:

- (1) commodities removed under a contract arrangement. (Record in items 1 or 2.)
- (2) crops placed under CCC loan which were not redeemed. (These should be recorded in Section F, item 3.)
- (3) cash sales of straw and manure. (Record these in Section F, item 6h.)

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.

Item 3e-1

For cash sales of crops **not accounted for in items 3a-d** above, such as corn, wheat, soybeans, etc., refer to the Crop Codes in the Respondent Booklet and write in the name and code of each commodity. Record the net dollar amount received for the cash sale of each commodity sold in 1998 in column 3.

Item 4 **CCC Loan Redemptions**

This item is to verify that crops redeemed from the CCC and sold during 1998 were accounted for in either Marketing Contracts (item 1) or Cash Sales (item 3).

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 25).

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 6h.

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 6h. **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 34a). 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 1998.

Item 5a Marketing Charges for WHEAT *V2 Wheat only*

Record the total amount of the marketing charges reported in item 5 that was for the marketing of the 1998 Wheat crop.

Item 6 Payments in 1998 for Previous Years' Marketing

This item accounts for payments received in 1998 for CROPS sold or transferred **before** 1998. This is money that would have been owed to the operation at the end of 1997. 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 1997 or before) should be included in the appropriate category under this item.

Item 6a Payment received from previous years' CROP Marketing Contracts

If the operation received payments in 1998 for CROPS **marketed** under contract in previous years, record the 1998 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 Payment received from previous years' CROP Production Contracts

If the operation received payments in 1998 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 Cash Sales of CROPS in Previous Years

If the operation received income in 1998 from CROPS sold or transferred in previous years, record that income here.

Section D - Livestock Inventory

Record all livestock, poultry, and animal specialties on the total acres operated on December 31, 1998, 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, 1998.

If on December 31, 1998 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, 1998. 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, 1998.

Item 1b Dairy Cattle

Record the number of head of dairy cattle, regardless of breed or type, on this operation on December 31, 1998. 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, 1998.

Item 1c All Hogs and Pigs

Record the total number of all hogs and pigs located on the total acres operated on December 31, 1998, 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, 1998, 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, 1998, regardless of ownership. Include both egg and broiler type layers. Broilers and other meat-type chickens should be recorded in item 1f.

Item 1f Boilers 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, 1998, 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, 1998, 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.

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 1998. This value could be zero if no shared livestock were marketed in 1998. 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).

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.

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 1998.

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. Use the codes from the Contractor Codes list at the top of the page. Refer the respondent to the list of Livestock Contractor Codes in the Respondent Booklet (these codes are different from the Crop Contractor Codes in Section C).

The Livestock Contractor Codes are:

Code 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.

Code 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.

Code 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.

Code 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.

Code 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.

Code 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.

Code 7 - BROKER 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.

Code 8 - 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 dairy may pass milk on to a cheese, bottling or food service operation under the same ownership.

Code 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, cwt, head, etc.

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 1998 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 1998 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 1998, enter a dash and make a note.

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. Use the codes from the Contractor Codes list at the top of the page. Refer the respondent to the list of Livestock Contractor Codes in the Respondent Booklet (these codes are different from the Crop 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 1998**. 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.

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 1998. **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.

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

The production of livestock, primarily cattle, "on shares" is common in Montana, the Dakotas, Nebraska, and other states. For example, individuals who own cows place them on someone else's land. The land operator cares for the stock. The cattle owner and land operator share the calf crop in a 50-50, 60-40, or some other split.

The parties involved usually do not consider these arrangements to be contracts. However, the arrangements best fit the definition of a **PRODUCTION CONTRACT**. The cattle owner is the contractor and the land operator who cares for the cattle is the contractee.

When interviewing a contractee involved with cattle on shares, complete columns 1, 2, 3, 4, and 5 for the share of the calves that were produced for the cattle owner. Record in column 4 the number of head that were the contractor's share. Complete columns 6 and 7 for the share of the calves that are the land operator's. These calves should be valued at the time the land operator takes ownership of his share, which is usually at weaning.

DO NOT record the final sales price received for the animals in Columns 6 and 7, because this value should appear in either cash sales or year-end inventory. Be sure to write a note that these are livestock on shares.

Item 3 CASH SALES of Livestock and Livestock Products

This item records the **net** sales of livestock and livestock products sold for cash in 1998.

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 4.

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

For items 3a-h in column 1, record the total number sold in 1998. Include only cash or open market sales. Exclude the contract sales reported in items 1 and 2 and the landlord's share of livestock reported in Section D, item 2.

Column 3 Price Per Head (Optional)

This column is optional and can be used to help calculate the net dollar amount received in column 4. If this column is used, multiply the number of head sold in column 2 by the price per head in column 3 to derive the net dollar amount in column 4.

Column 4 Net Dollar Amount Received

Record the Net Dollar Amount Received in 1998 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 1998. Record marketing expenses paid by the operation, landlords, and contractors in the appropriate columns.

Item 5 Payments in 1998 for Previous Years' Marketing

This item accounts for payments received in 1998 for Livestock or Livestock Products sold or transferred **before** 1998. This is money that would have been owed to the operation at the end of 1997. 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 1997 or before) should be included in the appropriate category under this item.

Item 5a Payment received from previous years' LIVESTOCK Marketing Contracts

If the operation received payments in 1998 for Livestock **marketed** under contract in previous years, record the 1998 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 Payment received from previous years' LIVESTOCK Production Contracts

If the operation received payments in 1998 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 Cash sales of LIVESTOCK in previous years

If the operation received income in 1998 from Livestock sold or transferred in previous years, record that income here.

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

If this operation paid *another* operation a fee for the service of feeding or raising a commodity (owned by the selected operation), then the answer to this question is yes (the operation is acting as contractor). The commodity must remain an asset of the selected operation. It is neither sold to the contractee operation, nor is ownership transferred to that operation.

Examples of these types of contracts include:

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

Column 1 Commodity Contracted Out

Record the type of commodity that was placed on another operation to be fed or raised. Include commodities that were placed on contractee operations in 1997 and were still under contract on January 1, 1998.

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, 1998

Record the estimated market value of all this operation's commodities **from 1997 and previous years** that were **placed** on contractee operations and still under contract as of January 1, 1998. **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 1998**. 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 1998. **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, 1998

Record the estimated market value of commodities still under contract as of December 31, 1998. **DO NOT** include this value in Section J, Assets.

Section F - Other Farm Income

Items 1-3 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 1998. 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.

For commodities placed under loan, the farmer gets the loan rate times the quantity of commodity. The amount of the loan received is recorded in item 1.

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 2. 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, item 6h.

If a loan was taken out in 1998, has a 1999 maturity date and has not had any action taken on it, there will be an outstanding balance. Record the total outstanding balance in item 3.

Marketing loans are one variation of CCC's regular nonrecourse commodity loans. They have the same conditions as the regular loan except that under certain conditions farmers can reclaim their crops at a repayment rate that is less than the loan rate. The difference between the repayment rate and the loan rate is an income support payment. Cotton, rice and honey are currently the commodities eligible for marketing loans, although the Secretary of Agriculture has the discretionary authority to put in place a marketing loan for feed grains, wheat and soybeans.

Item 1 CCC Loans Received

Record the gross amount of loans received in 1998. This should be equal to the amount of the loan rate (price per unit) times the quantity placed under loan.

Item 1a CCC Loan Amount for Wheat
V2 Wheat only

Of the total amount of CCC loans received in 1998 (item 1), record the amount that was for Wheat.

Item 2 CCC Loans Repaid

The amount spent to repay loans should be equal to loan rate times the quantity redeemed. Do not include any interest or storage charges that were repaid. Interest should be reported in Section G, item 20. Storage charges should be recorded as marketing expense in Section C, item 5.

Item 3 Value of Outstanding CCC Loans on December 31, 1998

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.

Items 4 & 5 Government Program Payments

Item 4a CRP Payments

Record the total amount this operation received in 1998 for participation in the Conservation Reserve Program (CRP).

Item 4b WRP Payments

Record the total amount this operation received in 1998 for participation in the Wetlands Reserve Program (WRP).

Item 4c EQIP Payments

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

Item 4d 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 items 6e and 6f below.

Item 4e Loan Deficiency Payments (LDP's)

Record the total dollar amount the operation received in 1998 from government loan deficiency payments.

USDA's Farm Service Agency (FSA) provides direct payments and nonrecourse loans on designated agricultural commodities to help ensure an adequate supply and distribution of reasonably priced commodities throughout the year. Instead of selling crops immediately after harvest, producers may store the produce, pledging the crop itself as collateral, and obtain interim financing to satisfy short-term financial needs. If market prices become more favorable, either during the loan period or at loan maturity, producers may redeem loan collateral and sell it on the open market by repaying the applicable outstanding loan principle plus accrued

interest. If market prices are not favorable at loan maturity, producers also have the following options: (1) forfeiting the commodity to the CCC and paying no principal or interest, or (2) repaying the principal with no interest at a CCC-established rate based on the market price.

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 4f Transition Payments

Record the total dollar amount the operation received in 1998 for payments received for participating in the 7-year farm program. Include 1999 payments received in advance in December, 1998.

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.

Item 4g Other Government Program Payments

Record the total dollar amount received in 1998 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 5 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 6 Income from Farm-Related Sources

Item 6a 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 6b 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 6c Forest Product Sales

Record the total 1998 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 6d 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 6d (1)

Record the dollar amount of sales of farm machinery and vehicles (item 6d) that was for sales directly to other farmers.

Item 6e Federal Crop 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 1998. If more than one payment was received, total the payments. Do not include insurance indemnity payments from any source other than Federal Crop Insurance Corporation (FCIC), which is now part of USDA Farm Service Agency, or a private insurer from which the operation bought federally backed crop insurance. Exclude hail insurance.

Item 6f Other Insurance Indemnity Payments

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 5). Include hail insurance indemnity payments.

Item 6g Patronage Dividends and Refunds from Co-ops

Record the amount of patronage dividends resulting from ownership of shares in cooperatives in 1998. 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.

Item 6h 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) any income received for providing others access to any type of outdoor recreation including hunting and fishing.
- (7) equity or premium payments on CCC loans transferred to someone else (money received above the face value of the loan).
- (8) real estate tax rebates for land preservation.
- (9) renting or leasing of livestock.
- (10) renting or leasing of tractors, trucks, etc.
- (11) road tax refunds.
- (12) all other farm related income not included in 6a-g.

Item 7 Products Sold Directly to Consumers

Record code "1" if the operation sold any commodities directly to consumers, such as in a roadside market, farmers' market, mail-order, door-to-door or the operator's own door, or pick-it-yourself operations.

Item 8 Products Sold to Wholesalers or Retailers

Record code "1" if the operation sold products to a wholesaler or retailer that then sold the product with no processing or without changing the form of the products. For example, operators may sell fresh fruit to a supermarket or restaurant.

Section G - Production Expenses

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 and 3)

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

Since there was not a Phase II interview completed for Hogs, it is necessary in the Phase III interview to collect all of the information related to the cost of production for the hog 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 1998 should be included in this section. This includes expenses for the Operator, Partners, Landlords and Contractors.

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.

Crop Expenses

Item 1 **Seeds, Plants, Trees, etc.**

This item refers to the cost of any purchases in 1998 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 1998 for harvest in 1998 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).

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 24.

Item 1a Amount of Seed Expense for Wheat *V2 Wheat only*

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

Item 2 Commercial Fertilizer

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 cooper
- (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 Wheat
V2 Wheat only

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

Livestock Expenses

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 E, item 6, 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 1998 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 3a 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 3b All Other 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 3c 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 1998. 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 1998, and explain with a note.

Item 3d 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 4 Leasing Livestock

INCLUDE expenses for:

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

Item 5 **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 5a **Feed Grains**
VI only

Record the dollar amount of the total purchased feed expense (item 5) that was for feed grains such as barley, field corn, oats, sorghum and wheat. Include expenses for all grains whether whole, rolled, cracked, ground, etc.

Item 5b **Hay and Forage**
VI only

Record the dollar amount of the total purchased feed expense (item 5) that was for hay and forage. Include expenses for all legumes, grasses, mixtures, and grains cut and dried for use as animal roughage, silage, greenchop, haylage, hay cubes, wafers, alfalfa pellets, etc.

Item 5c **Complete Rations and Formula Feeds**
VI only

Record the dollar amount of the total purchased feed expense (item 5) that was for complete rations and formula feeds.

Item 5d **Protein Meals and Concentrates**
VI only

Record the dollar amount of the total purchased feed expense (item 5) that was for protein meals and concentrates. Include expenses for all single ingredient items consisting of oilseed proteins (soybean, cottonseed, sunflower seed, linseed, etc.), animal proteins (fish meal, milk by-products, etc.) and grain proteins (gluten, brewers yeast, etc.).

Item 5e **Supplements and All Other Ingredients**
VI only

Record the dollar amount of the total purchased feed expense (item 5) that was for supplements and all other ingredients such as salt, vitamins, minerals, molasses, middling, pulp, tankage, fat, etc.

Enumerator Check (*Version 1 only*)

The sum of the individual feed items must equal the total feed expense (i.e. $5a + 5b + 5c + 5d + 5e = 5$)

Item 5f Total Feed Expense for Hogs

V3 Hogs only

Record the dollar amount of the total feed expense (item 5) that was for the Hog enterprise.

Item 6 Bedding and Litter

Record the amount spent by the operation in 1998 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 6a Bedding and Litter for Hogs

V3 Hogs only

Record the dollar amount of the bedding and litter expense (item 6) that was for the Hog enterprise.

Item 7 Purchases of 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 5). 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) manure disposal.
- (12) seining of fish.

Item 7a Medical Supplies, Veterinary, and Custom Services for Hogs
V3 Hogs only

Record the dollar amount of the medical supplies, and veterinary and custom services expense (item 7) that was for the Hog enterprise.

Item 8 Agricultural Chemicals

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

INCLUDE expenses for:

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

EXCLUDE expenses for:

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

Item 8a Chemical Expense for Commodity
V2, V3

Record the actual dollar amount of the total chemical expense (item 8) that was for the commodity of interest (wheat or hogs).

Items 9 - 12 Utilities (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 6a).
- (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 6h.)
- (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 8 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 Fuels

Item 9a Diesel Fuel
VI only

Record the farm share of expenses for diesel fuel.

Item 9b Gasoline and Gasohol
VI only

Record the farm share of expenses for gasoline and gasohol.

Item 9c Natural Gas
VI only

Record the farm share of expenses for natural gas.

Item 9d LP Gas
VI only

Record the farm share of expenses for LP gas (propane, butane).

Item 9e Oils and Lubricants
VI 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 9g **Total Fuel Expense**
V2, V3

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

Item 9g(1) Fuel Expense for Irrigation
V2, V3

Record the dollar amount of the total fuel expense (item 9g) that was used for irrigation. These costs include the cost of fuel, natural gas, and motor oils used to operate the systems that both pump and apply water.

Item 9g(2) Fuel Expense for Commodity
V2, V3

Record the dollar amount of the total fuel expense (item 9g) that was used for the commodity (wheat or hogs).

Item 10 **Electricity Expense**

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 **Irrigation Electricity Expense**
V2, V3

Record the actual dollar amount of the total (item 10) spent for electricity for irrigation in 1998. Include monthly or annual charges to maintain service even when electricity is not being used. Include emergency electric guarantee fees, etc.

Item 10a (1) Amount for Wheat
V2 Wheat only

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

Item 10b Electricity Expense for Drying
V2, V3

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

Item 10b (1) Amount for Wheat
V2 Wheat only

Record the actual dollar amount of the item10b electricity for drying expense that was for the Wheat enterprise.

Item 10c Electricity Costs for Specialized Livestock Production Facilities
V2 ,V3

Record the amount of the item 10 electricity expense that were for specialized livestock production facilities such as dairies, feedlots, poultry houses, or swine buildings.

Item 10c (1) Amount for Hogs
V3 Hogs only

Record the actual dollar amount of the item 10c electricity costs for specialized livestock production facilities that was for the Hog 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 Amount for Wheat

Record the actual dollar amount of the purchase irrigation water expense (item 11) that was for the Wheat enterprise.

Item 12 All Other Utilities

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

Items 13-16 Supplies and Repairs

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

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

INCLUDE expenses for:

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

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

Item 14 Repairs, Parts and Accessories for Motor Vehicles, Machinery, and Farm 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 Repair Expense for Commodity
V2, V3

Record the actual dollar amount of the total (item 14) that can be allocated to the commodity of interest (wheat or hogs).

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 24).

Item 15a Repair Expense for Livestock Production Facilities
V2, V3

Record the actual dollar amount of the total (item 15) expenses that were spent for maintenance and repairs of specialized livestock facilities such as dairy barns, feedlots, swine buildings, or poultry houses.

Item 15b Maintenance and Repair of Irrigation Equipment
V2, V3

Record the dollar amount of the total (item 15) that was spent for the expense of repair and upkeep of irrigation equipment, including all pumps and delivery systems.

Item 15b (1) Amount for Commodity
V2 *Wheat only*

Record the actual dollar amount of the total (item 15b) that was for the Wheat enterprise.

Item 16 Maintenance and Repair of the Operator's House

Record the total amount spent in 1998 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.

Item 17 Types of Insurance

The questions in this item relate to the types of insurance the operation purchased in 1998. **These are the only questions in this section that require a code (Yes=1) rather than an actual dollar amount.**

Item 17a Basic Catastrophic Insurance (Yes=1)

Crop insurance is offered by the USDA Office of Risk Management as two components; basic catastrophic coverage and buy-up catastrophic coverage. The premium for basic catastrophic coverage is fixed for all farms and covers 50% of the yield at 60% of an established price for the commodity grown on the area covered. This is sometimes called CAT or 50/60 coverage.

Enter a code "1" if the operation purchased basic catastrophic insurance (CAT coverage) in 1998.

Item 17b Buy-up Catastrophic Insurance (Yes=1)

Additional crop insurance can be purchased to supplement the catastrophic coverage. This coverage is bought to protect crops at higher yields and/or prices (for example 60% yield at 75% of expected price). It can only be purchased from private insurance companies but is subsidized by the USDA. When farmers purchase this insurance, they sometimes use the term "buy-up" or "add-on".

Enter a code "1" if the operation purchased buy-up on catastrophic insurance for higher levels of yield and price protection.

Item 17c Revenue Insurance (Yes=1)

Enter a code "1" if the operation purchased revenue insurance such as Income Protection (IP), Crop Revenue Coverage (CRC), and Revenue Assurance (RA).

Item 17d Other Insurance (Yes=1)

Enter a code "1" if the operation purchased other insurance except life, health or payroll insurance.

Item 18 Insurance Expenses

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 1998. Also exclude premiums paid for life, health, and other payroll insurance.

Item 18a Crop Insurance
V2, V3

Record the amount of the total insurance expense (item 18) that was for crop insurance only.

Item 18a (1) Crop Insurance for Wheat
V2 Wheat only

Record the amount for the crop insurance expense (item 18a) that was for the Wheat enterprise.

Item 19 Interest and Fees Paid on Debts Secured by Real Estate

Record the total amount spent by the operation in 1998 for interest and service fees for all loans owed by the operation which were secured by real estate. 'Secured by real estate' means real estate such as land, buildings or a home was used as collateral in obtaining the loan.

EXCLUDE:

- (1) interest on farm real estate debts for land that was not part of this operation.
- (2) interest on the operator's residence if it is owned by the operator separately from the operation.
- (3) payments made on the loan principal amount.
- (4) interest and fees paid on debts NOT secured by real estate

Item 20 Interest and Fees Paid on Debts NOT Secured by Real Estate

Record the dollar amount spent by the operation in 1998 for interest and service fees for all loans owned by this operation which were not secured by real estate--machinery, tractors, trucks, other equipment, fertilizer, feed, seed, or livestock and poultry, breeding stock, money borrowed for use as

working capital, and interest paid on CCC loans. Exclude interest and fees paid on debts secured by real estate which are reported in item 19.

Item 21 Real Estate and Property Taxes

Record the total of all real estate and property taxes paid by the operation in 1998. This is a line item in most farm record books (and the IRS 1040F.) Note that **personal property** taxes may be assessed on property such as automobiles, farm machinery, livestock, etc. and do not have to be associated with land or buildings. Some states do not have taxes on personal property. Also, since some states allow homestead exemptions, old age exemptions, etc., all owners of real property (land and/or buildings) 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, buildings, capital improvements, machines, livestock, cars (farm share) and other property.
- (2) taxes paid in 1998, even if they were levied in another year.
- (3) all partners' shares of taxes when a partnership is reported.

Item 21a Real Estate Taxes Only

Record the actual dollar amount of the total real estate and property tax expense (item 21) that was for land and buildings, that is real estate only. This item would exclude any personal property taxes.

Item 22 Renting and Leasing Vehicles, Tractors, Equipment and Storage Structures

Record the total 1998 expense for renting or leasing all vehicles, tractors, farm machinery, equipment and structures.

Item 23 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 1998 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.

Item 24 New Construction and Remodeling

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.

Record the operation's total capital expense for all new construction, remodeling or land improvements done on the operation (or for buildings owned by the operation but located elsewhere). Include new construction of fences.

New construction expenses often include expenses for materials such as new tile, pvc pipe, new culverts, fencing and machinery and labor charges. Land improvements are those additions or improvements to the land which change it in a PERMANENT way.

Include:

- (1) all costs for new construction or remodeling of the operator's house, **if it was owned by the operation.**
- (2) all costs for new construction or remodeling of houses for hired farm/ranch labor or tenants.
- (3) all costs to construct or remodel farm/ranch buildings, storage facilities, sheds, silos, bins and similar structures.
- (4) government reimbursed expenses.
- (5) expenses for improvements such as terraces, water and sediment control basins, grassed waterways, ponds, windbreaks, permanent cover, contouring, grading, filter strips, etc.
- (6) expenses for drainage improvements such as ditches, bedding, shaping, subsurface drain tile, etc.
- (7) expenses for irrigation improvements such as digging wells or ditches.
- (8) 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).
- (9) expenses for corrals, feedlots, feeding floors, trench silos, waste facilities, wells and equipment not for irrigation.
- (10) (in Western states) capital improvements to grazing land.
- (11) any other improvements not already recorded.

Item 24a Amount for Operator's House

Record the amount of the total new construction, remodeling, and improvements expense (item 24), that was for the operator's house, **if it was owned by the operation.**

Item 24b Amount for Other Farm Buildings, Houses, etc.

Record the amount of the total new construction, remodeling and improvements expense (item 24) that was for all farm buildings, including houses other than the operator's, sheds, storage facilities, upright silos, bins, and other buildings.

Item 25 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) potting soil for nursery/greenhouse operations
- (2) fees paid to extension service, accountants and others for keeping farm records.
- (3) fees paid for preparing income tax returns.
- (4) 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.
- (5) postage and telegrams for the farm business.
- (6) expenses for title searches, abstracts, recording deeds and mortgages, court costs and other legal expenses for the land operated.
- (7) fees paid to attorneys in connection with farm/ranch business.
- (8) charges for permits and licenses obtained in 1998 for production and marketing of commodities produced on the land operated. Exclude quota and allotment purchases and rentals.
- (9) 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.
- (10) registration of purebred animals.
- (11) brand registration fees.
- (12) charges for sales promotion or advertising.

- (13) 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 1998 expenditures, even if these cover more than one year.
- (14) real estate agent commissions and other direct selling or buying expenses.
- (15) garbage collection or dumpster service for barns and farm buildings.
- (16) rental expense for farm office space not on the operation.
- (17) fees paid to entomologists, service companies, etc. for pest scouting.
- (18) trapping club memberships and dues. (Trapping clubs are formed to trap predator animals such as coyotes.)
- (19) stall or space rental fees for farmer's markets.
- (20) parcel post expenses or charges for marketing agricultural products.
- (21) 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 21.
- (22) 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 30.)
- (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 1998 which were paid in other years.
- (6) all purchases of farm office equipment (if placed on a depreciation schedule).

Item 26 **Unallocated Expenses**

This item is used to account for any expenses the operation had in 1998 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.

Be sure to EXCLUDE labor expense (report in items 30-34).

Item 27 **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 28 **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 1998. 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 27.

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.

Items 30-34 Labor Expenses

Item 30 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 1998 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 1998.
- (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 33).
- (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 32).
- (5) benefits such as health insurance, life insurance, pensions, retirement, etc. (record in item 32).

Paid labor includes only those workers whose pay was considered a business expense of the farm/ranch operation during 1998. 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 1998 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 25.

Item 30a **Share of Labor for Commodity**
V2, V3

Record the actual dollar amount of the cash wages (item 30) that can be allocated to the commodity of interest (wheat or hogs).

Item 31 **Breakout for Wages Paid**

Record the actual dollars paid of the total cash wages paid (item 31) to people in each of the categories listed. The sum of 31a + 31b + 31c MUST equal the total reported in item 30.

Item 31a **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 31b **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 31c. 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 31c **Everyone Else**

Record the amount paid to all hired workers of the operation except those included in items 31a and 31b. Include salaries of partners and wages paid to their family members.

Item 32 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 30 and 31.

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 32a Amount for Commodity
V2, V3

Record the actual dollar amount of payroll taxes and benefits (item 32) that can be allocated to the commodity (wheat or hogs).

Item 33 Contract Labor Expense

Record the total amount spent by the operation in 1998 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 1998.

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 item 24.

Item 33a **Share of Contract Labor Expense for the Commodity**
V2, V3

Record the actual dollar amount of the total (item 33) that was for the commodity of interest (wheat or hogs).

Item 34 **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 33 if the labor is contract labor, or in item 30 if the labor was seasonal hired labor.

Item 34a **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) all other hauling charges for the operation.

Item 34b **Other Custom Work**

Most farm accounting record books (and the IRS 1040F) have a line for total expense for custom hire (machine work). Custom work is defined as work performed by machines and labor hired as a unit. Other custom work on crops would include custom planting, harvesting, leveling, and soil testing. Planting by plane or helicopter should also be included in this item.

Custom land leveling should be included in this item, however land improvement and development including conservation work, which is not custom, should be recorded in item 15.

EXCLUDE:

- (1) contract labor.
- (2) custom fertilizer, lime and/or soil conditioner applications (include in item 2).
- (3) custom applications of crop chemicals and pesticides (record in item 8) and pest scouting (record in item 25).
- (4) leasing of cars, trucks, tractors or other equipment.
- (5) custom livestock expense (report in item 7).

Item 34c **Total Custom Work Expense**
V2, V3

Calculate the total custom work expense by adding items 34a and 34b. Verify this total with the respondent.

Item 34c (1) Custom Work Expense for the Commodity
V2, V3

Record the actual dollar amount of the total (item 34c) that was for the commodity of interest (wheat or hogs).

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!

Item 1a OPERATOR'S Hours of Farm Work

All Versions

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

VI 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**
All Versions

For each quarter, record the **average TOTAL 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.

For Versions 2 & 3 include the spouse's unpaid hours. In Version 1, spouses unpaid hours are recorded in item 1b.

Section I - Hog Enterprise Labor

This section is only asked on the Hog (Version 3) questionnaire.

These items provide the information necessary to estimate the labor required to produce hogs. Item 1 collects the hours worked (both paid and unpaid) by the operator and the hours worked by all unpaid workers on the Hog enterprise. Item 2 records the hours worked by all paid workers on the Hog 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 Hog Enterprise

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

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

For each quarter, record the **average TOTAL 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 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 producing hogs, 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 Hog Enterprise

For each quarter, record the **average number of hours** all full-time paid workers worked on the Hog 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 Hog Enterprise

For each quarter, record the **average number of hours** all part-time paid workers worked on the Hog 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 Hog 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 Hog 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 - Assets and Debts

What's this Section 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 1998. 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 - 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. Include land the operation owns but rents out to others. 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, 1998, rather than all of 1998.

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 1998. 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).

Items 1 & 2 New Purchases

Item 1a Cars Purchased

Record the FARM SHARE of 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 1998. 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.

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 19 or 20 of Section G. Record registration and license fees in item 25 of Section G.

Item 1b Trucks Purchased

Record the FARM SHARE of 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 purchased by the operation during 1998. 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 for the operation. Include the cost of beds or boxes and hydraulic systems. The total cost should include the cost of accessories purchased with the vehicle, 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. Record financing charges in item 19 or 20 of Section G. Record registration and license fees in item 25 of Section G.

Item 1c Tractors Purchased

Record the total purchase price (after trade-ins, rebates, discounts, etc.) of all new and used tractors bought during 1998 for use on the operation. 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 19 or 20 in Section G. Registration and license fees should have been reported in item 25 of Section G.

Item 1d SELF-PROPELLED Equipment, Implements and/or Machinery Purchased

Record the total amount spent for all self-propelled equipment, implements and machinery (after any trade-in allowance, rebates and discounts were subtracted). 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.

Item 1e NON-SELF-PROPELLED Equipment, Implements and/or Machinery Purchased

Record the total amount spent for all non-self-propelled equipment, implements and machinery (after any trade-in allowance, rebates and discounts were subtracted). 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 2 Computer, Office Equipment and Furniture Purchases

Include all capital purchases of farm office equipment (items placed on a depreciation schedule) such as furniture, computers, etc. Any equipment items not placed on a depreciation schedule should be included in Section G, item 25.

Item 3 Value of Land and Buildings

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 3a 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 Free-of-Charge by the operation during 1998. 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 3b Market Value of Land and Buildings OWNED

Record the operator's best estimate of the total market value of all the Land and Buildings OWNED by the operation on December 31, 1998. This should correspond to the acres owned reported in Section A, item 1, unless land (and buildings) were purchased at the end of the year, and, thus, were not part of the operation **during** 1998. 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.

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.

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.

Item 3b (1) Market Value of the Operator's House

Record the market value of the operator's house as of December 31, 1998, if it is owned by the operation. This is the dwelling's share of the total value reported in item 3b.

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 3b (2) Houses Other Than the Operations

Record the market value on December 31, 1998 of tenant and hired labor houses, and all other houses (except the operator's house) owned by this operation. This includes houses occupied by partners, relatives, etc. The houses must be owned by the operation, not by the partner or relative separately from the land in the operation.

Item 3b (3) All Other Farm Buildings

Record the amount of the total in item 3b that was for all other farm buildings owned by the operation. Probe if necessary to obtain values, but do not accept "book value" (the original cost of the building minus depreciation.)

Include 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

Enumerator Check

Items 3b(1), 3b(2), and 3b(3) account for the value of all houses and buildings owned by the operation. The difference between the sum of these items and the total reported in item 3b would account for the value of the land owned. Verify that this value for the land is reasonable with the number of acres owned in Section A, item 1.

Item 4 Value of Ending/Beginning Year Inventories of Machinery, Commodities, and Production Inputs, etc.

For leased machinery, record the value of the machine, NOT the value of the lease, which reflects only that portion of the value of the machine that the operation has leased.

Note that the value of commodities held in inventory and the amount owed to the operation for past sales are related 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.

If the commodity was sold, but the revenue was not recorded in Sections C or E, then the amount of money owed to the operation for these sales goes in item 5 later in this section.

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 1998 and you ask about the value at the beginning of 1998, **do not say**, "Was it (about) the same?" or "It was the about the same, was it not?"

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.

For livestock, you also need to consider their weights or size. You need to consider **all** these things on January 1, 1998, to get the market value of the beginning year inventory. Then you need to consider **all** these things on December 31, 1998, 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.**

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.

Item 4a Value of OWNED Trucks, Cars, Tractors, Farm Machinery, Equipment and Tools

Record the end-of-year (on Dec. 31, 1998) estimate of the market value of the farm share of trucks, cars, tractors, machinery, tools, equipment and implements owned by the operation.

Item 4b Value of LEASED Trucks, Cars, Tractors, Farm Machinery, Equipment and Tools

For leased machinery, record the value of the machine, NOT the value of the lease, which reflects only that portion of the value of the machine that the operation has leased.

Record the operator's best estimate of the end-of-year (on Dec. 31, 1998) market value of the cars, trucks, tractors, machinery, tools, equipment and implements leased by the operation, and kept on the operation on December 31, 1998.

Include the value of:

- (1) farm share of the value of leased cars and trucks.
- (2) machinery that was leased as an alternative to buying.
- (3) machinery is kept and maintained on the operation.

Exclude the value of:

- (1) machinery rented for a short period of time, such as for a specific job.
- (2) machinery provided as a part of contract or custom work.

Item 4c Value of Livestock and Poultry On Hand

Record the operator's best estimate of both the end-of-year and beginning-of-year market value of livestock and poultry owned by 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, 1998 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 breeding purposes.
- (2) all animals held for resale.
- (3) beef and dairy cows, bulls, steers, heifers, calves and any other cattle.
- (4) hogs and pigs.
- (5) sheep and lambs.
- (6) horses, ponies and mules.
- (7) goats.
- (8) chickens, ducks, geese, guineas, pigeons, etc.
- (9) fur bearing animals.
- (10) catfish, crawfish and other fish.
- (11) bees.
- (12) other specialty livestock.

Exclude the value of:

- (1) livestock on hand not owned by the operation.
- (2) animals owned for pleasure use only.
- (3) livestock owned by this operation, but being produced by another operation under contract.

Item 4c (1) Amount for Breeding Livestock

Of the total value reported in item 4c for all livestock and poultry on hand, record the amount which represented the value of breeding stock (including dairy animals).

Item 4d Value of All Crops On Hand

Record the operator's best estimate of both the end-of-year and beginning-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 1998 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, 1998.

- (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 4e Value of Production Inputs

Record the operator's best estimate of both the end-of-year and beginning-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 4d (hay, crops to be used for seed, etc.) Do not include fertilizers and chemicals already applied.

Item 4f Production Inputs Already Used for Crops

Record the amount spent up through December 31, 1998 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, 1998.

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, 1998.

Exclude the value of inputs to:

- (1) crops already harvested (these crop values should be recorded in item 4d).
- (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, 1998 due to weather or market conditions. An estimated value for these crops should be recorded in item 4d if they were originally intended for harvest as of December 31, 1998.

Item 4g Value of Stock in Farm Cooperatives

Record the value on December 31, 1998, of the stock the operation owns in all farm cooperatives. Be sure to include the value of shares received during the year in lieu of dividends.

Item 5 Amount Owed To The Operation

Record the total amount owed to the operation as of December 31, 1998, for all commodities sold or delivered in 1998 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 1998 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 4d. 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.

Record the total amount owed to the operation as of January 1, 1998 for all commodities sold or delivered in 1997 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 1998 and future years from crops, livestock, poultry or products sold or delivered in 1997 or earlier years.

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. Read, or let the respondent read, 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 3.

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 1998 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 1998. Record the \$20,000 debt balance in the item 3 table, entering code 1 in column 4.

Item 2 **Screening for Debt**

If the operator had no long term debt and answers "No" to this question, go to Section L, otherwise continue with item 3.

Item 3 **Debt Outstanding**

If the operation had debt at the end of 1998, 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 smallest loan owed, for up to four 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

Show the respondent 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 Illinois*' 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. On the other hand, if respondents have difficulty in choosing the appropriate loan category, such as between a Savings and Loan or a Commercial Bank, do not hesitate to assist them in arriving at the correct response.

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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 16) the farm share of all unpaid bills.

Column 2 Balance Owed

Record the 1998 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 FmHA/FSA/SBA

Ask the column 7 question 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.

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 (for example a private bank)
- 4 Loan Not Guaranteed

Item 4 Additional Debt

Space is provided to record the details of four loans in the item 3 table. If the operation had more than four loans with balances outstanding at the end of 1998, enter the number of loans in addition to the four identified in the table.

Item 4a Amount of Additional Debt

If the operation had more than four loans with balances outstanding at the end of 1998, 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 Version 1 about 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 collected on Version 1 are used for two important reasons: (1) the estimate is incorporated in the Index of Prices Paid, and (2) it is necessary to know how much is spent on family living to develop an estimate of farmer's debt repayment capacity. Family living expenses are deducted from net income to determine how much is left over to replace equipment and to repay outstanding debt.

The Wheat and Hog questionnaires only ask a limited number of Farm Operator items (Section L, items 1-7) and none of the Section M, Farm Household questions. The Version 1 questionnaire contains more detailed information on Farm Operators (Section L, items 8-13) and includes the items related to the Farm Household (Section M).

Section L - Farm Household

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 2=No), if the corporation has more than 10 stockholders.

Item 2 Major Occupation in 1998

We consider major occupation to be the occupation or work at which an individual spent more than 50% or more work time in 1998. 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**

Enumerator Note: You should record the answer without asking the question.

Item 8 **Risk Management**
VI only

The following questions collect information about farmers' attitudes towards risks that are acceptable or mitigation of risks that are not acceptable. Measuring farmers' risk attitudes is an important and relevant issue, particularly at this time with decreased government intervention in price support. Legislation requires that USDA collect information that allows for conducting analysis of the affects of this policy change on American agriculture. Rating scales of risk management questions have been developed for the purpose of finding out how much risk farmers are willing to take.

Show the respondent the list of Agree/Disagree codes in the Respondent Booklet, then ask each of the items (8a-j) and record the appropriate code indicated by the respondent. It may be necessary to read each item more than once until the respondent becomes familiar with these type of questions.

Item 9 **Management Strategies**
VI only

Ask the respondent if any of the strategies listed are used. Record a "1" for those strategies used in 1998. Enter a dash (-) if the strategy was not used.

Item 10 **Most Important Strategy**
VI only

Of the strategies used in item 9, ask the respondent which one was most important and record the associated number of item 9. If none of the strategies listed in item 9 were used, item 10 should be skipped.

Item 11 **Sells To, or Purchased From, Farmer-owned Cooperatives**
VI only

If the operation sold any farm products to, or purchased any farm supplies or services from, a farmer-owned cooperative in 1998, record a code "1".

Item 12 **Member of a Marketing Cooperative**
VI only

If the operator was a member of a marketing (or bargaining) cooperative in 1998, record a code "1".

Item 13 **Member of a Farm Supply Cooperative**
VI only

If the operator was a member of a farm supply or related service cooperative in 1998, record a code "1".

Section M - Farm Household

This section is only asked on Version 1.

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 "2" and continue with item 2.

Item 2 **Spouse Makes Day-to-Day Decisions**

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.

Codes for '*Does not apply*' are available for operators who are not married. If the operator and spouse are separated and the spouse does not depend financially on the operator's household, the code '*Does not apply*' should be used.

Item 3 **Off-farm Work by Operator**

The next three 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 1998, enter "1" for item 3 and continue to items 3a and 3b.

If the operator did not have an off-farm job, items 3a and 3b should be skipped.

Item 3a Weeks Worked by Operator

If the respondent responded 'yes' to item 3, the number of weeks the operator worked off the farm in 1998 should be recorded in item 3a.

Item 3b Average Hours Per Week Worked by Operator

For the weeks the operator worked, 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 4 Off-farm Work by Spouse

Record whether the operator's spouse worked off-farm at any time during 1998. Again, both self-employment and work for others should be included. If the operator's spouse had a non-farm job, enter "1" for item 4 and continue with items 4a and 4b. If operator was not married, enter code "3" for does not apply and proceed to item 5.

Item 4a Weeks Worked by Spouse

If the answer to item 4 is 'yes' (code 1), record the number of weeks the spouse worked off-farm for pay in 1998.

Item 4b 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 5 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 1998.

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 5a Off-farm Wages and Salaries

Record the **Value Code** which best represents the GROSS cash wages, salaries, tips, paid bonuses, leave pay, etc. received by the operator and all household members in 1998 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 5b Another Farm/Ranch

Record the **Value Code** which best represents the NET cash income earned in operating other farms or ranches. If the operation suffered a loss, the respondent should use the appropriate code and put a negative sign in front of it.

Exclude income received from land rented to others (income received as a landlord). This income should be reported in item 5d.

Item 5c Off-farm Business

Record the **Value Code** which best represents the income earned from operating any off-farm businesses.

Include:

- (1) NET income earned from businesses other than farms or ranches. If the respondent indicates that the operation suffered a loss, the respondent should use the appropriate NEGATIVE code.
- (2) income from agricultural service firms and businesses.
- (3) income from farm-related businesses not already reported, such as custom operations that are not a part of the farm business (custom operation keeps separate books).

Exclude:

- (1) income earned from other farming or ranching operations.
- (2) income from farm-related sources reported elsewhere in the questionnaire.

Item 5d Rental of Farm Land

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 8 and 9. 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 5e Interest and Dividends

Record the **Value Code** which best represents the income earned from interest and dividends.

Include:

- (1) Interest and dividends from all investments.
- (2) Any other interest received from off-farm sources.

Item 5f Social Security, Disability, Military Retirement, etc.

Record the **Value Code** which best represents the income earned from the following:

- (1) Disability insurance
- (2) Social Security, military and other public retirement income.
- (3) Veterans Benefits, unemployment and public assistance programs.

Item 5g Other Off-farm Income

Show the respondent the list of Other Non-farm Income items and Value Codes in the Respondent Booklet.

Record the **Value Code** which best represents the income earned from the following:

- (1) all other NET non-farm income (not included in items 5a-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 5d.

Item 6 Other Households

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 6a and 6b should be completed. If NO, a code "2" should be entered then continue with item 7.

Item 6a 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 1998. Do not include money paid to landlords, contractors or people who worked on the operation for wages.

Item 6b 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 7 Value of All Non-farm Assets

Refer the respondent to the list of Non-Farm Assets 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 all assets owned by the operator and members of the operator's household SEPARATELY from the operation on December 31, 1998. Examples of these household assets are cash, checking, savings or money market accounts, stocks, bonds, equipment and machinery for personal use of household members, the value of non-farm businesses, other separate businesses, residential rental

property, non-farm use vehicles and other assets owned by the operator and operator's household. If the operator or members of the operator's household owns land which was RENTED TO THE OPERATION, the value of that land should be included here.

Item 8 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, 1998 (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 9 Household Living Expenses

Record the **VALUE CODE** which includes the total amount spent by the operator's household during 1998 for each of the listed groups of items. Be sure living expenses for all the members of the operator's household are collected. The purpose of these questions is to let us look at the ability of farm families to cover their living expenses.

Hog Production Practices (Sections N-V)

Sections N-V are only in the Hog questionnaire (Version 3) and relate to production practices on the hog 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 Hog Cost of Production survey was conducted for 1992. Since then, there has not only been change in overall economic conditions and government agricultural policy, but significant change has occurred in the hog industry with the trend toward a more "industrialized" structure. Data collected on the 1998 Hog questionnaire will be used to describe important financial, structural, and environmental aspects of hog production.

The change in the structure of the hog industry has raised questions about how far private rights extend with respect to hog production systems that are perceived to generate environmental risk, nuisance impacts on neighbors, and social impacts on rural communities. The concerns, conflicts, and questions have led to considerable policy debate and legislative activity at the local and state levels, and caused much speculation about the federal role in managing change in the hog industry. USDA has a key role in providing information to participants in this issue through a comprehensive data reporting and research program, with a view to fostering good decisions based on reliable, accurate, and factual information.

Because of evolving concerns about the nature of hog production arrangements and the management of animal waste, these issues will be emphasized in the survey. Data on the types and designs of contract arrangements will be used to study the economics of alternative production arrangements. Information on manure storage facilities, manure use on cropland, and manure management techniques will be used to evaluate potential economic and environmental impacts on producers of proposed regulations. While these data may appear sensitive to producers, a fair appraisal of the issues involved with modern hog production can only be made using accurate, unbiased information about hog production systems. ARMS will provide the only national database suitable for addressing these issues and other issues important to pork producers, researchers, and policy-makers.

Section N - Hog Screening and Inventory

Item 1 Peak 1998 Hog and Pig Inventory

Record the largest number of hogs and pigs on this operation, **regardless of ownership**, at any time in 1998. If this operation is a contractor, exclude hogs and pigs that are located on the contractees' operations.

Item 2 Enumerator Action - 25 or more Hogs

We are only interested in operations that had 25 or more hogs and pigs on the operation at any time in 1998. Therefore, if the answer to item 1 is less than 25, go to the Conclusion on the back page. If the answer to item 1 was 25 or more, continue with item 3.

Operations were selected for the Phase III Hog survey based on the data reported in the Phase I screening. Operations that reported 25 or more hogs (and those that indicated they raised hogs but the number was unknown) on Phase I were eligible for the Phase III Hog survey. Therefore, if less than 25 hogs are reported in item 1, indicate in notes why there is a difference from the Phase I which indicated they had 25 or more hogs.

Item 3 Hog Production Phases

This question identifies the hog production phases conducted on this operation in 1998. Check each of the phases that applies and record a code "1" in the appropriate item code box.

This information should be used to verify that sections of the questionnaire pertaining to each type of production phase are completed.

Item 4 Production Arrangement

Enter the code that describes the operation's type of hog production arrangement. There are three choices: contract, independent, or both contract and independent.

Item 5 Years Producing Hogs

The experience level of the operator is a factor which can help explain why one operation is more efficient than other. These data will also be used to identify operations that have recently entered the hog 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 hogs.

Item 6 Years Expecting to be Producing Hogs

Information from this item will be used to identify operations soon to be exiting the hog 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 5), will provide insight about the future structure of the hog industry.

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

Item 7 Hog Inventory

In this table we get a description of the hog operation as it existed at the beginning and end of 1998. This lets us see if the operation was expanding or reducing its size, and also give some idea of the culling and marketing patterns the operation follows.

Item 7a Sows, Gilts, and Young Gilts for Breeding

Include all sows, gilts, and young gilts bred or to be bred that are part of the operation's breeding stock. Include sows and gilts that were later sold for breeding stock if they were on hand on the reference data.

Item 7b Boars and Young Males for Breeding

Include all boars and young males kept for breeding. Include those used for breeding to sows and gilts located off the operation. Include those that were sold for breeding stock if they were on hand on the reference date.

Item 7c Cull Breeding Stock

Include all sows, boars, and gilts culled from the breeding stock but on hand on the reference date. Include gilts that were originally intended to be part of the breeding stock but which were later culled.

Items 7d-g Market Hogs

Include all hogs and pigs for market or home use in each of the weight categories. Include all weaned and unweaned pigs on hand that were not intended for breeding. Exclude breeding stock and cull breeding stock.

Column 2 End of Year Inventory

For each category listed in column 1, enter the number of head on hand on December 31, 1998. Include hogs and pigs that the selected operation was raising for another operation. If this operation is a contractor, exclude hogs and pigs being raised for the operation on the contractee's operation.

Column 3 Beginning of Year Inventory

For each category listed in column 1, enter the number of head on hand on January 1, 1998. Include hogs and pigs that the selected operation was raising for another operation. If this operation is a contractor, exclude hogs and pigs being raised for the operation on the contractee's operation.

Section O - Purchases, Contract Placements, and Death Loss

This section collects information on:

- Purchases
- Contract Placements
- Farrowings
- Death Loss

Item 1 Purchases and Contract Placements

The table in this item collects information separately for purchases by the operation and placements on the operation by contractors. This will allow for analysis of contract versus non-contract operations. If you are interviewing a contractor, exclude data on hogs after they are placed on a contractee's operation.

Item 1a Bred or Open Gilts for Breeding

Include all gilts, whether already bred or to be bred, that were to be used for breeding.

Item 1b Sows

Include sows purchased or placed on the operation in 1998. In the rare situation where an operation buys cull sows to fatten for the slaughter market, they should be included here.

Item 1c Boars

Include all boars and young males for breeding purchased or placed on the operation in 1998. As indicated above, in the rare situation where an operation buys cull boars to fatten for the slaughter market, they should be included here.

Item 1d Feeder Pigs

Include all pigs, regardless of age or weight, that were purchased or placed on this operation in 1998, to be fattened for the slaughter market.

Column 2 Purchases

For each of the four categories of hogs and pigs listed in column 1, record the total number purchased by the operation during 1998. Exclude those placed on the operation by contractors – those are recorded in column 4.

Column 3 Amount Spent for Purchases

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

Column 4 Contract Placements

For each category of hogs and pigs in column 1, record the total number placed on the operation by all contractors during 1998.

Column 5 Average Weight

For each category listed in column 1, record the average weight (in pounds per head) of all the hogs purchased or placed on the operation during 1998.

Item 2 Gilts Kept for Breeding

Enter the number of **gilts farrowed on this operation in 1998 which were kept for breeding**. Include those which have been sold or culled but were originally intended to be used for breeding.

Item 3 Farrowings

This item begins with a screening question to determine if this operation farrowed any litters during 1998. If no litters were farrowed, skip to item 4. If litters were farrowed, continue with item 3a.

Item 3a Breeding Method

This item records the method of breeding. Record the percentage of the sows and gilts bred by each method. The sum of the percents in items 3a(1), 3a(2) and 3a(3) must equal 100.

Item 3b Number of Litters Farrowed

Record the number of litters farrowed on this operation in 1998. If the respondent cannot give the number of litters farrowed, it can be calculated by multiplying the number of sows farrowed times the average litters per sow during 1998.

The gestation period for hogs is 3 months, 3 weeks, and 3 days. Sows “normally” farrow twice per year with a maximum of three litters every 365 days.

Item 3c Number of Pigs Born

Record the total number of pigs born (excluding stillborns and mummies) on the operation in 1998. Stillborn pigs are those that were fully developed but were born dead. Mummies are pig fetuses that died during gestation.

If the respondent cannot give the total number of pigs born, it can be calculated by multiplying the total number of litters farrowed (item 3b) times the average number pigs born per litter. The average litter size is between 6-10 pigs with a normal range between 3 and 15. Average litter sizes of less than 3 or more than 10 pigs per litter should be explained in notes.

Item 3d Age of Pigs at Weaning

Record the average age of pigs (in days) at weaning. The most common weaning age ranges from about 12 to 30 days, however the trend is to wean pigs as early as possible.

Item 3e Weight of Pigs at Weaning

Record the average weight of pigs (in pounds) when they are weaned. You should expect to see most weaning weights in the range of 7 to 20 pounds, however with the trend to wean pigs earlier, the weaning weight might be lower than this range.

Item 3f Death Loss Before Weaning

Record the total number of pigs that died on this operation before they were weaned. That is, of the total number of pigs born on this operation (item 3c) record the number that died before they were weaned. If the respondent cannot answer this question directly, it can be calculated by multiplying the number of pigs born (item 3c) times an average death loss rate for pigs before weaning.

Item 4 Death Loss of Weaned Pigs

This question is asked of all operations, whether they farrowed litters or not, and includes all weaned pigs that died which were purchased, placed under contract, or born on this operation.

Record the total number of weaned pigs that died on this operation in 1998 before they reached market weight. If the respondent cannot answer this question directly, it can be calculated by multiplying the number of weaned pigs purchased, placed, or born on the operation times the average death loss rate for pigs after they were weaned but before they reached market weight.

The normal death rate for weaned pigs is between 1 and 3 percent of the total. Usually low or high death losses should be explained in notes.

Exclude the unweaned pigs that died before they were weaned (this death loss is recorded in item 3f).

Item 5 Death Loss of Breeding Stock and Cull Hogs

Record the total number of breeding sows, boars, replacement hogs and cull stock that died on this operation in 1998.

The sum of items 3f, 4, and 5 should equal the total death loss of hogs and pigs on this operation in 1998.

Section P - Sales and Contract Removals

The purpose of this section is to collect information on the marketing and income patterns of the hog operation. Included are both sales and contract removals.

Item 1 Sales and Contract Removals

The data in this table provides information on the operation's marketing patterns of breeding stock, cull stock, feeder pigs and market hogs.

Column 1 Type of Hogs and Pigs

Most of the categories in this column have been described previously. Market hogs (1h) are hogs sold directly for slaughter.

Column 2 Number Sold

For each category listed in column 1, enter the total number sold from this operation in 1998. Exclude hogs and pigs removed from the operation under contract arrangements. If the operation is a contractee only, skip to column 4.

Column 3 Amount Received for Non-contract Sales

Enter the total amount received (net of marketing charges) for sales of each category of hog and pig sales reported. Exclude fees received for hogs and pigs removed under contract.

Column 4 Number Removed Under Contract

For each category in column 1, record the total number removed under contract arrangements during 1998.

Column 5 Average Weight

For each category, enter the average weight of the hogs and pigs sold and/or removed under contracts during 1998.

Item 2 Marketing Charges

Considering all the operation's sales of hogs and pigs in 1998, record either the average per head or total amount paid for all commissions, marketing charges, etc. Exclude transportation charges. If the operation is a contractee only, this item can be skipped.

Item 3 Market Hogs Sold Directly to a Packing Plant

Of the market hogs sold (item 1h, column 2) or removed (item 1h, column 4) from this operating in 1998, record the total number that were sold directly to a packing plant.

Item 4 Screening for Contract Arrangement

This is a screening question to determine if this operation had a contract or formal agreement to produce hogs or pigs for someone else. You probably already know the answer to this question from the information reported earlier but if not, re-ask the question.

If the operation does not have a formal agreement to produce hogs for someone else, check "No" and go to Section Q. If the operation does have a formal agreement, check "Yes" and continue.

Item 5 Number of Years with Current Contractor

Record the number of consecutive years this operation has had a formal agreement to produce hogs for their current contractor.

Item 6 Contract Payment Method

This item records the type of contract payment method this operation has with the current contractor. Select the option which best describes the type of payment arrangement and enter the code.

Item 7 Services Provided by the Contractor

This item consists of a series of yes/no questions to determine the types of services provided by the contractor under the current agreement. For each item, enter a code "1" if the contractor is providing this service under the current agreement.

Section Q - Hog Feed

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

For contractee operations where the contractor supplied the feed, try to get the respondent's best possible estimate of the type and quantity of feed used. The contractee should be able to supply information for columns 1-4 and column 6. The cost of the feed in column 5 may be found on the contractees contract settlement sheet. The total contractor expense for purchased feed should have been recorded earlier in Section G, item 5f, column 3.

Item 1 Screening Question for Purchased Feed

This is a screening question to determine if the operation purchased, or the contractor supplied, any feed for the hogs on this operation in 1998. Unless the operation grew all of the feed fed to the hogs, this question will always be "Yes".

In the unlikely event that the operation did not purchase any feed, or no feed was supplied by a contractor, 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 hogs in 1998. Include feed purchased and feed supplied by contractors. Exclude feed grown on the operation and fed to hogs (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 hogs on the operation in 1998. Include both feed purchased and feed supplied by contractors. Exclude homegrown feed.

Column 3 Unit Code

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

Column 4 Percent Purchased

For each type of feed listed in column 1, enter (1) the percent purchased by this operation and (2) the percent supplied by contractors. For each row, the sum of the percent purchased by the operation plus the percent supplied by contractors must equal 100.

Column 5 Total Cost of Feed

Record the total cost of each type of feed fed to hogs and pigs on this operation in 1998. This includes both the amount spent by the operation to purchase the feed and the cost of the feed supplied by contractors.

It may be difficult for respondents to report the cost of the feed supplied by contractors. This information may be available on the contract settlement sheet. If they do not have this information available, record their best estimate of what the supplied feed cost. This can be calculated by multiplying the total quantity of feed supplied by the contractor times the average market price of the feed.

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 hogs and pigs on this operation in 1998.

If no homegrown feed was fed to the hogs on this operation, check the appropriate box and go to Section R.

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 hogs and pigs on this operation in 1998. Exclude feed that was purchased or supplied by contractors.

Column 2 Total Amount Fed

For each type of feed listed in column 1, record the total quantity fed to hogs on the operation in 1998. Exclude feed purchased and feed supplied by contractors.

Column 3 Unit Code

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

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.

Section R - Housing

Housing on many hog 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 hogs and pigs remained outside for 24 hours a day without shelter.

Item 1 **Hog Housing Facilities**

Information will be collected on facilities used for gestating gilts and sows, for farrowing, as a nursery, and for growing and finishing hogs (column 1).

If hogs or pigs are kept in pastures or dirt lots, record any structures in the lots used for hog shelters.

Column 2 Types of Facilities

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

Enter the code for each type of facility used by the operation for each of the categories listed in column 1. Up to three types of facilities can be recorded for each category listed in column 1. 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 5, 6, and 7 are the same).

If the operation keeps weaned pigs in farrowing crates or pens, or if the weaned pigs were moved directly from farrowing facilities into growing/finishing facilities, do not duplicate these facilities by recording them as nursery facilities. For nursery facilities, we are interested only in separate facilities (although they can be in the same building) not used for these other purposes.

If the operation has separate breeding facilities, record these under gestating (1a).

Column 3 Open-Sided Facilities

If the facility recorded in column 2 was open-sided with doors or curtains to control ventilation, enter a code "1" in this column. Otherwise enter a dash (-) to indicate "no".

Column 4 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 5 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 2. Be sure to record the type of frame, and not the type of siding.

Column 6 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 2.

Column 7 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 "36 - none".

Column 8 Capacity

For each of the facilities listed in column 2, enter the total number of head of each category listed in column 1, that these facilities can house. If the operation has more than one facility of the same type (column 4 is greater than 1), enter the combined capacity.

Column 9 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 - Land Use for Hog Production

Item 1 Total Acres Used for Hogs

Record the total acres (to the nearest tenth of an acre) that were used on this operation in 1998 for hog production. Include pastures, hog lots, building sites, manure storage facilities, etc. used to raise hogs.

Exclude acres used to produce crops to feed to hogs and acres to which hog manure was applied.

Item 2 Pastures and Dirt Lots for Hogs

Enter a code "1", for each phase of hog production in items 2a-e that were conducted on pastures or dirt lots.

Verify that any hog housing facilities located in pastures or dirt lots were recorded in Section R.

Section T - Vehicles, Trucks and Tractors

The purpose of this section is to account for all trucks, tractors, and other motor vehicles used for hog production on this operation in 1998.

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

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 hogs.

VEHICLE USE

Column 1 Vehicle Type

Two categories of vehicles are pre-coded. Line 1 accounts for all pick-ups, cars and sport utility vehicles. Line 2 accounts for all terrain vehicles (ATV's) 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 hog production in 1998.

Column 3 Percent for Hog Production

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

TRUCK USE

Column 1 Truck Type

Record the make and model of each truck used on the operation in 1998 for hog 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 production of hogs 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 Hog Production

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

TRACTOR USE

Column 1 Tractor Type

Record the make and model of each tractor used on the operation in 1998 for hog 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 production of hogs 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 Hog Production

Record the percent of the total farm use of each tractor reported in line 1 that was for hog 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 hog enterprise in 1998. 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 hogs.

Item 1 Machinery and Equipment Used

This table lists all the machinery equipment used on the hog operation in 1998. Do not list machinery and equipment unless they were used on the hog 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 hog 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 hogs.

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 Hog Production

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

Section V - Hog Manure

The primary purpose of this section is to get information on the methods and facilities used to handle or dispose of hog manure. Hog manure may be considered both a waste product and a fertilizer by-product of hog 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 hog 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 hog operations will have these facilities. The only time you may encounter an operation without manure storage facilities is a relatively small operation with the hogs 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 3.

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 hogs. 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 Location of Lagoons

If lagoons were reported above in item 1, ask this question. Otherwise, skip to item 3.

This item collects information on the location of hog lagoons relative to houses, residential areas, drinking water wells, or sources of water (excluding farm ponds).

For each of the items 2a-2d, record the distance of the lagoon 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 lagoon on its hog operation, consider the lagoon closest to the item of interest.

Item 3 Acres Hog Manure was Applied To

Record the number of acres, **on this operation**, that hog manure was applied to during 1998. If manure was applied to the same acres more than once during the year, count these acres only once.

If the operation did not apply hog manure to any of the acres operated in 1998, skip to item 9.

Item 4 Manure Testing

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

Item 5 Commercial Fertilizer Applied

The purpose of this item is to determine if the operation applied commercial fertilizer to any of the same (item 3) acres on which hog manure was also applied.

If the operation did not apply commercial fertilizer to any of the same acres as hog manure was applied, check "No" and skip to item 6.

Items 5a & 5b Adjusting Commercial Fertilizer Application

If the operation applied commercial fertilizer to any of the same (item 3) acres on which hog manure was also applied, these items record if commercial fertilizer application rates were adjusted according to either the nitrogen or phosphorus available from the hog manure. Enter a code "1" in the appropriate item if so.

Item 6 Manure Handling

This item records how the hog manure on this operation was handled. Record the percent of the total hog manure in 1998 that was either handled in solid form, handled in liquid form, or not handled at all. The sum of the percents in items 6a + 6b + 6c must equal 100.

Item 7 Solid Manure Incorporation

If any hog manure was handled in solid form (item 6a is greater than zero) then ask this question. Otherwise, skip to item 8.

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

Item 8 Liquid Manure Incorporation

If any hog manure was handled in liquid form (item 6b is greater than zero) then ask this question. Otherwise, skip to item 9.

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

Item 9 Manure Removed From This Operation

There are basically two ways hog 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 total amount of hog manure that was removed from this operation in 1998. This would include manure that was sold, hauled off, or given away and can be reported in either gallons or tons.

Item 9a Manure Sold

Of the total hog manure removed from this operation (item 9) record the percent that was sold.

Item 9a (1)

Record the dollar amount this operation **received** for selling hog manure in 1998.

Item 9b Manure Hauled Off

Of the total hog manure removed from this operation (item 9) record the percent that was hauled off the operation for a fee. Exclude manure that was given away free of charge.

Item 9b (1)

Record the dollar amount this operation **paid** to have hog manure removed from this operation in 1998.

Item 9c Manure Given Away

Of the total hog manure removed from this operation (item 9) record the percent that was given away free of charge.

Items 9a, 9b, and 9c should account for all the hog manure removed from this operation in 1998 therefore the sum of these items must equal 100.

Item 10a Amount Spent to Control Odor

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

Item 10b Amount Spent on Fees, Permits, etc.

Record the total dollar amount this operation spent in 1998 on fees, permits, licenses, etc. for this hog operation.

Item 11 Feed Ration Adjustment

If the operation adjusted hog feed rations by adding microbial phytase to reduce the level of phosphorous in hog manure, record a code "1".

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 Releases will be published in July of 1999. 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 MMDDYY format on the lines provided in the date cell. For example, if the interview was completed on March 6, 1999, enter 3 06 99 in the date cell. 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!!!*