

United States  
Department of  
Agriculture

National  
Agricultural  
Statistics  
Service

December 1996



USDA

1996

Agricultural  
Resource  
Management  
Survey (ARMS)

Phase III – Cost and Returns  
Report

Interviewer's Manual

Agricultural Resource Management Study for 1996  
Costs and Returns Report Interviewer's Manual

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## Chapter 1 - General

### Purposes of the Agricultural Resource Management Study (ARMS), Costs and Returns Report (CRR)

Information from the ARMS Costs and Returns Report questionnaire is used to help determine:

- (1) farmers'/ranchers' net farm income and provide data on the financial situation of farm/ranch businesses, including the amount of debt they have.
- (2) what it costs to produce various crop and livestock commodities, and the relative importance of various production expense items.
- (3) the characteristics and financial situations of farm/ranch operators and their households, including collecting information on their off-farm income, participation in the new farm programs and their risk management strategies.
- (4) farmers'/ranchers' resource use (such as water for irrigation) and adoption of new technology (such as "precision farming" methods).

### Uses of CRR Data

CRR data are vital for evaluating farmers'/ranchers' current income and financial situation. These data provide the only national perspective on the annual changes in the financial condition of production agriculture. The Bureau of Economic Analysis (BEA), part of the United States Department of Commerce, estimates the value of all the final goods produced in the United States, or the *gross domestic product*, (GDP). The CRR data are the only source of the value of goods the farm sector contributes to GDP. Without CRR data, BEA would have to conduct their own survey of farm operators to make their estimates.

Farm organizations, commodity groups, agribusinesses, Congress, and the U.S. Department of Agriculture (USDA) use the information to evaluate the financial performance of farm/ranch businesses when making policy decisions affecting agriculture. Producer associations and the USDA Farm Service Agency (FSA) also asked for CRR data on the cost of producing crops in the old commodity programs. Now, FSA will use the data to develop proposals for programs that have replaced the previous commodity programs.

Generally, farmers use CRR 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 spots. Most respondents probably do not realize the data came from this survey. It is hard to imagine a market today that can operate well on bad information or no information at all. With good reports from farmers across the country, people who help farmers market their crops and livestock have free and equal access to the most timely and accurate information about the markets they buy and sell in for their farmers.

New technologies make this information even more accessible. Many farmers now have a computer and can find these data on the Internet. Reports and tables using CRR data can be downloaded from the Farm Business Economics Briefing Room on the USDA Economic Research Service (ERS) homepage. The ERS homepage address is:  
<http://www.econ.ag.gov>

Just click on **Briefing Rooms** and on the next page click on **Farm Business Economics** to view reports and tables. To access this page without going to the ERS homepage use the following address:  
<http://www.econ.ag.gov/briefing/fbe>

### 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 permit accurate estimates of annual expenses.

Throughout the year, the prices farmers receive for their commodities often change in response to weather and national or international events. The CRR data are used daily to describe the impact these adverse changes have on the financial health of different types and sizes of operations. The CRR is the only national source of data to quickly meet this kind of information request.

Drought, flood, hail, insects or outbreaks of disease may impact specific geographic areas while the rest of the country is unaffected. Thus, it is important to monitor the health of the agricultural economy by region, as well as by size and type of operation. Several parts of the country experienced adverse conditions in 1996 and the financial impact of bad weather will be measured by the CRR.

Numerous requests to ERS are made throughout the year to characterize the financial position of various groups of farmers. For example, this past summer data from last year's Farm Costs and Returns Survey (FCRS) were used to help the Office of the President understand the financial condition of cattle producers. Congress often makes requests of ERS, too. For example, ERS was asked to report about the financial condition of farms in the Northern Plains, and how many farmers use hedging as a marketing tool. These requests are often answered only by using CRR data.

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 CRR.

ERS publishes farm income estimates monthly in 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

Congress or USDA mandates exist for the development of annual estimates of the cost of producing wheat, feed grains, cotton, peanuts, tobacco, sugar, 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 on 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 CRR, along with information collected in the fall of 1996 on the ARMS Production Practices and Costs Reports, 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 that 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 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 ongoing basis.

Balance sheet analysis helps identify areas of poor financial performance and pockets of potential financial stress. The CRR 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 CRR 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 the 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 CRR data, the extent and seriousness of financial problems facing farmers are assessed, including the likely consequences of recurring financial stress.

### **Operator Household's Situation**

There are many players in U.S. agriculture and farmers are the most unique resource among them. Operators and their households are of special interest for policy purposes because they incur nearly all of the risks of farming and most strongly feel the effects of 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 these 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 the 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 operator households had a member who earned income from off-farm wages or salary.

44 percent 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 for farm households, pose serious obstacles for the farm household which would like to maintain its farm lifestyle by earning more stable off-farm income. The CRR is the only national data source that provides the type of information necessary to study these nontraditional financial conditions of farmers.

### Use of CRR for Parity Prices

CRR information on farm expenses helps determine 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 is used to help 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 CRR

NASS publishes the Farm Production Expenditures report from each CRR. The 1996 survey results will be released in July 1997.

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 include this information in their State publications.

ERS prepares state, regional, and national reports. 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 a number of reports which depend on data from the CRR:

Annual Report to Congress on the Status of Family Farms

(See Exhibit 4 at the end of this chapter for this report's legislative background.)

Financial Performance of U.S. Farm Businesses

Farm Operating and Financial Characteristics

U.S. "Commodity" Production Costs and Returns , 1996: An Economic Basebook

The Economic Well-Being of Farm Operator Households

Productivity & Efficiency Statistics

CRR 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.

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

# Agricultural Resource Management Study for 1996 Costs and Returns Report Interviewer's Manual

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## 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 1977 Act to provide that when set-aside programs were in effect the adjustment 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 to be used directly in setting support levels.
- Established a National Agricultural Cost of Production Standards Review Board composed 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 the 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 establishing support levels for sugar.
- 1990 Cost of Production Review Board extended with modifications to membership requirements.
- 1995 Cost of Production review board authorization expired September 30, 1995.

**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 costs, a return on fixed costs, and a return for management.

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## Exhibit 3

### References to Parity in Statutes Currently in Effect

Agricultural Adjustment Act of 1933, as reenacted and amended by the Agricultural Marketing Agreement Act of 1937: Sec. 2 (7 USC 602) & Sec. 8 (7 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) [The National Wool and Mohair Act of 1954] - 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 percent of parity for certain agricultural commodities when commercial 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 programs are continued by prior legislation and are not affected by the 1996 Act. Section 101 (7 USC 1441) suspended permanent provisions of parity price support formulas for tobacco, peanuts, corn, wheat, rice, and cotton.

**Exhibit 4**

Annual 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



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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 -
  - (i) the economic structure of the family farm system;
  - (ii) the competitive status of domestically-produced agricultural commodities and foods in foreign markets; and
  - (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 -
  - (i) derive the majority of their income from non-farm sources; and

- (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.

## Chapter 2 - Terms and Definitions

Enumerators working on the CRR 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. Appendix A of the "Interviewer's Manual" should serve as a reference for definitions. An asterisks after a term indicates the term is defined at the end of this chapter.

### Economic and Cost of Production Terminology

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

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depreciation	fringe benefits *
direct sales	futures market *
discount	
diversion	grazing allotment
double crop	grazing association
drip irrigation	grazing fee
	greenhouse
editing	
EIN	harvested acres
electronic information service	hay
Environmental Quality	hedging
Incentives Program (EQIP)*	herbicide
equity	hired manager
estate	household
expenditure	hundredweight (cwt)
expenses, production	
	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	input
Improvement and Reform	input provider *
(FAIR) Act *	
feeder	landlord
fertilizer	landlord, non-operator
field	landlord, operator
financial health	liability
finish	liquidity
flat	loan, marketing*
flexibility contract, 7-year	loan, marketing assistance*
production	
flexibility contract*	mail maintenance system
forage	(MMS)
forward pricing *	major occupation
free-of-charge*	market value

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military time	primary name
name & address master	processor
Natural Resources Conservation Service (NRCS) *	production flexibility contract *
net worth	production flexibility contract payment*
nonresponse	questionnaire
nursery	rangelands
oilseed crops	ratio, debt-asset
on feed	ratio, parity
operating arrangement	real estate
(1) individual	record status code
(2) managed	refusal
(3) partnership	rent
operator	rent, cash
orchard	rent, free
out-of-business	rent, share
partner	respondent
pasture*	retired
patronage dividend	salary
payment, advanced*	sample, list
payment, cost-share*	sample, multi-frame
payment, deficiency	sample, probability
payment, disaster	sampling frame
payment, final*	sampling unit
payment, incentive	secondary name
payment, loan deficiency*	seed
payment, transition*	sharecropper
payment limitations	shrinkage
payment quantity*	small grains*
payment yield*	software
pesticide	solar power
planting flexibility*	sold-out
pick your own (U-Pick)	solvency
power-take-off (PTO)	SSN
premium	state EIN
price support	straw
price support level	subsidy

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survey	Wetland Reserve Program
survey period	(WRP)*
survey, statistically defensible	woodland
	work, agricultural
tenant	work, contract
	work, custom
wages	work, service
water rights	worker
wetting agent	
wetlands*	yardage

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<b>acreage, eligible contract</b>	Under the new farm bill, eligible contract acreage must have been included in the annual acreage reduction program for at least one out of the last five crops, or have been considered planted. The definition of considered planted has been expanded to include acreage which may not have participated, but which was reported to the local Farm Service Agency office. Eligible contract acreage also includes cropland subject to a CRP contract whose term expired, or was voluntarily terminated, after January 1, 1995, or is released by the Secretary of Agriculture between January 1, 1995, and August 1, 1996.
<b>acreage, contract</b>	Under the new farm bill, an owner or producer may enroll all or a portion of the eligible cropland on the farm as contract acreage. Also, an owner or producer who enters into a contract may subsequently reduce, but not add to, the quantity of contract acreage covered by the contract.
<b>acreage, noncontract</b>	Under the new farm bill, noncontract acreage is the portion of eligible contract acreage which an owner or producer did not enroll in the program.
<b>borrowing capacity</b>	The amount of credit (ability to obtain loan or services based upon a promise to pay) that an operator has with lending institutions. Credit is a resource that can be used or held in reserve. Even a debt-free operation may have credit, but in the case of the debt-free operation, all of its credit is in reserve.
<b>commodity, contract</b>	Under the new farm bill, contract commodity is the crop specified in the production flexibility contract. Eligible commodities are

wheat, corn, sorghum, barley, oats, upland cotton, and rice.

**Commodity  
Credit  
Corporation  
(CCC)**

A Government-owned and operated entity which was created to stabilize, support, and protect farm income and prices. CCC also helps maintain balanced and adequate supplies of agricultural commodities and helps in their orderly distribution. The CCC Charter Act, as amended, aids producers through loans, purchases, payments, and other operations, and makes available materials and facilities required in the production and marketing of agricultural commodities. Farmers who have participated in the wheat, feed grains, cotton, and rice programs in any of the last 5 years can enter into 7-year production flexibility contracts for 1996-2002 whereby producers receive government payments largely independent of farms prices and specific crop production, in contrast to the past when deficiency payments were dependent on farm prices and the production of specific crops.

The CCC Charter Act also authorizes the sale of agricultural commodities to other government agencies and to foreign governments, and food donations to domestic, foreign, or international relief agencies. CCC also assists in the development of new domestic and foreign markets and marketing facilities for agricultural commodities.

**conserving use**

Under the new farm bill, land idled from production and planted in a soil-conserving crop, such as annual, biennial, or perennial grasses, or other soil-conserving crops.



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**Cooperative State  
Research,  
Education, and  
Extension Service**

A USDA agency providing farmers and rural people leadership, coordination, and evaluation in support of state and county educational programs. It also provides access to agricultural research and information on federal regulations and policy, food safety, agricultural marketing, disaster awareness, sustainable agriculture, waste management, water quality and youth at risk. The Agency called Extension Service is now a part of the Cooperative State Research, Education, and Extension Service.

**Environmental  
Quality Incentives  
Program (EQIP)**

EQIP is a new program which combines the functions of the Agricultural Conservation Program, Water Quality Incentives Program, Great Plains Conservation Program and the Colorado River Basin Salinity Control Program. EQIP is funded at \$130 million in fiscal year 1996 and \$200 million annually thereafter. Livestock-related conservation practices will receive 50 percent of program funding. The program provides technical, educational, and cost-share assistance and incentive payments to crop and livestock producers in implementing structural and management practices to protect soil and water resources. The program defines land eligible for EQIP contracts as agricultural land that poses a serious problem to soil, water, or related resources. The program establishes 5- to 10-year contracts to provide technical assistance and pay up to 75 percent of the costs of conservation practices such as manure management systems, pest management, and costs of conservation practices such as manure management systems, pest management, and erosion control.

<b>farm, contract</b>	Under the new farm bill, a contract farm is a farm which has land that is considered eligible for the program and the owner or producer chose to enroll all or a portion of the eligible land in the program.
<b>farm, noncontract</b>	Under the new farm bill, a noncontract farm is a farm which, even if it has land that is considered eligible for the program, the owner or producer chose not to enroll in the program.
<b>Farm Service Agency (FSA)</b>	An agency of U.S. Department of Agriculture which administers farm commodity and conservation programs for farmers and makes farm loans. FSA programs are primarily directed at agricultural producers or, in the case of loans, at those with farming experience.
<b>Federal Agricultural Improvement and Reform (FAIR) Act</b>	The 1996 Farm Bill, which became law on April 4, 1996, significantly changed U.S. agricultural policy. The new farm act removes the link between income support payments and farm prices by providing for seven annual fixed but declining production flexibility contract payments whereby participating producers may receive government payments largely independent of farm prices, in contrast to the past when deficiency payments were dependent on farm prices.

**flexibility  
contract, 7-year  
production**

Under the new farm bill, producers on a farm with eligible cropland must have signed a production flexibility contract in order to participate in the program. The producer must continue to comply with the conservation and wetland protection requirements on all of the producer's farms, comply with the planting flexibility requirements, and use the contract acreage for an agricultural or related activity. Remaining in compliance over the next 7 years, the farm will receive annual contract payments. Producers are also eligible to receive marketing assistance loans on all production of contract commodities on the farm with a production flexibility contract, even if produced on noncontract acres. All producers are eligible for loans on extra-long staple (ELS) cotton and oilseeds on any production.

**flexibility contract**

Farm legislation passed in 1996 replaced previous commodity programs with "production flexibility contracts" that provide income support to participating farmers over the next seven years. To be eligible, farmers had to have:

- a crop acreage base at the FSA (ASCS) office,
- and* • been a participant in a farm commodity program for at least 1 of the previous 5 years,
- or* • have land that was enrolled in CRP.

Participating farm operators must continue to comply with conservation provisions related to highly erodible land and wetlands preservation to receive contract payments. Farmers have few, if any, restrictions on what crops they can plant on land enrolled in the program. The total funding in the new farm program is fixed by law, but the distribution of payments to

individual farmers depends on how many operators participate and the number of contract acres each has in the program. The new program will offer a boost to cash-flow over the seven year program, but will end in 2002. Nearly all farmers who enrolled in previous commodity programs or who were eligible to receive deficiency payments also enrolled in the new program.

<b>forward pricing</b>	Contracting or agreeing with an input provider to purchase a given quantity of supplies at a given price.
<b>free-of-charge</b>	An arrangement where a producer may use a resource owned by someone else and not have to pay for its use.
<b>fringe benefits</b>	Employer provided cash payments for any such items as health insurance, life insurance, holiday pay, vacation pay, sick leave, time-off with pay, Workers' Compensation, employer's share of Social Security and Medicare, pensions and retirement plans.
<b>futures market</b>	The formal marketing system that lets farmers promise to deliver or buy commodities at a set price.
<b>income, off-farm</b>	A figure that includes all income from off farm sources received by farm operator households.
<b>input provider</b>	The company or individual that sells or contributes products used in the production of agricultural commodities.
<b>loan, marketing</b>	A nonrecourse price support loan which the producer may repay at less than the announced loan rate whenever the world market price or

posted county price is less than the commodity loan rate.

**loan, marketing assistance**

The new farm bill retains nonrecourse commodity loans in a modified form. Farmers may receive a loan from the CCC at a designated rate per unit of production by pledging and storing a quantity of commodity as collateral. Loan rates for most crops continued to be based on 85 percent of the preceding 5-year average of farm prices, excluding the high and the low. Maximum loan rates are specified for wheat, corn, upland cotton, soybeans, and minor oilseeds. The rice loan rate is set at \$6.50 per hundredweight.

**Natural Resources Conservation Service (NRCS)**

A USDA agency charged with the national soil and water conservation program in cooperation with landowners, operators, developers, community planning agencies, and other local, state and federal agencies. The Agency called Soil Conservation Service is now part of the Natural Resources Conservation Service (NRCS).

**pasture**

Land or a plot of land used for grazing.

**payment, advanced**

A provision in the farm program where a program participant receiving payments may chose to receive a portion of the projected final payment early in the year. However, at the end of the program year, if the final payment is less than the advance amount, producers must refund the excess portion

**payment, cost-share**

Payments made under a program where a participant in the farm program receives partial cash assistance from the Government when the participant pays for the cost of a service or good.

<b>payment, final</b>	This term is used in conjunction with deficiency payments and transition payments. Advanced payments are made to participants on the basis of projected payments. The final payment is that actual payment level that the participant is authorized under the terms of the program which is determined at the end of the year.
<b>payment, loan deficiency</b>	A payments made to a producer who, although eligible to obtain a marketing assistance loan, agrees to forgo the loan in return for the payment. A loan deficiency payment is available only when the adjusted world price is below the loan rate.
<b>payment, transition</b>	The payment participants receive under the new farm bill are referred to as transition payments. That is because over the 7- year period of the program, the payments will decline. At the end of the program, the producers will operate under free market conditions with no payments received.
<b>payment quantity</b>	Under the new farm bill, the payment quantity of a contract commodity for each fiscal year equals 85 percent of the contract acreage multiplied by the farm program payment yield.
<b>payment yield</b>	The farm commodity yield of record (per acre), determined by a procedure outlined in legislation. Program yields continue to be frozen at 1985 levels.
<b>planting flexibility</b>	Under the new farm bill, except for fruits and vegetables, any commodity or crop may be planted on contract acreage on a farm. The planting for harvest of fruits and vegetables (other than lentils, mung beans, and dry peas) is

prohibited on contract acreage, except in the following situations:

Harvesting double-cropped fruits and vegetables on contract acreage is permitted, without loss of payments, in any region which has a history of double-cropping contract commodities with fruits and vegetables. An individual farm does not have to have a double-cropping history, only the region.

Harvesting of any fruits or vegetables on contract acreage is permitted, with an acre-for-acre loss of contract payments for each contract acre planted to fruits or vegetables, if the Secretary of Agriculture determines that there is a history of planting fruits and vegetables on the farm.

Harvesting of specific fruits or vegetable on contract acreage is permitted, with an acre-for-acre loss of contract payments for each contract acre planted to the specific fruit or vegetable, if the Secretary of Agriculture determines that a producer has an established planting history of the specific fruit or vegetable. In such a case, the quantity harvested cannot exceed the producer's average annual planting history of the specific fruit or vegetable during the 1991--1995 crop years (excluding any crop year with 0 acres planted).

Haying and grazing restrictions have been eliminated, except for CRP acres. There are no minimum planting requirements for contract commodities.

There are no restrictions as to what a producer can plant on non-contract acres.

<b>production flexibility contract</b>	Under the new farm bill, owners and producers of farms with eligible cropland who want to participate in the farm program must have signed a production flexibility contract during the sign up period which was from May 20 through July 12, 1996. The producer must continue to comply with the conservation and wetland protection requirements on all the producer's farms, comply with the planting flexibility requirements, and use the contract acreage for an agricultural or related activity. The participant benefits are transition payments received over the 7-year period and eligibility for marketing assistance loans.
<b>production flexibility contract contract payment</b>	Under the new farm bill, this is another term for the transition payments received by program participants.
<b>wetlands</b>	Land that is characterized by an abundance of moisture and that is inundated by surface or ground water often enough to support a prevalence of vegetation typically adapted for life in saturated soil conditions.
<b>Wetlands Reserve Program (WRP)</b>	WRP is a voluntary program that offers landowners financial incentives to enhance wetlands in exchange for retiring marginal agricultural land. Congress authorized the WRP under the Food Security Act of 1985, as amended by the 1990 and 1996 Farm Bills. To be eligible for WRP, land must be restorable and provide significant wetland and wildlife habitat. The program offers landowners three options: permanent easements, 30-year easements, and restoration cost-share agreements of a minimum 10-year duration. The WRP has restored approximately 325,000 acres of wetlands throughout the country, and



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over the next six years the goal is an additional  
650,000 acres.



## Chapter 3 - Survey Procedures

### Survey Materials

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

#### **You will receive the following from your State Office:**

- Copies of pre-survey publicity letters mailed to each respondent
- Copies of the publicity brochure
- Questionnaires with labels identifying the assigned operations
- A few questionnaires without labels
- Respondent Booklets containing code tables and a burden statement
- Supplements and Inserts for any questionnaire(s) 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

You will need to use a calculator for this survey; a clipboard may also be handy.



## Questionnaire Versions

Four questionnaire versions will be used in this year's CRR. All States will use Version 1. Major producing States will use versions 2, 3, and 4.

<u>Version</u>		<u>Color</u>
Costs and Returns Report (CRR)	(V1)	White
Corn	(V2)	Blue
Flue Cured Tobacco	(V3)	Green
Cow/Calf	(V4)	Yellow

All versions have a Face Page which identifies the selected operator and partners. Since prescreening of respondents was done in Phase I of ARMS in 34 states, a screening form is not printed in the questionnaire this year. Instead, a screening supplement will be used in the 14 states which did not pre-screen in Phase I (AL, AZ, CT, DE, MD, MA, NV, NH, NJ, NY, RI, UT, VT and WV) and selectively in states where Phase I screening was incomplete. Screening will be discussed in Chapter 4 of this manual.

All the remaining sections are identified by both letter and title. The letter and title pairings do not change. For example, Section B is always "Farm/Ranch Production Costs" and the topic "Farm/Ranch Production Costs" is always covered in Section B. However, the amount of detail asked in a section may vary from one questionnaire version to another. These sections are discussed in Chapter 5. Although this approach makes for a more lengthy chapter, it greatly reduces the duplication that would result from discussing each questionnaire in separate chapters. To help you find instructions, dividers are provided at key intervals, and the letter of the section discussed on a page is shown at the bottom of the page along with the chapter and page number for example, page A-5001.



## Respondent Burden

Be thoroughly familiar with each questionnaire version you will be using and the instructions for it so you won't waste the respondent's time.

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. Respondents who have questions or comments about the burden statement or paperwork reduction should send them directly to the mailing address shown in the burden statement.

## Questionnaire Format

The following formatting conventions apply to the CRR questionnaires:

1. Enumerator instructions are printed in italics and enclosed in brackets.

### Example 1 - Enumerator instructions

10. Is anyone now operating the land you [operation on face page] formerly operated?

<input type="checkbox"/> <b>YES-</b>	<i>[Complete information below for new operator. Give this questionnaire response code 3. Then go to back cover and complete the items in the black box at the bottom of the page.]</i>	<input type="checkbox"/> <b>NO -</b>	<i>[Make notes. Give this questionnaire response code 3. Then go to back cover and complete the items in black box at the bottom of the page..]</i>
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- Prompts, "includes and excludes", and other instructions for respondents are also printed in italics but enclosed in parentheses. Read these only when needed.

### Example 2 - Instructions for respondents

11. What was the total CASH rent this operation RECEIVED in 1996?  
*(Include government payments received for acres rented out.)*

- Optional wording for items or questions is shown in plain print enclosed in parentheses.

### Example 3 - Optional Wording

13a. you (the operator)? ..... PERCENT 0175 OR DOLLARS 0178

- Office-use boxes are printed with thick solid lines in dark type (boldface).

### Example 4 - Office Use Boxes

OFFICE USE-SHARES  
INC 0382

- Item code boxes for interviewer use are generally printed with thin solid lines in a lighter typeface.

### Example 5 - Item code boxes for interviewer use

a. How many acres did this operation OWN in 1996? ..... 0041



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6. Some item code boxes have a printed decimal point followed by 1, 2, or 3 marked spaces. They show the data should be reported to the tenth, hundredth, or thousandth place.

**Example 6 - Item code boxes**

	<b>DOLLARS AND CENTS PER POUND PER POUND</b>
18a. What was the (per pound) cost for cleaning and treating homegrown seed? .....	749

7. Boxes made of dot-dash lines in boldface are for data which will be broken down into greater detail in later questions.

**Example 7 - Boxes made of dot-dash lines in boldface**

11. In 1996, how much was spent for all repairs, parts and accessories for machinery, equipment and vehicles, AND all maintenance and repair of farm buildings, fences and farm improvements? .....	0167
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8. Boxes outlined with dashed lines in boldface are for totals to be referenced later.

**Example 8 - Boxes outlined with dashed lines in boldface**

2. Then the TOTAL acres in this operation, including the farmstead, all cropland, government program land, pastureland, wasteland, wetland and woodland, was-- [Total of 1a + 1b(1) + 1b(2) + 1b(3) - 1e + 1h.] .....	0051
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9. For a few items, respondents may report either percentages or dollars. If boxes for percentages are shown in dotted lines, they're okay, but answers in dollars are preferred.

**Example 9 - Percent or dollars**

	<b>PERCENT OR DOLLARS</b>
7a. diesel fuel? .....	0152      0158

10. In some tables, the flow through the table is indicated by an arrow. A vertical arrow pointing down means to go down each column in the table completing all the rows for the column before moving to the next column. A horizontal arrow pointing right means to complete all the columns for a row before moving to the next row.

**Example 10 - Table columns**

	1 → Who was the lender?	2 What was the balance owed on Dec. 31, 1996? <i>(outstanding principal plus unpaid interest)</i>	3 What was the interest rate?	4 What was the original term of the loan?	5 What year was it obtained?	
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## 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.

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 them. Use zeros as fill when answers are not given to as many decimal places as allowed for, or are given in whole numbers.

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

## The Sample

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

Mark the location of each of the operations assigned to you on a map before you start to interview. Show the location by a small circle with the I.D. number 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 told 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. If the operator says someone else is more knowledgeable, interview that person.

If the operator is not present when you visit but is expected soon, either wait or make other contacts nearby and return a little later.

If the operator is too busy to be interviewed at that time, set up an appointment at his or her convenience. Be sure to keep the appointment, and be on time! If an emergency prevents you from doing so, inform the operator beforehand and reschedule the 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 callbacks), 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 or evening.

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 of their own finances and may not have their records in order. They probably do not realize what an asset you will be in the interview. Because you know the survey questions well, you will be

able to help farmers find most of the information in their books. Make sure they understand you're 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 the 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. If the respondent didn't hear or didn't understand a question, repeat it using the same wording. You may also use any optional wording or explanations printed with the question in the questionnaire. If the respondent still doesn't understand, or asks you to explain, then use what you learned in training and information from this manual to explain what is needed.

Ask every question and ask related 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 that you need later in the interview. When you get to a question that 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 can't answer the question,
- the answer isn't exact enough to record,
- the answer may be incorrect because it doesn't fit with information you've already obtained, and
- you think the respondent didn't 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 don't 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. Don't 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 1996, did this operation have marketing contracts for any commodities it produced? Marketing contracts are when you and the buyer agree on a price and delivery of the commodity before it is ready to be marketed."

In another example, if a respondent tells you that 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 that 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 1996. 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 bother the farmer again 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 set up 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, pick up the information for the operation's 1996 fiscal year.

## **Nonresponses**

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. Most respondents 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 done. Hold all your completed work until this review takes place unless you are told 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. 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 introducing yourself and this survey to an operator, develop and practice an introduction that you are comfortable with. In the introduction include who you are, whom you represent and what you want. Become familiar with the information in Chapter One of this manual and be prepared to answer general questions about the survey.

Some of the operators may have already heard about the ARMS on radio or television broadcasts or short spots. They may also have read about the survey in a pre-survey letter from the State office or in newspaper or farm magazine articles. They may know about 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 some farm financial records (including milk checks, co-op statements, FSA records, etc.) are extremely helpful. These records don't have to be in perfect order to be useful. Make sure the respondent knows that you'll be conducting about 20 of these interviews, you know the questionnaire very well, and you'll help him find the answers in whatever records are available.

Often when making the initial contact on this survey, you're only setting up an appointment to complete the questionnaire at a later date. Some states will be screening samples for the first time or re-screening samples where Phase I data were inadequate using a Screening Supplement. **It's best to complete the Screening Supplement on this first contact**, because you may find out things about the operation you need to call the state office about. This procedure gives you plenty of time to contact the office before doing the full interview. Account for the screening time in notes so that

interview beginning or ending time can be adjusted to more accurately reflect total interview time.

If the operation is very small, try to get through Section A on this first visit so that you can find out from the office if a full interview is necessary. If the operation does not meet the \$1,000 gross value of sales cutoff, you may not need to complete the remainder of the questionnaire.

### Response Codes

Upon completion of the interview, enter the response code in cell 0001 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.

Code 8 - **REFUSAL**: The respondent refused to cooperate or grant an interview, **but you have identified the target name qualified as a farm operator AND grew the target commodities in 1996.**

Code 9 - **INACCESSIBLE / INCOMPLETE**: The operator was not available throughout the survey period, "inaccessible," **but you have identified the target name qualified as a farm operator AND grew the target commodities in 1996.** Also use code 9 if the respondent gave an interview but couldn't or wouldn't answer a lot of the questions (incomplete questionnaire).

### Starting Time

Record the **starting time** (military) of the interview when the respondent agrees to cooperate on the survey and you actually start the interview. We use the interview times to find out how much respondent time we're 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

All the questionnaires will have labels. If the first line (primary name line) of the label after the ID number line has an individual name (JOHN SMITH), this is the target name, (unless the Record Status Code (RS) 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 RS is 99, then the operation named on the primary name line is the target. *When RS= 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 target name is always the person identified on the label.**

The first thing you will do is verify the operation's name and address label and the names and addresses of any known partners. If there are partner labels, be sure that the partner names and addresses are correct, and that 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 aren't listed.

### Area Frame Sampled Operations

Name, Address, and Partners Verification -- AREA

All of the area frame samples selected for the ARMS were part of the June Agricultural Survey.

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

We know that by using this rule we'll lose some data for those few farms or ranches that were formed after June 1. They wouldn't have much impact on the overall estimates from the survey, however,

because there usually aren't very many of these operations and they are relatively small.

If you find out that 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 in June**. *If you have time between your first contact with the respondent (when you find out that 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's overlap with the list, you won't have to do an interview.*

**EXAMPLE:** The June survey questionnaire showed a partnership between Leroy and Wade Johnson. When you're verifying the name, address, and partners, you find out that Leroy and Wade have always farmed as individuals and have never farmed in partnership. In this case, you would complete two questionnaires, one for Leroy's individual operation and one for Wade's.

## Screening Report - LIST

All list operations sampled for ARMS in 34 states were screened during June, July, and August, 1996, for operation description in-business status, and (for Version 2-4) presence of the target commodity. The State Office in the States may insert a Screening Report inside the questionnaire with information from the screening interview.

Information on the Screening Report includes:

- the reporting unit (individual, partnership, managed).
- respondent code.
- enumerator ID.
- an indicator showing if a contact was made during the Screening Survey or whether the information came from another source such as the June Agricultural Survey.
- the sequence (sample) number

You should verify that the reporting unit, as listed on the Screening Report, is still correct, particularly if you made any corrections to the name, address, and partners on the Face Page.

## Screening Report - AREA

Screening Reports for the area samples will be available in the same 34 states and will show:

- the reporting unit.
- respondent code.
- enumerator ID from the June Agricultural Survey.
- the sequence (sample) number.

## Screening Box on Face Page

*V1, V3*

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



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Box is not marked, then do not screen this operation, and begin the interview with Section A.

If a question or problem exists with the operation description information picked up during the ARMS Phase I Screening Survey, the State Office will want you to ask the screening questions again. This may be because the screening data were collected from sources other than the Screening Survey, the respondent to the Screening Survey may have been someone other than the operator, or incomplete information was obtained on the Screening Survey (for example, partner information was not collected).

States that have prescreened for Phase III of ARMS:

Arkansas	Kentucky	New Mexico	Carolina
California	Louisiana	North	South Dakota
Colorado	Michigan	Carolina	Tennessee
Florida	Minnesota	North Dakota	Texas
Georgia	Mississippi	Ohio	Virginia
Idaho	Missouri	Oklahoma	Washington
Illinois	Montana	Oregon	Wisconsin
Indiana	Nebraska	Pennsylvania	Wyoming
Iowa	New England	South	
Kansas	(Maine)		

The samples in the above states were prescreened for ARMS in June, July and August, 1996. For questionnaire Versions 1 through 4 in these states, no additional screening will be necessary, unless the State Office requests you to do so.

States screening samples for ARMS for the first time:

Alabama	<i>(Connecticut,</i>	<i>Rhode Island,</i>	New York
Arizona	<i>Massachusetts,</i>	<i>Vermont)</i>	Rhode Island
Delaware	<i>New</i>	Nevada	Utah
Maryland	<i>Hampshire,</i>	New Jersey	West Virginia
New England			

A screening supplement must be completed for every sample in this second list of states.

In either group of states, if you are supposed to complete a Screening Supplement for the sampled operation, the State Office will:

- enter a code 1 in the Screening Box on the Face Page of the questionnaire, and
- include a Screening Supplement for you to complete for this operation.

If the Screening Box is not marked, then do not screen this operation, and begin the interview.

## Screening Supplement

Farm operations in each state were sampled for the screening phase of the ARMS based on list frame information about crop acreage, livestock, and 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 names were misclassified. Screening questions help us find out if the selected name is eligible 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 to be excluded from the study. If your assignment includes any of these farms, notify your supervisor or the survey statistician.

If an operation was in business during part of 1996 but went out of business during the year, **complete a questionnaire for the part of the year during which the operation did business.** If the operation was taken over by another operator or operation when it went out of business, make a note of this. This note should include a name, address, phone number and any other pertinent information.

### Item 1                      Other operation name

Even though you've already verified the label, you need to ask this item to avoid duplication and to make sure the List is up-to-date.

### Item 2                      Crops, livestock or poultry

Check YES if the operation grew any crops (field crops, fruit/nut crops, vegetables, oilseeds, specialty crops, hay) or had cattle, hogs, sheep, poultry or other livestock during 1996 on the total land 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 the 1996 crop year 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 1996.

**INCLUDE:**

- 1) all cattle, hogs, sheep, mules, 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.

**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.
- 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, fish 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 (RS = 99 and Out of Business)**

Use this item only if both of the screening questions (Items 2 and 3) were answered NO. This is an item you handle yourself unless the State Office has marked it for you. It's not an item you ask the respondent. If the State Office hasn't marked this, you may want to circle the Record Status (RS) code on all of the questionnaires with Screening Supplements assigned to you before you go out into the field to enumerate. Check the label on the Face Page of the questionnaire. The state survey statistician will give you a label diagram to show you the location of the Record Status (RS) code on the label. If the RS is not 99 enter code 2 and skip to Item 7. If the RS is 99 enter code 1 and skip to Item 9.

**Item 5                      Decision-maker for this operation**

What we're interested in is how the operation was **managed** on a day-to-day basis. Here we don't care what the **LEGAL** definition of the operation is.

Definitions of individual, partnership, and managed land are printed 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 7 partners, enter code 7. When a manager is reported, enter code 8.

### **Item 6**                    **Enumerator Action**

This is an item you handle yourself unless the State Office has marked it for you. It's not an item you ask the respondent. If the operation is an RS 99 sample, begin the interview.

The State Office may have marked RS 99 for you. If they haven't handled this, you may want to circle the Record Status (RS) code on all of the questionnaires with Screening Supplements assigned to you before you go out into the field to enumerate. Check the label on the Face Page. The state survey statistician will give you label diagrams for the location of the Record Status (RS) code on the list frame label.

### **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 1996. Each additional 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 has other operations (item 7 yes)**

If the operator had another operation, turn the Screening Supplement to its back side 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'll complete the questionnaire for the operation named on the Face Page.

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 of partners associated with them. Mark out any operations the target name was not associated with in 1996. If any partner names are not listed, add them.

If the target name is involved (either as individual operator or as a partner) with any other operations which aren't 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.

**If the operator does not have other operations (item 7 no)**

If there weren't any other operations, and Item 4 was blank (you didn't have to complete it), begin the interview. If Item 4 was code 2 (the operation on the Face Page was out of business), go to Item 9.

**Special Situations**

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

A special situation exists if any of the operations for which there is a label on the questionnaire (Face Page, or Screening Supplement) 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 target name is no longer the hired manager, how you should handle it depends upon whether the label for that operation is on the Face Page or on a Screening Supplement.

If the label for the managed operation is on the Face Page, and the operation was still in business in 1996 under a new hired manager, you'll contact the new hired manager and collect data for the operation named on the Face Page. You'll contact the target name to verify the

other operations listed, and if that individual has any additional operations you'll list them on one or more Screening Supplement(s).

If the label for the managed operation is on the Screening Supplement, update the label for the managed operation to show the name of the new hired manager. If the operation on the Face Page is still in business, complete the interview for the operation named on the Face Page.

**Item 7a Day-to-day decisions for additional operation**

For each of the additional operations, enter the appropriate code to explain who made the day-to-day decisions in 1996. What we're interested in is how the operation was managed on a day-to-day basis. We aren't interested in the LEGAL definition of the operation.

**Item 8 Enumerator Action**

If Item 4 was blank, then you will complete the interview for the operation named on the Face Page. If you've just finished verifying other operations, be sure to tell the respondent you're interviewing for the operation named on the Face Page. Then begin the interview.

If Item 4 was code 2, enter code 4 in Response Code cell 001 on the Face Page of the questionnaire. Then go to the Conclusion on the back page, and complete the items in the black-outlined box at the bottom of the page.

**Item 9 Out-of-business determination**

Determine 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 all of the screening questions. (Either the operation is out of business or there's been a major name change.) If another operation has taken over from the target name on the label, or if there was a major name change, 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,

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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.



## Chapter 5 - Questionnaires

### Section A - Land Operated and Commodities Produced

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

Section A has five primary functions:

- (1) to measure the total land operated,
- (2) to determine the tenure arrangements and whether farmers are renting on a share or cash basis,
- (3) to provide an accounting of the crops and livestock grown, and whether a farm has or currently is participating in government programs that require that land be withdrawn from production,
- (4) to determine whether the operation qualifies as a farm and, if so, the type of farm, and
- (5) to determine the acreage and use of acres in the new farm program.

More specific uses of data collected within each of these major groups follow:

- Acres of owned and rented land are used to determine the total size of farms in terms of acres operated. This is 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.
- Government program acreage data are used to understand what types of operations participated in the Conservation Reserve Program (CRP) last year. These data also show the number of acres on which farmers signed production flexibility contracts under the new farm program, and whether or not crops were planted on that land. Since 1996 was the first year of the new program, this survey will provide base-line data so that the effectiveness of the new program can be monitored.

- Acreage and production reported for crops are used to develop estimates of the value of crops produced by farms; to do this we need to know the total produced. The quantity produced is multiplied by an average price for the calendar year to estimate total value.

To avoid double counting crop and livestock value of production, the quantity of hay, grain, and other commodities that are 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 -- we do not want to double count.

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. For share rent landlords, the quantity of production given to the landlord is multiplied by a market price to estimate gross rents paid by farmers for the use of land. Without good estimates of landlord shares in estimating gross rents, farmers' net income would be overstated.

- Expansions of harvested acreage and crop production are compared with NASS official estimates at regional and national levels to measure how well the CRR sample covers the U.S. farm population.
- Livestock production data are used to estimate total value of production and to help determine the major enterprise (crops or livestock) from which the farm receives most of its income. Combining the livestock data with crop data gives a complete picture of the commodities produced on farms. This shows how the farm's cropland is being used: either to produce crops for market or to produce feed for use in a livestock enterprise. This data also supports analyses on diversification or specialization of production activities on farms. This is an important piece of farm structure information that is incorporated into reports to the Congress on the **status of family farms**.
- Estimating whether a farm has TOTAL GROSS VALUE OF SALES greater than \$1,000 establishes the group of farms to be

interviewed for the survey. By USDA official definition, a farm is any establishment from which \$1,000 or more of agricultural products were produced and sold or would normally be sold during the year. In addition, it is important to identify small farms, because they can greatly affect the total number of farms accounted for by the survey.

### General Instructions

All of the land this operation used in 1996, even if the acres were only in the operation for a short time. The smallest number you can record in this section is one acre. If the operation had less than that in 1996, you'll have to round up to one acre.

For operations that were in business for only a part of 1996, collect data for the part of the year when they operated. If they went out of business before December 31, 1996, you shouldn't expect to find end-of-year inventory values for crops in storage or for livestock when you ask about these later in the interview, but 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 that was selected.

### Item 1                    **Acres in the operation in 1996**

Item 1 is broken down into owned acres, acres rented in and acres rented out.

#### **Include in Item 1:**

- (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 produced 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's part of the operation (if the operator made the day-to-day decisions for that land).
- (3) 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.
  - (4) all land in the operation that's used by the operator's children for 4-H or FFA projects, if the operation's equipment is used.

**Item 1a      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 wasn't used for agricultural purposes in 1996.

**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, etc.) which is permanently out of agricultural use. Note: Although non-farm land is not included in acres owned, income from the sale of non-farm land, or from renting out non-farm land must be reported as a source of off-farm income in Section F of Version 1.

Sometimes you'll 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 situation occurs, don't 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'll usually have to probe very carefully in these situations. (When you count these acres as rented rather than owned in this section, exclude them from the value of land and buildings owned in Section E, Farm/Ranch Assets and Debt. On Version 1, they should be included in the value of land and buildings rented in Section E. Also on Version 1, you should include the value of these acres in the value of non-farm assets in Section F, Farm/Ranch Operator and Household).

**Item 1b      Acres rented from others**

There are three categories of rented acres: cash rented acres are recorded in Item 1b(1), share rented acres are recorded in Item 1b(2) and acres used rent-free are recorded in Item 1b(3).

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 1b(1)*)
- (2) paid for use of the land with a share of the crops (either standing or harvested). (*Item 1b(2)*)
- (3) paid for use of the land with a share of livestock production. (*Item 1b(2)*)
- (4) had free use of the land. (*Item 1b(3)*)

**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 6a.
- (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 a land rental.

Be sure you are getting the full number of rented acres from the respondent. Farmers/ Ranchers often don't think that the land they

rent contains some 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. Record the value of firewood, etc., in Section C, Item 16, Value of Home Consumption.

**Item 1b (1) Acres rented in for cash**

Record the total number of acres rented by the operation in 1996 for cash.

**Item 1b (2) Acres rented in for a share**

Record the total number of acres rented by the operation in 1996 for a share of the crop or livestock production. Share renting of cropland is far more common than share renting with livestock, but share renting with livestock is increasing.

**Item 1b (3) Acres used rent-free**

Include only acres for which **the original agreement** was that no rent would be paid. Don't include share rented land on which no rent was paid because no crop was harvested due to weather, pest damage, etc.

**Item 1c Acres rented to others**

**INCLUDE:**

- (1) land this operation owned which was rented to another operation in 1996 for cash. This land should also be included in Item 1a.
- (2) land this operation rented or leased from someone else but which it subleased to another operation in 1996. This land must also be included in one of the categories in Item 1b.
- (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.
- (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 new 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 1d      Acres used and also rented out**

This is a fairly common situation in California and Arizona (and also may happen in other states) in which growers of winter grains grow their winter 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). These acres should be included here and in the appropriate items above. This item is needed so that 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. (That income should be recorded in Section C, Item 15b.)

**Item 2                      Total acres operated in 1996**

The operation's total farming/ranching operation is the total of Items 1a + 1b (1) + 1b(2) + 1b (3) - 1c + 1d. Verify this total with the respondent because it is the basis for the rest of the interview, it defines the operation and all the income and expenses which relate to

it. Be sure the number you calculate includes all cropland, the farmstead, government program land, idle land, orchards, pasture, wasteland, wetland and woodland.

**Item 3                    Cash rent paid for acres rented from others**

Record the total amount paid in 1996 to all landlords for all cash rented land. Ask this question even if no land was rented in 1996. Why? The operation may have paid rent for 1995 or 1997 in 1996. If we skip this question just because the operation didn't rent any land in 1996, we miss previous year's rent paid in 1996 or 1997 rent paid in advance in 1996. If an operation had more than one cash rental arrangement, the sum of all the individual rents should be recorded.

**EXAMPLE:**

<u>ARRANGEMENT</u>	<u>ACRES</u>	<u>RENT/ACRE</u>	=	<u>ANNUAL RENT</u>
#1	200	\$30.00	=	\$ 6,000
#2	150	\$20.00	=	\$ 3,000
#3	100	\$25.00	=	\$ 2,500
		total annual rent	=	\$11,500

**Item 3a                    Rent that was for crop commodity  
                                   VI, V2**

Record the percent or actual dollar amount of the cash rent that can be allocated to land used for corn or tobacco. On Version 2, include land used for corn that was planted with the intention of harvesting for grain.

**Item 4                    Cash rent received for acres rented to others**

Don't skip this item even if the operation rented no land out in 1996. The operation may have received income in 1996 for land rented to others before 1996, or it may have even received a pre-payment of 1997 rent in 1996.



Record the total cash rent received during 1996 for all land rented to others for cash. If rent owed to the operation for 1995 was received in 1996, it should be included here. If rent for 1997 was received in advance (in 1996), it should also be included. Government payments received in association with these acres should also be included.

**Item 5                    Value of share rent *received* for acres rented to others**

Don't skip this item even if the operation share rented no land out in 1996. The operation may have received its share of 1995 commodities in 1996 for land it rented to others in 1995. 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 hasn't sold it yet, record the operator's best estimate of its 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 in Section C (Commodity Marketing and Other Income).

**Item 6                    Use of AUM acres**

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

Item 6 is a screening item to find out if the operation ever uses public, industrial or grazing association land rented on an AUM basis. This is usually land 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 use this type of land on an AUM basis, you'll ask Item 6a.

**Item 6a                Usage fees for AUM basis acres used**

In Item 6a, 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 1996.

EXCLUDE expenses for use of land controlled by private individuals or partnerships even if the operator reports that his cattle or other livestock were pastured on an AUM basis on this land. (This expense should be recorded in Section B, Item 6b.)

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

### Government Program Land (*Version 1 Only*)

#### **Item 7a      Acreage in Conservation Reserve Program** *VI*

Record all acreage enrolled in the 10 or 15 year Conservation Reserve Program (CRP) as of December 31, 1996. See the *Interviewer's Manual* for a definition of the CRP. If CRP contracts expired during 1996 and were not renewed, do not record acreage here but remember to collect that data in Item 9.

#### **Item 7b      Acreage in new farm program** *VI*

Although farmers did not have to certify particular crops to be grown under the new government farm program, they did have to record total acres enrolled. In the new farm program, farmers receive **transition payments** in decreasing amounts over the next 7 years. Producers receiving transition payments must have signed a contract during the period May 20 through July 12, 1996. For their acreage to be eligible, the acreage must have been either (1) included in the annual acreage reduction program at least once during the last five crop years, or (2) considered planted. In the new program, the participant may have enrolled all or a portion of the eligible cropland on the farm as 'contract acreage'.

How is the payment under the new program figured? For each contract, the payment quantity of a contract commodity for each fiscal year equals 85 percent of the contract acreage multiplied by the farm program payment yield. The annual contract payment rate for each commodity equals the total amount the government has budgeted for that commodity for the fiscal year divided by the sum of payment quantities for all contracts of that commodity for the fiscal year. The annual payment amount equals the payment quantity for each of the contract commodities multiplied by the respective annual contract payment rate.

Who participated in the new program? Ninety-nine percent of the eligible farmers enrolled, so expect few 'zeros' to be reported here among farmers growing the traditional farm program crops. Include all of the acres that are contract acres, even if the land is fallow or planted only to cover crops. Don't include acres that are enrolled in CRP or Wetlands.

Where should you record these new program payments? Record payment amount received in Section C, Item 17a.

**Item 7b (1, 2, 3) Ownership of acres in the farm programs**  
*VI*

Farmers receive transition payments from acres enrolled under contract with the government under the new farm program. If the land is enrolled, the payment can be wholly received by the owners, or it can be shared with any tenants. Record the number of acres that are enrolled in the new program, even if the operation does not share any of the payments from those contract acres. If the operation receives payments, be sure to record the amount received in Section C, Item 17a.

**Item 7b(1) Acres in program owned by operation**  
*VI*

Record the number of acres that are owned by the operation and are contract acres under the new farm program.

**Item 7b(2) Acres in program cash rented from others**  
*VI*

Record the number of acres that are cash rented from others and are contract acres under the new farm program.

**Item 7b(3) Acres in program share rented from others**  
*VI*

Record the number of acres that are share rented from others and are contract acres under the new farm program.

**Item 7c Acreage in other programs**  
*VI*

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

**Item 8 Conservation Reserve Program acres**  
*VI*

This question screens for operations that had **10 - 15 year Conservation Reserve Program (CRP) contracts** expire any time during 1996. This is a program in which the government financially assists farmers and land owners in conserving and improving the soil and water resources of their farms. Farmers take highly erodible land out of crop production and plant it to a permanent cover crop or tree crop. If a CRP contract expired, check YES and ask Item 9.

**Item 9, 9a, b, c Distribution of acres in expired CRP contracts**  
*VI*

If the operation had CRP contract acres that expired in 1996, record these acres in Item 9. Do not record these same acres in Item 7a, this would be counting the acres twice. If the acres were re-enrolled in CRP contracts, record the amount in Item 9a. Record the 1996 expired acres which were not re-enrolled but planted to crops in Item 9b. If acres were not re-enrolled and were pastured, fallowed, or left in conserving uses (not planted to crops), then enter the number of acres in Item 9c.

## Land Uses on Total Acres, *Version 1 only*

### Items 10 a-c Description of land use

#### VI

These items are only asked on Version 1 and begin to collect information about the land uses of the (Item 2) Total Acres Operated in 1996.

Item 10a is comparable to the total cropland question we ask in our quarterly agricultural surveys. Record all of the operation's acreage that was tillable cropland in 1996. This is any land that was (or could have been) planted to crops in 1996. Include cropland, land in hay and land idled through a government program such as CRP.

Item 10b collects the number of acres that were tillable cropland, but used for pasture rather than to raise crops. Do not include acres that were planted to crops and then grazed or foraged, these acres should be reported in Item 13a. Acres reported in 10b should be part of the total cropland reported in 10a only.

In Item 10c, the operator should report any acres that were tillable but left idle or fallow in 1996. This would not include any acres idled through a government program reported in Item 10a. Acres reported in 10c should be part of the total cropland reported in 10a.

### Item 11 Crops produced

This item records specific crops harvested on the operation during 1996. Some crops are pre-listed on their own lines in the table. Appearing in alphabetical order, these crops are corn (for grain and for silage), cotton, all fruits and nuts, alfalfa hay, all other hay, all nursery and greenhouse crops, soybeans, sugarcane and sugarbeets, all vegetables and melons, and all wheat for grain. These items should be asked before you begin listing the operation's other crops. None of these crops should be listed again in the table on the write-in lines.

Four major U.S. crops -- corn, cotton, soybeans, and wheat -- are listed on their own lines to be sure that they are asked about in every state, even in states where their production may be less common.

Vegetables, fruits, and nursery, or greenhouse crops must each be summed to a total harvested acres and recorded in column 3. One of the reasons we do not want these crops itemized is that there are too few reports in all states to assign values to each crop.

Sugar crops are a single line item because value of the landlord share cannot be determined by obtaining a quantity.

Alfalfa hay and other hay are listed because they are often forgotten, especially on livestock operations where these crops are just considered feed, not crops. Otherwise, they are handled just like every other crop.

### **Item 11, column 1      Crop**

The easiest way to complete this table is to find out what crops the respondent harvested in 1996 by first going down Column 1. Mark the pre-printed crops harvested by the operation and record the operation's State-specific crops on the blank lines. Then, for each crop harvested, go across the table (as indicated by the arrow) and complete Columns 3 - 8. Ask all the Column 3 - 8 questions about one crop before going to the next crop.

Except for the pre-printed crop groupings and the two hay items, you will list **each** crop grown by the operation in column 1. Your State Office will provide a State-specific CROPS LIST, naming the crops that must be enumerated in your State in addition to those pre-printed in the table. You may show this CROPS LIST to the respondent, like a showcard, if you want to.

If the operation harvested any of the crops appearing on your State-specific CROPS LIST, then you must write it on a separate line in the table. Crops that are not on your State-specific CROPS LIST should be lumped together and recorded in the preprinted line item for all other crops. These include crops such as alfalfa seed, popcorn, sesame, etc.

Four lines are provided in the table for writing in crops not already printed. If the operation has more than four crops (other than the ones

pre-listed at the top of the table), record the four largest and lump the remaining crops in the "All Other Crops" category.

**Item 11, column 3      Acres harvested**

Report the harvested acreage **to the nearest whole acre** for all crops harvested (except tobacco). **HARVESTED ACREAGE OF TOBACCO SHOULD BE REPORTED TO THE NEAREST TENTH OF AN ACRE.**

Acreage of CORN and SORGHUM/MILO harvested for silage should always be recorded on a separate line from acres harvested for grain.

Wheat acreage harvested for grain should be recorded as ALL Wheat, regardless of the type (Durum, Spring, or Winter). Acres of small grains harvested for hay should be recorded under OTHER HAY.

**INCLUDE:**

- (1) acreage of crops harvested in 1996.
- (2) acreage of crops intended for harvest in 1996 even if harvest was delayed until 1997 due to bad weather, etc.
- (3) acreage for which two uses were made of the same crop. An example is alfalfa acreage harvested for both hay and seed. These acres are recorded twice: as acres of alfalfa harvested and as acres of ALL OTHER CROPS harvested.

**EXCLUDE:**

- (1) acreage for second or later harvests (for the same use) of any crop from a single planting, such as multiple harvests of hay, second or third pickings of cotton and ratoon crops of rice.
- (2) acres of 1995 crops not harvested until 1996 due to weather conditions, etc. Make sure the respondent is not reporting **planted** acres by crop when you are asking only for harvested acres.

**Item 11, columns 4 and 5      Total Production and Unit Code**

Record the TOTAL production of each commodity. If the respondent can't report total production, take the average yield per harvested acre

and multiply it by the number of harvested acres. Record the unit reported in column 5. For example, if the respondent reported a total production of 400 tons of wheat, you would record 400 in column 4, and in column 5 you would record "3" for "tons."

If a crop is harvested more than once during the year ( for example, hay), then add up the total production from all the times that the crop was harvested, remembering to count the acreage only once.

Be sure to include the amount produced on share-rented land and given to the landlord when recording total production, otherwise the value of production belonging to the operation will be understated.

The column 5 unit code should also apply to the amounts recorded in columns 6 (amount used on operation) and 7 (amount of landlord's share).

If the operator reports production in a unit not listed, be sure to record complete information about that unit, including its weight. This allows the State Office to convert the production into a more common unit and to also evaluate if the unit reported is commonly used for the reported commodity.

**Item 11, column 6      Amount used or to be 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 that was (or will be) used for human consumption. (Record this in Section C, Item 16, Value of Home Consumption.)
- (2) the landlord's share of production even if it was (or will be) used on the operation.

**Be sure that the amount recorded for use on the operation is in the same unit as coded in column 5 for the amount produced in column 4.** If it isn't, make complete notes or describe the unit if it's not listed.



**Item 11, column 7      Landlord's share (amount)**

Record the amount of each commodity given to landlord(s) in return for use of the land. This item is very important because it's used to calculate the value of the landlord's share for rent.

**Be sure that the amount recorded for landlord(s) share is in the same unit as coded in column 5 for the amount produced in column 4.** If it isn't, make complete notes or describe the unit if it's not listed.

In field crops such as peanuts or tobacco, quotas or allotments may be rented or leased on shares from operators who don't use their full allotment or quota. Quotas for marketing peanuts or burley tobacco may be rented with or without land. Note that if quota was rented without land, then no rented land will be reported in Item 1b of this section. Record the landlord's share of production for these types of share rental arrangements here.

**DON'T EVEN THINK ABOUT** recording the percent received by the landlord in the margin so that 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. This is a common mistake and one that can be avoided! See the example below.

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

Valley Farms owned 200 acres on which it grew wheat in 1996. 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

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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.

Operation Name: Valley Farms 967123450					
Crop wheat	Acres	Average Yield	Landlord Share	Amount of Landlord Share	Value of Landlord Share (@ \$4.00/bu)
Owned	200	45 bu			
Share Rented	400	x 45	x .20	= 3,600 bu (right)	\$ 14,400
Cash Rented	100	45			
Total Acres	700	45 bu	.20	= 6,300 bu(wrong)	\$25,200

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

Landlord's Share (amount) of production

4,500 bushels X .33 share = 1,500 bushels

**Item 11, column 8      Value of landlord's share**

For fruit and nuts, nursery and greenhouse crops, sugarcane/sugarbeets, or vegetables and melons grown on share-rented land, record the MARKET VALUE of the landlord's share. Also record the MARKET VALUE of the landlord's share of any crops grown on share-rented land that were included in "All Other Crops."

## Commodity-specific Instructions

### All Vegetables and Melons

Include all vegetable acreage of one acre or more. Include watermelons, cantaloupes, other melons and strawberries. Potatoes and sweet potatoes should be reported on the write-in lines if they are on your State-specific Crops Lists, or include them under ALL OTHER CROPS.

Exclude home gardens.

### All Fruits and Nuts

Include berry crops harvested (except strawberries, which are included with Vegetables and Melon crops). Exclude abandoned acreage. Exclude non-bearing acres.

### All Nursery and Greenhouse Crops

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

### Alfalfa Hay and All Other Hay

Include as "All Other Hay" acreage of crops ( SMALL GRAINS, etc.) and native or wild vegetation cut for dry hay or dehydrating. Hay acres in column 3 should be reported only once even if several cuttings were made, while hay production in column 4 should include the total from all cuttings. If hay production is reported in bales, ask for an average bale weight. To convert to tons, multiply the total number of bales by the average bale

weight to get total production in pounds. Then divide by 2000 to get total production in tons.

Acreage from which only grass silage, hay silage (haylage), greenchop, or alfalfa seed were harvested in 1996 should be reported under ALL OTHER CROPS. Hay acres cut at least once for hay and one or more times for silage, haylage, greenchop, or alfalfa seed should be recorded under hay acres harvested, **and** under ALL OTHER CROPS harvested.

Hay planted in the spring but not cut during 1996 should be ignored because there were no acres harvested.

Acres of pasture cut or clipped for hay should be reported as other hay acres harvested. If only part of a pasture was cut for hay, record only the acreage cut.

### 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 under OTHER HAY harvested.

If they were harvested as silage, they should be recorded as harvested acres of ALL OTHER CROPS. If the crop was not harvested (only grazed), don't record it at all.

### Corn

Sweet corn should be included in all vegetables and melons. Popcorn should be included in all other crops.

All corn acreage harvested for seed should be included as corn harvested for grain. Some seed corn companies destroy the male rows after pollination. Don't exclude these destroyed acres from the total harvested acres.

### Sorghum (Milo)

Acreage of Sorghum-Sudan crosses harvested for hay should be recorded as OTHER HAY HARVESTED.

### **Cotton**

Include both Upland and American Pima cotton not harvested.

### **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.

Report dry weight of production. Include production from all harvests if the acres were harvested more than once.

### **Sugarcane or Sugarbeets**

Include acreage originally intended for harvest in 1996, regardless of the year planted.

### **Wheat**

All wheat acreage harvested for grain should be recorded as All Wheat whether it is spring, winter or durum varieties.

### **Other Crops**

Record the total harvested acres of all crops not previously reported. If two or more crops (not listed in the table) were double cropped in 1996, record the sum of acres for all harvests.

If two or more crops of a single non-listed commodity were harvested (from multiple plantings) on the same acres, report the total of all harvests. For example, three plantings and harvests of a non-listed crop on the same 40 acre field should be reported as 120 acres of other crops harvested.

#### **Include as Other Crops:**

- (1) Mixed grains cut for silage.
- (2) Oilseeds not reported elsewhere.
- (3) Christmas trees.
- (4) Herbs.
- (5) Popcorn.
- (6) Crops other than corn and sorghum (milo) cut only for silage or greenchop, and alfalfa seed.

- (7) All other minor or specialized crops. (Any crop that is widely grown in your state should be listed separately if it is listed on your State's Crops List showcard.)

## Enumerator Action

Once you've finished Item 11, verify with the farmer that you have recorded all of the crops harvested on the operation and that you've accounted for all of the acres enrolled in government programs. Be sure that no crops are missed and that you make notes to explain unusual situations.

Check acreage totals when you get through Item 11, and if it looks as though you have accounted for more acres than the operation reported as a total in 10a, ask if some of the acres were double cropped. (If acres were double cropped, they are recorded in item 12 on Version 1. Just make notes on Versions 2-4.) If you come up with a lot fewer acres than were reported in Item 10a, probe to be sure you haven't missed any harvested crops.

### Item 12 **Harvested acres double-cropped, Version 1 only** VI

Enter the total acres from which a crop was harvested more than once. For example, if 200 acres of soybeans were harvested after wheat in 1996, record these 200 acres here in Item 12. See the general Interviewer's Manual for a definition of double cropping.

### Item 13 **Acres planted to field or hay crops but not harvested** VI

Although **harvested** acres of all field crops and hay have already been recorded in the crop table, Item 13 now asks whether all acres **planted** to these crops were harvested. If there were field crops or hay planted but not harvested, enter the acreage in item 13a. Include any acres abandoned due to poor yields, bad weather, etc. Exclude fruit, vegetable, nursery and greenhouse acres from this item.

### Item 14 **Acres of Other Crops not harvested** VI

Acres *harvested* for non-field or non-hay crops are reported in the crop table, Item 11. However, not all acres that were planted were

necessarily harvested. In Item 14a, report any acres of all other crops that were not harvested due to poor yields, bad weather, etc. Exclude the acres reported in Item 13. Include fruit, vegetable, nursery and greenhouse acres.

**Item 15                    Livestock and/or poultry**

The purpose of this group of items is to determine which livestock and/or poultry commodities were on the operation and/or marketed by the operation in 1996. You should use this information as you complete the interview to help determine when probing is needed. If the operation has five or more pleasure horses, they should be counted. Otherwise, exclude animals kept only for pleasure use or as pets.

**Item 15a            Number of head owned by the operation**

Record the total number of head of each type of livestock or poultry owned by the operation as of December 31, 1996. Include animals owned by this operation but located on other land, such as cattle or sheep grazing on another operation's crop residue or on public land. Exclude livestock and poultry placed by contractors on this operation. Exclude animals or poultry being raised by a contractee *for* this operation, the value of these animals will be reported in Item 14, Section C.

**Item 15b            Number of head sold in 1996**

Record the total number of head of each type of livestock sold by the operation during 1996.

**Item 15, column 2    All Dairy Cattle and Calves**

Sometimes a respondent will think you only want numbers for the cows being milked. It is important to emphasize that you want the data for the whole dairy herd. Be sure the respondent has reported all dairy cattle including the cows, bulls, heifers and calves owned by the operation. Account for the number of head owned on December 31, 1996, in line a and the number of head sold during 1996 in line b.



**Item 15, column 3      All Beef Cattle and Calves**

Here you will want the respondent to report all the cattle being raised primarily for beef production, regardless of breed: beef cows, steers, heifers, bulls and calves owned by the operation. Account for the number of head owned on December 31, 1996, in line a, and the number of head sold during 1996 in line b.

**Item 15, column 4      All Hogs and pigs**

Include all sows, boars, barrows, gilts and pigs owned by the operation. Account for the number of head owned on December 31, 1996, in line a, and the number of head sold during 1996 in line b.

**Item 15, column 5      Other livestock and poultry**

**Specify in notes** the type of other livestock and/or poultry, and the number of head on hand at the end of 1996. Include all sheep, chickens, turkeys, ducks, geese, etc. owned by the operation. Include all horses, mules, ponies, goats, bees (record number of hives), rabbits, mink and other fur-bearing animals, fish raised commercially or used for home consumption, and all FFA and 4-H project animals.

**Item 16                      Landlord's share of livestock production**

Before asking this item, you'll need to 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 received by the landlord in 1996. This value could be zero if no shared livestock were marketed in 1996. In this case, write a note to indicate that zero is valid. If the respondent doesn't know the value, probe for the best estimate.

Don't include livestock production not associated with land. Shared livestock production that isn't part of a land rental arrangement (such as raising "cattle on shares" should be reported in Section C.

**Item 17                      Gross Value of Sales**

Most operations will exceed the \$1,000 gross value of sales cutoff. An enumerator note has been added instructing you to precode cell 137 =2 if either of these two conditions has been met: (1) the operation harvested at least 20 acres of any crop or (2) had 10 hogs or cattle in 1996.

If you are not certain that the value of the operation's sales is over \$1,000, you must ask the question. If the operation had non-bearing acres of fruits, nuts or vegetables, make notes of these crops and acreages.

**For operations with sales of less than \$1,000, you may call the office to ask them to determine whether or not an interview is required.** If you are in a situation where you've got to complete the questionnaire now or never, and you can't reach the State Office, go ahead and complete the rest of the questionnaire. It is common for small operations to underestimate their gross value of sales because they do not fully consider the value of their agricultural activities. You can help them more accurately assess their farm status by asking them to:

**INCLUDE:**

- (1) sales of products raised on the total acres operated.
- (2) the value of any commodities given to the landlord for rented land.
- (3) all production from 1996 AND EARLIER YEARS sold during 1996.
- (4) all sales of livestock and poultry during 1996.
- (5) sales of all types of horses.
- (6) sales of miscellaneous agricultural products such as honey, furs, fish, nursery and greenhouse products (including tobacco transplants), rabbits, Christmas trees, etc.
- (7) all government program payments received in 1996.
- (8) total equity or premium payments for CCC loans transferred to others or repaid by others in 1996.
- (9) value of products removed from the operation under production contracts.

**EXCLUDE:**

- (1) prizes or winnings from horse racing or showing.
- (2) any money received through the sale of commodities received as share rent payment for land rented out.
- (3) other farm-related income such as grazing income, timber sales and insurance payments.

**Item 18            Type of operation**

This is the first question where the respondent booklet will be used. This booklet contains lists of items and response categories. It is absolutely essential that respondents SEE these items, not simply hear them, and that all respondents have access to the same information before choosing a response. This year's questions are more dependent on the use of a respondent booklet, so take a moment to familiarize the respondent with it.

If an operation's gross value of sales exceeds \$1,000, (code 137=2), have the respondent choose a farm type category representing the largest portion of the operation's gross value of sales in 1996. We'll use this to classify this operation into one of the 14 types of farms and ranches. Do not assume you know the appropriate category, even after enumerating the crops grown and livestock raised. You may not have enough information to best judge the relative value of different enterprises on the operation and code it correctly.

If the operation received only CRP payments in 1996, enter code 13. If the operation received only other government agricultural payments in 1996, code the farm/ranch by the type of payment received (or the farm/ranch type before it was placed in the government program).

The Farm Type Codes Table contains the following categories:

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<u>CODE</u>	<u>TITLE</u>	<u>INCLUDES</u>
1	Cash Grain	Corn, sorghum, small grains, flax, soybeans for beans, cowpeas for peas, dry edible and seed beans, peas and rice.
2	Tobacco	
3	Cotton	
4	Other Field Crops	Peanuts, Irish potatoes, sunflowers, sweetpotatoes, sugarcane, broom-corn, popcorn, sugarbeets, mint, hops, seed crops, hay, silage and forage.
5	Vegetables	Beets, cabbage, cantaloupes, melons, pumpkins, strawberries, sweetcorn, tomatoes, watermelons, etc.
6	Fruits	Apples, blueberries, cherries, grapes, oranges, pears, etc.
7	Nuts	Almonds, hazelnuts, pecans, pistachios, walnuts, etc.
8	Nursery & Greenhouse	Flowers, greenhouse and nursery products, sod, ornamentals, tobacco transplants grown for sale, etc.
9	Beef, Hogs, Sheep	Calves, cattle, goats, hogs, mohair, sheep, wool, (exclude dairy cattle).
10	Poultry	Chickens, ducks, eggs, turkeys, other poultry products.
11	Dairy	Milk and cream, plus sales of dairy cows, heifers, calves and dairy bulls.
12	Other Livestock	Mules, horses, foals, ponies, fur farms, bees and honey, fish, minnows, etc.
13	CRP only	Entire farm is in Conservation Reserve Program. (Use code from above if anything else was produced.)
14	Christmas Trees only	(Use a code from above if anything else was produced.)

## Section B - Farm/ranch Production Costs

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

Section B 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 the CRR 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), part of the Department of Commerce, where they are used to develop estimates of 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 surveyed. 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 full costs of producing various crop and/or livestock commodities. Since all crops and livestock produced by the farm are reported, one use of data from Section B is to assess how costs are changing for different types of farms. Changes are tracked over time so that USDA and Congress have the best information to understand what is taking place in agriculture today.

In Section B, 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 all the detail of the cost statement, leaving out some cost would make net income appear to be 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 the item for all poultry and other livestock.

- **Fuels and Utility Costs for Irrigation, Versions 2, 3 and 4 only.** This information will permit more accurate estimates of energy use on farms. ERS analyzes the effect proposed changes in water quality, wildlife, resource conservation, and other environmental policies would have on agriculture that depends on irrigation. Farms irrigating crops with surface water are affected differently than farms using water pumped from wells. Farms with different sources of water for irrigation often have different limitations on which crops can be grown and which inputs can be used.

Therefore, to best describe the affect any policy change may have on irrigated agriculture, it is important to know the impact on a farm's fuel and utility cost structure by source of water. Estimates of costs of purchased water for irrigation are important for similar reasons.

- **Labor Hours.** This information is used to help measure the overall productivity in agriculture. We multiply the hours of unpaid labor by a per hour wage rate to calculate the dollar value for operator, family, and other unpaid hours worked on the farm. This makes labor costs comparable between a farm where the operator and family provide most of the labor without formally paying themselves wages, and a farm where most of the labor is hired from outside or the operator and/or family members are formally paid a wage. If the value of unpaid labor is not added to costs, farms where operators and their families do most of the work without formal pay would seem to be much more profitable. We can also compare what household members receive from farm work with what they could receive from an off-farm job.

We add the value of hours worked by the operator and family to production costs, because we know that if they had spent that time working off the farm, they would have had to pay someone else to do the farm work.

Although unpaid labor is not a cash cost, correct rates of return from farming can be calculated only after all labor, paid and unpaid, has been given a value.

In the area of farm household statistics, we look at the commitment of labor hours to the farm by the operator and other household members.

- **Insurance.** New detail is being asked this year about crop insurance purchased either through the Risk Management Agency (FCIC or Federal Crop Insurance) or through private insurers. USDA is examining programs that could be offered to farmers to replace past programs or expand current ones. The purchase of insurance provides a safety-net income to farmers in case of a disaster.

If a farmer signed production flexibility contracts to receive payments under the new farm program, he had to purchase crop insurance. If he participated in the new farm program but decided *not* to purchase crop insurance, he could only do so by signing a formal written waiver of his rights to disaster payments for a loss due to a natural disaster.

Farmers who bought crop insurance could buy-up, or add-on, to the initial basic catastrophic (sometimes called CAT coverage) level through private companies. They could also buy private-carrier insurance coverage for their crops or livestock, and blanket coverage for the rest of the farm buildings, equipment, and vehicles. Farmers could also have liability insurance that covered workers and visitors.

- **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 and over how many years on their buildings, equipment and breeding stock. 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 can't 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 CRR 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 that 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

#### *V2, V3, V4*

Most of the information necessary to compute cost-of-production is collected in the Phase II portion of ARMS conducted in the fall. However, several questions are included in Versions 2, 3, and 4 to collect data that is used to compute cost-of-production for the specific commodities (corn for grain, flue-cured tobacco, and cow-calf). 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.

For example, information on vet and medicine, custom services, fuel, and repairs for cow-calf production could not be collected in the fall because records were not available that summarized these data for a 12-month period. 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 corn, tobacco, and cow-calf production based on their relative value of total farm production. Corn and tobacco 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, drying, and specialized livestock production facilities are not part of farm overhead. Therefore, questions are included in Versions 2, 3, and 4 to separate the amounts spent for these items in irrigation, drying, and specialized livestock facilities. 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 in 1996 (defined by the total acres recorded in Section A, Item 2) PAID BY THE OPERATOR AND PARTNER(S) SHOULD BE REPORTED IN THIS SECTION. Section B expenses will be added to landlord and contractor expenses from Section D in the summary to calculate total expenses for the operation. SO WE CAN BE SURE WE HAVE CORRECT TOTALS, YOU SHOULD RECORD LANDLORD AND CONTRACTOR EXPENSES **ONLY** IN SECTION D.

Ask the respondent to use farm/ranch records and explain that the interview length 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. Where breakdowns of total figures are needed, we allow these to be reported as whole dollars or as percentages, but we prefer exact dollars (rounded to the nearest dollar). If the respondent can't give exact dollar figures, BEST ESTIMATES are acceptable.

In Section B and the sections to follow, some items will appear in only one of the CRR versions. These will be marked below the item number in the text of this manual with V1 (CRR), V2 (Corn), V3 (Flue-cured Tobacco), V4 (Cow-Calf).

**Item 1a**      **Seeds, sets, plants, trees, etc.**

As with other items in Section B, the amount recorded here should not be based only on the amount used in 1996. This item refers to the cost of any purchases in 1996 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. If you only record the amount used you would be understating their 1996 expenses. In another scenario, if Spring weather was unfavorable, some farmers may have had to reseed acres to the same or a different crop. If this was common in your area this year, 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 didn't have any harvested acres. Be sure the operator remembers to include any expenses for seed for pastures, for crops planted in 1996 for harvest in 1997 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 didn't 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 Section E, Item 6.

**Item 1a(1)      Amount of seed expense for commodity  
V2, V3**

Record either the actual dollar amount or the percent of the total (item 1a) seed and plant expense that was for the commodity of interest

(corn for grain, flue-cured tobacco). Include expenses associated with flue-cured tobacco greenhouses, plant beds, and float beds.

**Item 1b Fertilizer, lime and soil conditioners**

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

**INCLUDE expenses for:**

- (1) all commercial fertilizers purchased by the operation.
- (2) fertilizer-pesticide combinations.
- (3) pre-emergence herbicides mixed with fertilizer and sold as one product.
- (4) trace elements (micronutrients) such as zinc and copper.
- (5) all fertilizer purchased under the Agricultural Conservation Program even if all or part was paid by the government.
- (6) lime and all soil conditioners, purchased manure, cottonseed hulls, sludge, gypsum, sulfur, marl, peat and other conditioners.
- (7) application costs if materials were custom applied.

**Item 1b(1) Fertilizer expense for commodity only**  
**V2, V3**

Record either the actual dollar amount or the percent of the total (item 1b) that was for the commodity of interest (corn for grain, flue-cured tobacco). Include expenses associated with flue-cured tobacco greenhouses, plant beds, and float beds.

**Item 1c All chemicals and pesticides**

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

**INCLUDE expenses for:**

- (1) insecticides, herbicides, fungicides, defoliants, 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 1b).
- (2) **cleaning chemicals** for equipment and buildings on dairy and other livestock enterprises. Put these expenses in Section B, Item 15.

**Item 1c(1) Chemical Expense for Commodity Crop Only**  
**V2, V3, V4**

Record either the actual dollar amount or the percent of the total (item 1c) that was for the commodity of interest (corn for grain, flue-cured tobacco, cow/calf). Include expenses associated with flue-cured tobacco greenhouses, plant beds, and float beds.

As above, exclude expenses for cleaning chemicals for equipment and buildings for livestock.

**Item 2**                      **Custom labor hired to apply chemicals or pesticides**  
**V2, V3**

More and more farmers are hiring custom applicators rather than performing the applications themselves. Chemical application may require specialized handling. A typical farm worker may not have the skills to properly and safely apply farm chemicals. By hiring custom workers, the farmer avoids some hazards associated with chemical application (shifting them to the custom operation). Also, the farmer

does not have to bear the entire cost of specialized equipment and the workers.

In Items 2a, b and c, record the total number of days, average numbers of workers and average number of hours worked per day by custom applicators in applying chemicals and pesticides to the corn or flue-cured tobacco crop.

To count as a day worked, a custom worker must have worked at least one hour. Include airplane operators as custom workers if they were hired to apply pesticides and other chemicals. For flue-cured tobacco operation (Version 3), include custom applications to tobacco greenhouses, float beds and plant beds.

### **Item 3                    Screening for 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 custom expenses paid to someone else for producing livestock or poultry for this operation. Also, 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 C, Item 14, 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 Section D, Landlord and Contractor Expenses.

### **Item 4                    Livestock and poultry purchases**

Purchases of livestock and poultry during 1996 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 isn't 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.

The total expense (or cost basis, in the case of integrated firms) for livestock or poultry is a line item in most farm record books.

**Item 4a      Breeding stock and dairy stock**

**INCLUDE expenses for:**

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

**Item 4b      All other cattle, calves, hogs, pigs**

**INCLUDE expenses for:**

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

**Item 4c      All 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 1996. Transfers aren't 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. Include contractor expenses in Section D of the questionnaire. 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 can't provide a settlement sheet or report the expenses, find out how many birds the operation grew under contract in 1996, and explain with a note. (Also, record the contractor name and address information at the bottom of the page in Section D.)

**Item 4d      Other livestock, poultry, fish, bees, etc.**

**INCLUDE expenses for:**

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

Exclude expenses for animals kept only as pets.

**Item 5      Leasing livestock**

**INCLUDE expenses for:**

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



**Item 6a      All purchased feed items**

This expense is a line item in most farm record books (and on 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 6b      Pasturing or grazing of livestock on private land**

Include expenses for pasturing or grazing livestock on PRIVATE land on a fee per head, (AUM) or gain basis. Western States should exclude expenses already reported in Section A, Item 6a.

**Item 6c      Bedding and litter**

Record the amount spent by the operation in 1996 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 6d      All livestock, dairy and poultry custom services and medical supplies, feed processing, etc.**

**INCLUDE expenses for:**

- (1) feed processing, grinding and mixing services. (Cost of feed should be included in Item 6a.) 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 6d(1) Livestock custom services, medical supplies, feed**

V4 processing for cow/calf enterprise

Enter percent or dollar amount of Item 6d that was for the cow/calf enterprise. Exclude custom services for feedlot cattle.

**Item 7 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 9 if the labor is contract labor, or in Item 19 if the labor was seasonal hired labor.

**Item 7a 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 the he includes milk hauling. 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 the Commodity Marketing and Other Income Section.)

- (4) hauling of feed, seed and fertilizer to the operation.
- (5) all other hauling charges for the operation.

**Item 7b      Other custom work on crops**

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.

**EXCLUDE:**

- (1) contract labor (include in item 9).
- (2) land improvement and development including soil conservation work (include in Section E, item 6).
- (3) custom fertilizer, lime and/or soil conditioner applications (include in item 1b).
- (4) custom applications of crop chemicals and pesticides (include in item 1c).
- (5) leasing of cars, trucks, tractors or other equipment (include in item 14).

**Item 8      Total custom work expense**  
*V2, V3, V4*

Calculate the total custom work expense by adding Items 7a and 7b. Then, ask the respondent if this was the total custom expense. If this is not the total, adjust items 7a and 7b to reflect any changes, total, and verify the total again.

**Item 8a      Custom work expense for the commodity**  
*V2, V3*

Record either the actual dollar amount or the percent of the total (Item 8) that was for the commodity of interest (corn for grain, flue-cured tobacco). Include expenses associated with flue-cured tobacco greenhouses, plant beds, and float beds.

**Item 8b      Custom work expense for cow/calf production**  
**V4**

Enter the percent or dollar amount of custom work expense that was for beef cattle production, excluding any expenses for feedlot cattle.

**Item 9              Contract labor expense**

Record the total amount spent by the operation in 1996 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 1996.

**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 16b or 16c. Contract labor expenses for all new construction should be reported in Section E, item 6.

**Item 9a            Share of contract labor expense for the commodity crop**  
**V2, V3, V4**

Record either the actual dollar amount or the percent of the total (Item 9) that was for the commodity of interest (corn for grain, flue-cured tobacco). Include expenses associated with flue-cured tobacco greenhouses, plant beds, and float beds.

On Version 4, record the share or actual dollar amount of contract labor expenses that can be allocated to the cow/calf enterprise, excluding any expenses to a feedlot enterprise.

**Items 10 - 13    Fuels, oils, electricity and Water (Farm Share Only)**

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

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

If farm and home meters are separate, exclude costs for water and/or electricity for the home except in situations where the farm office is in the home. In this case, include the farm share of home water and/or electricity expense. If some or all of the farm buildings shared the same meter as the home, include only the farm's share of the costs in this item. Home share of expenses for utilities is recorded in Section F, Item 25b, on the CRR questionnaire version (V1) only.

**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 C, Item 15a.)
- (6) aviation fuels

- (7) Federal excise fuel taxes. (Refunds of Federal excise fuel taxes paid should be reported as other income in Section C, Item 15h.)
- (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 1c 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 (Record these in Section F, on item 25b Version 1 only).

**Item 10**

**Fuels**

Record the dollar amount for the farm share of total expense for all fuels, natural gas, fuel oil, kerosene, coal, wood, aviation fuel, motor oils, transmission and hydraulic fluids, grease, and lubricants. Include all fuels purchased off the operation or delivered to the operation (FARM SHARE ONLY).

**Item 10a Fuel expenses for irrigation**

**V2, V3, V4**

Record either the percent or the actual dollar amount of the farm's total fuel costs identified in the total (Item 10) that were incurred to irrigate crops. These costs include the cost of fuel, natural gas, and motor oils used to operate the pump systems that both pump and apply water.

**Item 10b**      **Amount for commodity**  
*V2, V3, V4*

Record either the actual dollar amount or the percent of the total (Item 8) that was for the commodity of interest (corn for grain, flue-cured tobacco). Include expenses associated with flue-cured tobacco greenhouses, plant beds, and float beds.

**Item 11**              **All 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 11a**      **Irrigation electricity expense**  
*V2, V3, V4*

Record the actual dollar amount of the total (Item 11) spent for electricity for irrigation in 1996. Include monthly or annual charges to maintain service even when electricity is not being used. Include emergency electric guarantee fees, etc.

**Item 11a (1)**      **Amount for commodity**  
*V2, V3*

Record the actual dollar amount of the total (Item 11a) expense for electricity for irrigation for the commodity (corn for grain, flue-cured tobacco.)

**Item 11b**      **Electricity expense for drying**  
*V2, V3, V4*

Record the actual dollar amount of the total electricity expense (Item 11) that was for the commodity of interest (corn for grain, flue-cured tobacco) that was for drying crops. Include expenses associated with flue-cured tobacco greenhouses.

**Item 11b (1) Amount for Corn**  
 V2

Record the percent or actual dollar amount of Item 11b electricity expense that was for drying corn costs.

**Item 11c Share of electricity costs for beef cattle production**  
V4

Record the dollar amount of Item 11 (electricity) that was for the beef cattle production enterprise, excluding feedlot cattle.

**Item 11d Share of electricity costs for specialized livestock production facilities**  
V2 , V3, V4

Record the amount of the Item 11 expenses that were for specialized livestock production facilities such as dairies, feedlots, poultry houses, or swine buildings. On Version 4, do not include the share that was allocated to beef cattle in Item 11c.

**Item 12 Purchased water for irrigation**

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 stand-by fees and/or taxes which must be paid even if no water is used.

**Item 12a Share of purchased water for commodity**  
V2, V3

Record either the actual dollar amount or the percent of the total (Item 12) that was for the commodity of interest (corn for grain, flue-cured tobacco). Include expenses associated with flue-cured tobacco greenhouses, plant beds, and float beds.



**Item 13                    All other utilities**

Record the farm share of the total expense for telephone service and calls, and water (other than for irrigation). 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.

**Item 14                    Total expense for renting and leasing vehicles,  
tractors, farm machinery, equipment and structures**

Record the total 1996 expense for renting or leasing all vehicles, tractors, farm machinery, equipment and structures.

**Item 15                    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 tool, 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 16a All repairs, parts and accessories for motor vehicles, drying equipment and frost protection 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 aren't 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. Include these in Section E.

**Item 16a(1) Repair expense for commodity  
V2, V3, V4**

Record either the actual dollar amount or the percent of the total (Item 16a) that can be allocated to the commodity of interest (corn for grain, flue-cured tobacco, cow/calf). Include expenses associated with flue-cured tobacco greenhouses, plant beds, and float beds.

**Item 16b      Maintenance/repair of fencing, 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.

**Item 16b(1)      Repair expense for specialized livestock production facilities**  
**V2, V3, V4**

Record the actual dollar amount or percentage share of the expenses for maintenance and repairs of specialized livestock facilities such as dairy barns, feedlots, swine buildings, or poultry houses.

**Item 16c      Maintenance and repair of irrigation equipment and pumps**

Record the dollar amount for the expense of repair and upkeep of irrigation equipment, including all pumps and delivery systems.

**Item 16c(1)      Amount for commodity**  
**V2, V3**

Record either the actual dollar amount or the percent of the total (Item 16c) that was for the commodity of interest (corn for grain, flue-cured tobacco). Include expenses associated with flue-cured tobacco greenhouses, plant beds, and float beds.

**Item 17**                    **Total expense for repairs, accessories and maintenance**

Add entries in Items 16a, 16b, and 16c. Verify the total with the respondent as the total spent on repairs and maintenance in 1996. Adjust previous entries until the total can be verified.

**Item 18**                    **Maintenance and repair of operator's house**

Since this item is often not kept in farm record books, it was separated from items it had accompanied in the past (Items 16a, b, and c). Record the total amount spent in 1996 for repairing, restoring, or maintaining 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 in brackets. 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 19**                    **Paid labor for agricultural work**

Record the total cash wages, bonuses, etc. paid to employees of this operation in 1996 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 1996.
- (2) wages paid to family members and corporate officers.
- (3) salaries of hired managers.
- (4) EMPLOYEES' share of Social Security taxes if withheld from wages.
- (5) 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.

- (3) Social Security for the operator and/or spouse UNLESS they were paid employees (received a W-2 form from the operation).
- (4) money taken by the operator's household on a "draw".

Paid labor includes only those workers whose pay was considered a business expense of the farm/ranch operation during 1996. 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 1996 are affected by minimum wage laws. The minimum federal wage level in effect for agricultural workers in 1996 was \$4.25 until October, 1996 when it increased to \$4.75.

**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's 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 (recorded in Section C 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 30.

**Item 19a      Share of labor for commodity**  
**V2, V3**

Record either the actual dollar amount or the percent of the total (Item 19) that can be allocated to the commodity of interest (corn for grain, flue-cured tobacco). Include expenses associated with flue-cured tobacco greenhouses, plant beds, and float beds.

**Item 20              Breakout for wages paid**  
**V2, V3, V4**

**Item 21              Breakout for wages paid**  
**VI**

Record either the actual dollars paid or the percent of the total cash wages paid to people in each of the categories listed. When percents are reported, they must sum to 100%. If dollars are reported, they must sum to the total in Item 19.

**Item 20a      The operator**  
**V2, V3, V4**

Record the amount paid to the operator (include a hired manager's salary), or the percent of the total wage bill which was paid to the operator. Exclude money taken out of the operation on a draw by the owner/operator.

**Item 20b      Everyone else**  
**V2, V3, V4**

Record the amount (or percent of the total) paid to all hired workers of the operation, except the operator. Include salaries of household members paid to work on the farm, and the salaries of partners and all other hired workers.

**Item 21a      The operator**  
**V1**

Record the amount paid to the operator (include a hired manager's salary), or the percent of the total wage bill which was paid to the operator. Exclude money taken out of the operation on a draw by the owner/operator.

**Item 21b      Spouse and other household members**  
**V1**

Record the amount (or percent of the total) 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 21c. 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 don't live in the house if they are dependents of the operator (college students, etc.).



**Item 21c**      **Everyone else**  
*VI*

Record the amount (or percent of the total) paid to all hired workers of the operation except those included in Items 21a and 21b. Include salaries of partners and wages paid to their family members.

**Item 22**                      **Payroll taxes and benefits for paid labor**

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 Item 19 and 21 (Version 1) and Item 19 and 20 (Versions 2-4).

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.

If agricultural workers are paid \$150 or more in cash wages during the year or work 20 or more days during the year they are subject to Social Security taxes (also called Federal Insurance Contribution Act (FICA) taxes). Farmers hiring these workers have to pay part of the tax, and can withhold the employees' part of the tax from their wages. Employers also have to pay FICA taxes if they pay \$2500 or more in wages during a year.

Agricultural workers are covered under the Federal Unemployment Tax Act (FUTA) if their employer:

- (1) paid \$20,000 or more in wages for agricultural labor in any quarter during 1995 or 1996.
- (2) had 10 or more workers hired on any one day in 20 different weeks of 1995 or 1996.

Items (1) and (2) are the minimum coverage required by Federal Statute. California, Florida, and Texas have more restrictive regulations. In some states, farmers/ranchers who have less than 10

workers and pay less than \$20,000 in wages still have to pay a state unemployment tax. That expense should be included.

**Item 22a**      **Share of employer expenses for commodity**  
                         **V2, V3, V4**

Record either the actual dollar amount or the percent of the total (Item 22) that can be allocated to the commodity of interest (corn for grain, flue-cured tobacco, cow/calf). Include expenses associated with flue-cured tobacco greenhouses, plant beds, and float beds.

**Item 23**                      **Cash value of commodities provided to household members**

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 24**                      **Cash value of all food, goods and services provided to paid and unpaid 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. Note their best estimate.

**Item 25**                    **Hours worked by operator, spouse and other unpaid workers**

These items provide the information necessary 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. Items 25b and 25c appear only in the CRR version (V1). Item 25d appears only in the versions 2, 3, and 4.

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. See Section B, Item 19 for a list of jobs considered farm work.

Some respondents may say they don't 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 the CRR interview!

**Item 25a**                    **Operator's hours of farm work**  
*V1, V2, V3, V4*

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 25b**                    **Spouse's hours of farm work**  
*V1*

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 25c      All other unpaid workers**  
***V1***

For each quarter, record the average total number of hours of farm work done per week by any unpaid workers **except the operator and spouse**. Unpaid workers may include members of the operator's household, partners, neighbors, guests, etc. Record only UNPAID hours of work.

**Item 25d      Other unpaid workers**  
***V2, V3, V4***

For each quarter, record the average total number of hours of farm work done per week by any unpaid workers **except the operator**. Unpaid workers may include the operator's spouse, other members of the operator's household, partners, neighbors, guests, etc. Record only UNPAID hours of work.

**Items 26-28      Insurance expenses (FARM SHARE ONLY)**

In most record books, insurance expense is a line item. The IRS 1040F also contains a similar expense item. You may have to probe to get separate values for crop insurance expense and the cost of all other insurance for the farm operation.

**Item 26              Basic catastrophic coverage insurance expense**

Crop insurance is offered by the USDA Office of Risk Management as two components. 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 coverage or 50/60 coverage. Record the dollar amount of the total crop insurance purchased that was for this basic catastrophic coverage, regardless of where it was purchased.

What is meant by 'regardless of where purchased'? In some states, farmers could only buy this insurance through the government while in other states they could only buy it through private insurers. (In 14 States enough providers were available in the region, so this multi-peril crop insurance could only be purchased from private insurance

agencies.) Some farmers will be confused if you change the question wording to say Federal Crop Insurance since they may have bought it from a non-government vendor. In either scenario, the crop insurance is federally backed and subsidized.

Collect basic catastrophic coverage in Item 26. Item 27 shows expenses for premium coverage that offers higher levels of yield/price protection in addition to basic catastrophic coverage.

Note: Item 26 only collects crop insurance. If the operator participated in one of the revenue insurance pilot programs, do not include the expenses here. Include those expenses in item 28.

**Item 26a      Share of basic catastrophic crop insurance for Corn  
V2**

Record the percent or dollar amount of the basic catastrophic coverage that was for corn.

**Item 27                      Additional crop insurance coverage expense**

Additional crop insurance can be purchased to supplement the catastrophic coverage recorded in Item 26. This coverage is bought to protect crops at higher yields/prices. It can only be purchased from private insurance companies, but is still subsidized by the USDA. Note: farmers who bought this insurance may have paid different prices field by field for each crop, depending on the relative risk of crop loss. You only need to record the total insurance expense for higher yield/price coverage. When farmers purchase this insurance they sometimes use the terms 'buy-up' or 'add-on'.

**Item 27a              Share for additional insurance coverage for corn  
V2**

Record the percent or dollar amount of the additional crop insurance coverage that was for Corn .

**Item 28                    All other insurance (FARM SHARE ONLY)**

Include all other casualty coverage. Include hail insurance. Include coverage for hay and grain in storage facilities. Include insurance for motor vehicles, liability and blanket insurance policies. Often motor vehicle, liability and blanket policies include coverage for the farm and home, so you may need to have the operator estimate the actual amount considered the farm share.

Include insurance premiums paid during 1996 which provided more than one year's coverage. Include expenses for other insurance such as the USDA's pilot programs offering revenue insurance or income protection.

**EXCLUDE:**

- (1) premiums paid in earlier years which provided coverage for 1996.
- (2) premiums paid for health insurance.
- (3) unemployment insurance and other insurance expenses for employees of the operation.
- (4) losses to the farm operation due to disasters. The costs involved in crop or livestock production are accounted for in other sections.
- (5) Worker's Compensation, Social Security, unemployment insurance and other payroll insurance items.

**Item 29a                    All interest and service fees on mortgages and loans**

Record the total amount spent by the operation in 1996 for interest and service fees for all loans owed by the operation.

**INCLUDE:**

- (1) interest on farm mortgages, land contracts and other loans secured by real estate.
- (2) finance charges for operating loans, loans for motor vehicles (FARM SHARE), remodeling, machinery, livestock, feed, fertilizer, seed and other items.
- (3) service fees on CCC loan redemptions.
- (4) the FARM SHARE of interest on all other non real estate loans.

**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.

**Item 29a(1) Loans secured by real estate**

Record percent or dollar amount of expense in Item 29a that was secured by real estate. 'Secured by real estate' means that real estate such as land, buildings or a home was used as collateral in obtaining the loan.

**Item 29b Real estate and property taxes**

Record the total of all real estate and property taxes paid by the operation in 1996. This is a line item in most farm record books (and on the IRS 1040F.) Note that **personal property** taxes may be assessed on property such as automobiles, farm machinery, livestock, etc. and don't have to be associated with land or buildings. Some states don't 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.

**INCLUDE:**

- (1) taxes on farm land, buildings, capital improvements, machines, livestock, cars (farm share) and other property.
- (2) taxes paid in 1996, even if they were levied in another year.
- (3) all partners' shares of taxes when a partnership is reported.

**Item 29b(1) Real estate taxes only**

Record the actual dollar amount or the percent of the total real estate and property tax expense (Item 29b) that was for land and buildings, that is real estate only. This item would exclude any personal property taxes.

**Item 30**                    **General business expenses**

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. In order to gain some consistency in what is reported here, the question has been changed to a check list. The purpose of this list is not to have the respondent itemize each expense to the nearest penny but to insure he has considered the various categories which define what you mean when you ask for 'general business expenses'. Administer the items as a checklist, noting which costs were incurred, and in Item 30a, have the respondent report his best estimate of the total.

**INCLUDE:**

- (1) fees paid to extension service, accountants and others for keeping farm records.
- (2) fees paid for preparing income tax returns.
- (3) travel expenses (such as lodging, meals and parking) associated with purchasing or selling commodities for farm, association or cooperative business, attending fairs where the respondent's farm products were exhibited and other farm/ranch business.
- (4) postage and telegrams for the farm business.
- (5) expenses for title searches, abstracts, recording deeds and mortgages, court costs and other legal expenses for the land operated.
- (6) fees paid to attorneys in connection with farm/ranch business.
- (7) charges for permits and licenses obtained in 1996 for production and marketing of commodities produced on the land operated. Exclude quota and allotment purchases and rentals. Quota and allotment rentals should be reported as a marketing expense in Section C. Purchases should only show up in the value of the operation's assets.
- (8) fees paid on a voluntary basis to marketing associations or government agencies (federal, state or local) on the basis of sales or production, for the promotion of sales or for other specific purposes.



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- (9) registration of purebred animals.
- (10) brand registration fees.
- (11) charges for sales promotion or advertising.
- (12) farm management expenses including books, papers and magazines on subjects related to crop or livestock production, market reports, farm newsletters and ag bulletins. Report only 1996 expenditures, even if these cover more than one year.
- (13) real estate agent commissions and other direct selling or buying expenses.
- (14) garbage collection or dumpster service for barns and farm buildings.
- (15) rental expense for farm office space not on the operation.
- (16) fees paid to entomologists, service companies, etc. for pest scouting.
- (17) trapping club memberships and dues. (Trapping clubs are formed to trap predator animals such as coyotes.)
- (18) stall or space rental fees for farmer's markets.
- (19) parcel post expenses or charges for marketing agricultural products.
- (20) 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 aren't included in this item. These taxes should be recorded in Item 29b.
- (21) 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 19.)
- (2) gasoline and other vehicle operating expenses. (Record in Item 10.)
- (3) taxes paid which were levied for general purposes.

- (4) marketing expenses and check-off fees deducted from sales of commodities. Report these in Item 12 in Section C, Commodity Marketing and Other Income.
- (5) expenditures for magazine or journal subscriptions for 1996 which were paid in other years.
- (6) all purchases of farm office equipment (if placed on a depreciation schedule).

**Item 31            Depreciation for all 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 Farm Deductions section of 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 seems agreeable.

If the operator has been farming a long time, his equipment and breeding stock may be 'depreciated out', meaning he didn't claim any on his 1996 taxes. If this is the case, enter a '1' in the data cell and move on.

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. DON'T enter the CURRENT VALUE of depreciable assets.

**Item 31a            Depreciation of breeding stock**

Record the total dollar amount or the percent of the total depreciation that was for breeding stock.

**Item 32**                    **Expenses not already recorded**

We use this item to get expenditures that don't really have a place somewhere else in the questionnaire or that the respondent didn't report in the right place. Include operator and partner(s) expenses.

**INCLUDE:**

- (1) purchases of crop commodities specifically to fulfill marketing contracts.
- (2) potting soil or purchased topsoil.

**EXCLUDE:**

- (1) landlord and contractor expenses. (Include these in Section D.)
- (2) marketing and storage expenses. (Include these in Section C.)
- (3) capital expenses for new construction or remodeling of farm improvements and/or buildings. (Include these in Section E)
- (4) purchases of new vehicles, machinery and equipment. (Include these in Section E.)
- (5) long-term capital investments such as land purchases, or purchases of allotments or shares in co-ops or processing plants. (Include the December 31, 1996 value of these assets in Section E.)

Describe each of the expenditures the respondent reports here. If these expenses should have been reported in another category, make the necessary corrections. Enter the total of expenses that really don't have a place somewhere else in the questionnaire in Item 32, cell 258.



## Section C - Commodity Marketing and Other Income

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

Section C collects information on the cash sources of income earned by the farm -- the revenue side of an income statement. Steps are taken in this section to make sure that we have a correct accounting of a farm's gross cash income--anything else can make farms appear to have either net income that is too high or losses that are excessive. Expenses reported in Section B are subtracted from the revenues reported in Section C to develop an income statement and an estimate of cash flow for the farm business.

Reports of cash sales of crops or livestock are combined with other sources of cash income earned during the year from any other source. Other sources of cash income include the sale of commodities using contracts, government payments, and commodity loans. Cash sources of income also include payments from previous year's sales under a contract, custom work for a neighbor, grazing, insurance indemnity payments, as well as cash earned by the business from any other source during the year.

Expenses reported in Section B are subtracted from the income reported in Section C to develop an estimate of cash flow for the farm business. **It is essential for Section C to be complete in order for USDA to have a correct estimate of a farm's net income.**

### General Instructions

This section of the questionnaire was designed to:

- 1) get data on contracts used for selling and/or producing agricultural commodities during 1996.
- 2) allow us to make an estimate of annual income earned from the cash sales of crop and livestock commodities.
- 3) provide an estimate of marketing expenses such as commissions, storage charges, insurance, and inspections that farmers/ranchers have to pay in order to sell their products.

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- 4) help us estimate the amount of crops placed under the Commodity Credit Corporation loan program.
- 5) let us estimate the amount of government agricultural payments received.
- 6) let us make an estimate of the value of crop or livestock commodities consumed or used on the operation where they were produced.
- 7) let us estimate farm related income earned from such activities as custom work for others, grazing of livestock, etc.

This section of the questionnaire is arranged in 3 basic parts:

- 1) commodity sales.
- 2) government programs.
- 3) other farm related income.

Commodity sales are further divided into three basic parts:

- 1) marketing contracts.
- 2) production contracts.
- 3) cash sales.

In addition, each of these categories is split between income from commodities marketed during 1996 and income from commodities sold or delivered in previous years.

**Each sale can only be recorded in one category---marketing contract, production contract or cash sale.** If sales are reported in two categories and the mistake isn't caught, income is overstated for the operation (and for all operations in the nation when the data are expanded).

Crop and livestock commodities grown under production contracts or sold under marketing contracts usually aren't reported as cash sales. Farmers don't receive all of the value of animals or crops grown under a **production** contract. What they receive is a fee that represents only a small part of the total value of the production. This means we have to collect cash sales separately from the value of commodities sold or removed under contract so we can estimate the farm operation's share of total net farm income correctly.

### 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, USDA must fully account for persons or other businesses who provide inputs that the farm uses to produce agricultural commodities and receive income from the sales of these products. The contracting information collected on the CRR 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 don't own the animals or crops raised under a production contract, they usually don't report the sales of these commodities. Furthermore, they don't 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's also important that the quantity of products removed from the farm operation under production contracts be recorded so that an accurate estimate of total value of production can be developed. Farmers usually don't report sales of livestock grown under production contracts since they don't own these animals. But if we don't 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

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negotiated price (or pricing arrangement).

doesn't own the commodity until it's delivered to him.

has little influence over production decisions.

Contractee (operator):  
has a buyer and a price (or pricing arrangement) for commodities before they're harvested.

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

owns the commodity while it's 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 doesn't 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 doesn't 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. In recent years, about ten percent of the farms used some form of contracting. 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 these 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 commonly 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's 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 broilers or feeder cattle, it's 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 don't correctly account for the division of income and expenses between contractees and contractors, we can't 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.

### Identity of Contractors

#### VI

This year we are collecting additional data to understand who the contractors are that are working with farmers. These data will be used to prepare a major report for USDA on the role of contract production in U.S. agriculture.

### 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.

Look at the crops and livestock commodities reported in Section A. If commodities are reported for which contracts are almost always used, make sure that the operator fully understands the marketing and production contract questions asked in this section.

## 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 that you're looking at a production contract is that they're 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 lot 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 in Item 15 of Section A, yet the operation has livestock or poultry facilities and/or production expenses. It is almost certain that 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. A growing 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 sugarbeets, sugarcane, peanuts, dry peas or dry beans.
- produce fluid milk.
- grow potatoes.
- produce eggs.
- grow ornamentals or horticultural crops.

### Item 1                      **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.

**Don't 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 Item 5 (crops) or Item 10 (livestock) under the appropriate commodity. The net profit or loss from hedging should be recorded in Item 15h.

**Item 1, column 1 Commodity**

In this column record each commodity that the operation had a contract to market. For vegetables, be sure to specify whether the contract was for fresh market production or processing production. In most cases, contracts for processing are production contracts, and should be recorded in Item 2, Column 1.

**Item 1, column 3 Contractor**

*VI*

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. Verify with the operator that his or her answer fits in the category you are recording. If the respondent identifies the contractor by name and/or you are uncertain of the correct category, read the categories to the operator -- "Would you say that XYZ Contractor is another farm, a processor, mill or gin, etc.?" -- or ask the respondent to look at the code list printed in the questionnaire and select the appropriate category for the type of contractor. If none of the categories in the code list fit the operator's contractor, select code 8 for OTHER and be sure to write a description of the contractor in notes.

The 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.

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Code 2 - PROCESSOR, MILL, OR GIN: 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 cranberries, citrus, milk or milk products, 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, such as a feed mill which contracts farms to grow livestock as a way to market feed, or a seed company that contracts with a farmer to grow seed corn, for example.

Code 5 - 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 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. Or, a dairy may pass milk on to a cheese, bottling or food service operation under the same ownership.

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.

**Item 1, column 4 Quantity sold**

Record the total amount of the commodity marketed or removed from the operation under the contract. Don't include the landlord's share of production even if it was marketed along with the operation's share. **Always ask this question when contract marketings are reported so that this column is completed correctly**, even if the income from the sale wasn't received during 1996. It is essential to obtain the quantity removed from the operation under the contract so that an accurate estimate of the total value of production (quantity times price) can be developed.

**Item 1, column 5 Unit**

Record the commodity unit (specified in the contract), such as pounds, cwt, bushels, etc.

**Item 1, column 6 Price per unit**

Record the **final** price in dollars and cents per unit that the operation will get 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 1996 for the commodity marketed under the contract.** Because buyers often don't pay the whole contract price at one time, total receipts under a contract in 1996 don't 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 that the unit for the price reported agrees with the unit for the quantity reported. Cotton is an example where price and unit often don't 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's fine. Just make sure



that you record pounds of cotton sold and not bales. There's a big difference!

Let's look at an example where just one bale was contracted at 65 cents per pound. If you recorded 1 in the quantity column, 7 (for bales) in the unit column and .65 in the price column, 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 dollars and 35 cents (the price per BALE is  $480 \times .65 = \$312$ )!

### **Item 1, 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 that 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 isn't paid until after the first of the next year. If the operation didn't receive any payment under the contract in 1996, enter a dash and make a note.

If the operation will get future payments under this contract we consider them accounts receivable. Expected future payments should be recorded in Section E, Item 9.

### **Item 2 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's 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 in Section D.

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.

**Item 2, column 1 Commodity name**

In this column record each commodity that the operation had a contract to produce. For vegetables, be sure to specify whether the contract was for fresh market or processing production.

**Item 2, column 3 Contractor**

*VI*

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. Verify with the operator that his or her answer fits in the category you're recording. If the respondent identifies the contractor by name and/or you are uncertain of the correct category, read the categories to the operator -- "Would you say that XYZ Contractor is another farm, a processor, mill or gin, etc.?" -- or ask the respondent to look at the code list printed in the questionnaire and select the appropriate category for the type of contractor. If none of the categories in the code list fit the operator's contractor, select code 8 for OTHER and be sure to write a description of the contractor in notes.

Descriptions of the Contractor Codes for this item appear above in Item 1, Column 3.

**Item 2, column 4 Quantity removed**

Record the total quantity of the commodity produced and removed from the operation under the contract **during 1996**. Always complete this column when contract production is reported so that 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, number of broilers removed and the number of tons of tomatoes produced and removed.

**Item 2, column 5 Unit**

Record the commodity unit (specified in the contract), such as pounds, cwt, etc. This column must always be completed when contract production is reported.

**Item 2, 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 that the unit for which the fee is reported agrees with the unit in which the quantity was reported.

**Item 2, column 7 Total fees received for services**

Record the total amount received for producing the commodity under contract during calendar year 1996. **Ask** this question in order to complete this column correctly. Fees aren't always received in the same year as production, so this may not be the same number as price multiplied by quantity. **DON'T** include reimbursement for expenses in the fee for services. Reimbursed expenses should be recorded in Section D only.

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 1 - 4. (This is an example where the contractor is "Another Segment of the Same Company" and code 7 is entered in Column 3 on Version 1.)

**Special situation for production contracts - cattle "on shares":**

The production of livestock, primarily cattle, "on shares" is common in Montana, the Dakotas, and Nebraska. 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 don't consider these arrangements to be contracts. However, the arrangements best fit the CRR 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, 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.

Don't record the final sales price received for the animals in Columns 6 and 7, because this value should appear in either cash sales (Item 10b of this section) or year-end inventory (Section E, Item 8c, Column 2). Be sure to write a note that these are cattle on shares.

**Items 3a-c      How contracts were negotiated**

*VI*

If the operation had more than one production contract, refer to the contract with the largest value of product for Items 3a-c, and 4.

For Item 3a, enter '1' for 'yes' if the operator was contacted personally by the contractor, or if the contractor held a meeting to solicit contractees, even if the operator still had to qualify for the contract.

For Item 3b, enter '1' for 'yes' if the operator and contractor negotiated the terms of the contract, including which inputs would be supplied by the contractor, and the how or when fees were paid to the farmer.

For Item 3c, enter '1' for 'yes' if the operator had a third-party professional (such as attorney or accountant) evaluate the contract before the operator agreed to sign the contractor.

**Item 4**                    **Were other contractors available in area**  
*VI*

For Item 4, enter '1' for 'yes' if the contractor was the only one that offered contracts for that commodity in their particular region.

**Items 5 a-l**            **Net cash sales of CROPS**

For each crop sold in 1996, report the amount received during calendar year 1996, 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 that a farmer records in the books most likely already has the check-offs or other charges deducted from it.

If multiple crops within a category were sold, (for example, vegetables, melons and strawberries) report the sum of the NET RECEIPTS for the combination of crops. Note that the table provided has lines for cash sales of fruits, nuts and berries, for all hay, for all nursery and greenhouse crops, and for vegetables, melons, and strawberries.

For sales of any other crop commodities, such as corn, wheat, soybeans, etc., write in the name of the commodity and record the net dollar amount received for the sale of that commodity. Refer to the list of crops harvested in Section A to insure that all crops sold in 1996 are listed either as marketing or production contracts, or here as

cash sales. The only way that a crop that was harvested doesn't get recorded here is if the crop was used on the farm (as feed) or was stored for future sale. Crops stored are considered assets and their value should be recoded in Section E, Item 8d.

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. weren't deducted. If charges for marketing containers, supplies, etc. were deducted, they should be added back to the total received for the crop and should also be reported in the appropriate expense items in Section B.

If marketing charges haven't been deducted from the farmer's receipts, you or the farmer must subtract them before you record net receipts in Items 5a - 1. Marketing charges should be recorded in Item 12 so if you have to deduct them, it's a good idea to list them in the table in Item 12 as you go.

**INCLUDE as cash sales:**

- (1) crops sold in 1996, 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 1996.** 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 Item 1 or 2.)
- (2) crops placed under CCC loan which were not redeemed.  
(These should be recorded in Item 22.)
- (3) maple syrup sales. Those sales should be reported in Item 15c because maple syrup is a forestry product rather than an agricultural product.

**Item 6                    CCC crop sales**

If a respondent has not already reported sales from crops redeemed from the CCC, have him allocate the 1996 sales of these crops to marketing contract sales (Item 1) or cash sales (Item 5).

**Item 7a, b, b(1), & 8 Flue-cured tobacco sales**  
V3

Record in Item 7a the number of pounds of flue-cured tobacco that were stored for sales in 1997 or later. Record the 1996 pounds of tobacco produced that were sold *and* for which the farmer received payment in 1996 in Item 7b.

**Item 7b(1)    Tobacco receipts, current year crop**  
V3

Record the net cash receipts for the pounds of tobacco produced and sold in 1996 that are noted in Item 7b.

**Item 8                    Tobacco receipts, previous year's crop(s)**  
V3

Record the net cash receipts for pounds of tobacco produced in 1995 or earlier years but that was sold in 1996.

**Item 9                    Livestock and livestock products**

This section asks if the operation had any cash sales of livestock or livestock products during 1996. If yes, proceed to collect the type of livestock or livestock product in Item 10. If no, go to Item 11.

**Item 10a Cash sales of breeding stock and dairy cattle**

Sales of breeding stock are collected separately from other livestock, because breeding stock is treated as a capital item.

Record the net cash receipts for sales of dairy cattle for milking or breeding and for sales of beef breeding stock. Dairy cull animals and animals culled from the beef cattle breeding herd should be included in Item 10b. If calves were sold, and the operator didn't know whether or not they would be used for breeding, record them in Item 10b.

**Item 10b Cash sales of all other cattle**

Record the total 1996 net cash receipts for sales of all dairy cull animals, cull animals from the beef breeding herd, and other cattle and calves sold as feeders or for slaughter. If calves were sold, and the operator didn't know whether or not they would be used for breeding, record them here.

**Item 10c Cash sales of hog breeding stock**

Record the net cash receipts for sales of hogs for breeding stock. Animals culled from the breeding herd should be included in Item 10d. If pigs were sold, and the operator didn't know whether or not they would be used for breeding, record them in Item 10d.

**Item 10d Cash sales of all other hogs**

Record the total 1996 net cash receipts for sales of all hogs for purposes other than breeding. If pigs were sold, and the operator didn't know whether or not they would be used for breeding, record them here.

**Item 10e Milk and dairy product sales**



If the operation had **cash sales** of milk or other dairy products (cream, cheese, butter, etc.) in 1996, record the NET CASH SALES. If sales of milk or dairy products were recorded under marketing contracts (this is more common than cash sales), don't report those same sales again in this item.

**Item 10f      All egg sales**

Record the operation's 1996 NET CASH SALES of all eggs (after deduction of marketing charges). Exclude sales of eggs marketed or produced under contract. These should be recorded in the contracting items--Item 1 or 2.

**Item 10g      All poultry sales**

INCLUDE sales of broilers, fryers, turkeys, and other poultry.

EXCLUDE sales of poultry produced under contract. (Record these in Item 1 or 2.)

Record the operation's 1996 NET CASH SALES of poultry and poultry products (after deduction of marketing charges).

**Item 10h      All other livestock, poultry, fish, bees etc.**

**INCLUDE cash sales of:**

- (1) all sheep, wool, goats, horses, mules, ponies, etc.
- (2) ducks, geese, guineas, pigeons, etc.
- (3) bees and honey.
- (4) mink, rabbits and other fur bearing animals.
- (5) catfish or other fish raised commercially or used for home consumption.
- (6) all other livestock or products not included previously.

Record 1996 CASH SALES of other livestock and other livestock products, excluding marketing charges.

**Item 11                  Payments in 1996 for previous years' marketing**

This item screens to find out if the operation received payments in 1996 for products sold or transferred before 1996. This is money that would have been owed to the operation at the end of 1995. 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 1995 or before) should be included in the appropriate category under this item.

**Item 11a      Payment received from previous years' MARKETING contracts**

If the operation received payments in 1996 for commodities **marketed** under contract in previous years, record the 1996 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's 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 sugarbeets may call for payment to the farmer as the crop is sold by the co-op, pool or contracting firm.

**Item 11b      Payment received from previous years' PRODUCTION contracts**

If the operation received payments in 1996 for commodities **produced** under contract in previous years, report those payments here. As with payments under marketing contracts, payments under production contracts may be paid over more than one year.

**Item 11c      Cash sales of commodities in previous years**

If the operation received income in 1996 from commodities sold or transferred in previous years, record that income here.

**Item 12, 12a      Total marketing charges**

Almost all operations that sell commodities have some marketing charges. These are usually deducted from the gross payment, so the check the farmer gets has already had these charges deducted. Farmers don't usually keep very good records of charges that were

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already deducted before they got 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 didn't have any marketing charges, make a note of this, or the state survey statistician will have to call you or your supervisor back to check on this.

If the respondent knows the total marketing charges for all commodities sold, record the total in cell 477 and go to Item 14, (Versions 1, 2, 3). (Go to Item 13 on Version 4.) If the total is unknown, complete the worksheet. In columns one and two, list the commodity and the specific marketing charges the respondent had for that commodity. In columns three and four, enter the rate per unit and the unit, (for example, dollars, cents and mils per bale). In column five, enter the total number of units sold in 1996 (for example, 10,000 bushels).

Calculate total charges by multiplying column 3 (rate per unit) times column 5 (total units). Add up the total charges for all commodities and enter the total at the bottom of the table. (Note that the same item code is used in the total cell at the bottom of the table and the Item 12a cell.) If you **absolutely can't get** per commodity charges, **record the total quantity (and unit) sold** so that 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) to get marketing charge rates, make a note in the margin so the survey statistician knows the farmer couldn't supply this information. **DO NOT** use these sheets unless the farmer **can't** supply the information.

All marketing expenses paid by the operation should 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 wasn't sold from storage, but was returned to the operation, out-of-pocket expenses for storage should be included.

In field crops such as peanuts or tobacco, quotas or allotments are often rented or leased from operators who don't 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 here**. It's 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 that the rent payment reported in Section A is **only for land** and not for the land and allotment or quota rental combined. (Quota or allotment **purchases** should be reported in Section **E** as assets of the operation.) Also include rental of sugarbeet co-op shares in states where this is a practice.

Perishable products such as fruits, vegetables and fish often have to be refrigerated or iced during storage or transportation. These expenses should be considered marketing expenses. If these expenses are paid by the contractor they should be reported in Section D.

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 expense (Item 30 in Section B).

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 Item **15h**.

### 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 Item 15h.

**Don't 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 recorded in Item 1 or Item 10e . Be sure these hauling charges were included in custom hauling in Section B, Item 7a . If they weren't, go back and add them in.

Include charges the operation paid for cash and/or contract sales.

### Cotton

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

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

### Item 13

#### Marketing charges for beef cattle

V4

If marketing charges of beef cattle was already reported in the worksheet of Item 12a, record the percentage or dollar amount in Item 13. If this was not itemized in Item 12a, you must ask Item 13 to obtain the total marketing charges for beef cattle sold during 1996, excluding feedlot cattle. Include yardage fees, check-offs, commissions, inspection fees, and any other fees collected at the time of sale.

**Item 14**                    **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.

**Item 14**                    **Screening for commodity contracted out**

Ask the operator if any other operation grew livestock or poultry for this operation under a contractual arrangement. If yes, complete the table for the commodity that was contracted out.

**Item 14, 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 1995 and were still under contract on January 1, 1996.

**Item 14, column 3**        **Market value of commodities already under contract on January 1, 1996**

Record the estimated market value of all this operation's commodities **from 1995 and previous years** that were **placed** on contractee operations and still under contract as of January 1, 1996. Don't include this value in Section **E** (Farm/Ranch Assets and Debt).

**Item 14, 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 1996**. If more than one arrangement existed, or if arrangements existed for more than one commodity, record each one on a separate line.

**Item 14, column 5      Production expenses and fees**

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

**Item 14, 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 1996. **Don't** 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.

**Item 14, column 7      Market value of items still under contract on  
December 31, 1996**

Record the estimated market value of commodities still under contract as of December 31, 1996. Don't include this value in Section E (Farm/Ranch Assets and Debt).

**Item 15**

**Item 15a      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. Exclude custom work which was considered separate from the operation and which had its own set of books. (This income should be reported by the respondent in Section F, Item 18b or 18c on Version 1.)

**Item 15b      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 15c Forest product sales**

Record the total 1996 income from sales of all forest products. Include timber sales, pulpwood sales, firewood sales, maple syrup sales, etc. Christmas tree sales should be reported as crop sales in Section C, Item 5.

**Item 15d 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 15d(1) Amount for sales to other farmers**

Record the amount (or percent of the total sales) received from sales of farm machinery and vehicles to other farmers. This item gives us a measure of the value of equipment being traded within the farm sector of the economy.

**Item 15e 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 from Sections B and D, 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 1996. 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 15f      Other insurance payments**

Record the amount of insurance payments that were collected for losses to insured property that were not part of the payments covered by FCIC. Include farm share of payments 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, put this income in Section F under off-farm income on Version 1. Include hail insurance indemnity payments.

**Item 15g      Patronage dividends from Co-ops**

Record the amount of patronage dividends resulting from ownership of shares in cooperatives in 1996. 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 15h      Other farm related income**

**INCLUDE:**

- (1) by-product sales.
- (2) sales of livestock manure.
- (3) any Federal Excise tax (FET) refund claimed, if the FET was included in fuels purchase cost.
- (4) all other farm related income not included in 15a-15g.
- (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.
- (7) equity or premium payments on CCC loans transferred to someone else (money received above the face value of the loan).

**Item 16**

**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 1996. Exclude home gardens if expenses were excluded earlier. Include products used or consumed by partners and their families.

## Government Loans and Programs

### Item 17 Government agricultural payments

Record the total amount of government agricultural payments received by this operation in 1996.

INCLUDE:

- (1) Payments received by participating in the new 7-year farm program. These payments were made in the late summer and early fall for 1996. In addition, farmers could have received advance payments in December, 1996 for the coming year. These payments should be recorded in Item 17a.
- (2) deficiency payments. These are based on target prices and are made to farmers who participated in the feed grain, wheat, rice or upland cotton programs under the 1990 Farm legislation. The payment rate per bushel, pound, or hundredweight was based on the difference between the target price (a price set by law) and the higher of the market price or loan rate. The total payment equaled the payment rate times the amount of production eligible for payment. Farmers usually received a portion of their estimated deficiency payments well in advance of their crop harvest and marketing period. If crop prices ended up higher than expected (higher than the target price), farmers were required to pay back to the government all or part of the deficiency payments they received in advance.
- (3) 10 - 15 year Conservation Reserve Program (CRP) payments. This is a program in which the government financially assists farmers and land owners in conserving and improving the soil and water resources of their farms. This is done by taking highly erodible land out of crop production and planting it to a permanent cover crop or tree crop. Record the total 1996 payments received for participation in this program as item 17c.
- (4) disaster payments and all other state and federal agricultural program payments are combined together and recorded as item 17d. In addition to federal disaster payments (not

money received through loans), program payments included here are:

- (a) payments made for soil conservation or water use and control. These programs help pay some of the costs farmers face when they begin establishing conservation practices and improvements.
- (b) emergency feed payments.
- (c) storage payments. Farmers sometimes receive payments for storing certain commodities they've pledged as collateral for CCC loans and which are stored in the farmer-owned reserve. Under this program farmers store the grain for 3 years in exchange for payments.
- (d) any other state or federal payments related to this operation.

**EXCLUDE:**

- (1) crop insurance payments, even if payments were received from required Federal Crop Insurance.
- (2) CCC loans.

**Item 18                    Amount paid back to government for overpayment of deficiency payments**

In this item (Item 18), you should collect the amount the farm paid back to the government in 1996 for receiving overpayments of deficiency payments.

**Item 19                    Commodity Credit Corporation 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 1996. This lets us 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.

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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 that's 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 that 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 isn't 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 total amount of all loans received goes in Item 20.

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 21. When a farmer reclaims title to the commodity, he can then either sell it or store it for future sale.

If the loan isn't repaid by the maturity date, it is considered forfeited. Farmers usually do this when the market price is less than the loan redemption price. Don't record the value of forfeited loans.

Farmers who have placed a crop under loan can transfer the loan to someone else. When they do this, they are no longer responsible for loan repayment. (This cannot be done in all areas of the country.) If the farmer did this, any money received above the face value of the loan (equity or premium payment) should be recorded in all other farm income, Section C, 15h.

If a loan was taken out in 1996, has a 1997 maturity date and hasn't had any action taken on it, there will be an outstanding balance. Record the total outstanding balance in Item 22.

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.

All CCC loans are recorded the same way in the questionnaire.

**Item 20**                    **CCC loans received**

Record the gross amount of loan received in 1996. This should be equal to the amount of the loan rate (price per unit) times the quantity placed under loan.

**Item 21**                    **Loans repaid**

The amount spent to repay loans should be equal to loan rate times the quantity redeemed. Don't include any interest or storage charges that were repaid. Interest charges should go in Section B. Storage charges should go in Item 12, Marketing Charges in this section.

**Item 22**                    **Value of outstanding loans December 31, 1996**

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

## Section D - Landlord And/or Contractor Expenses

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

Section D obtains expenses paid by landlords and contractors. 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. Landlords and contractors provide a relatively large share of some expense items such as property taxes, purchases of livestock, feed, and farm supplies.

It's 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 we use 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 reported in Section C (quantity removed under contract times an average price for the state), to develop an estimate of contractors' share of net farm income.

### General Instructions

This section applies only if the operation had landlord(s) and/or contract production or marketing.

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

**Expenses paid by the operator and partner(s) should have been recorded earlier.**

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 here in Section D.

Sometimes the contractor charges the operator for some expenses that 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 in Section D. The **net** payment (after deductions for expenses) for the commodity should be recorded in Section C, Item 2.

If the operator can't provide settlement sheets (or otherwise report contractor expenses), find out how many acres of crops or number of head of livestock or poultry were raised under contract during the year. 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.



**Item 1                      Landlord's share of government commodity program payments**

If you found out earlier in the interview the operator share rents land, and the operation has land enrolled in government programs, then you have a clue you should expect something in this item. Share rent landlords almost always get a share of the government payments associated with their land.

This data show how payments are shared by operators and landlords and document the fact that farm operators don't get all of the payments made through commodity programs.

**Item 2                      Landlord/contractor taxes**

Record the total amount of taxes (associated with land or other assets used by the operation) that were paid by landlords and contractors in 1996. **Usually landlords have to pay the taxes on the land they rent out.** If the operator reports the operation paid the taxes as part of the rental agreement, make a note of this in the margin.

In some states a certain number of acres can be excluded from real estate tax. If the respondent knows his landlord didn't owe property tax on the acres, make notes.

**Item 3                      Crop insurance paid by landlords/contractors**

Record the total 1996 expenses paid by landlords/contractors for basic catastrophic and buy-ups of federally backed crop insurance for crops grown on the operation. Include hail insurance in Item 4.

**Item 4                      All other insurance paid by landlords/contractors**

Record the total amount of all other casualty insurance associated with this operation that was paid by landlords/contractors during 1996. Include coverage for hay and grain in storage facilities, insurance on farm buildings, motor vehicles, liability and blanket insurance policies.

**Item 5                      Other landlord/contractor expenses**

Use the check-boxes to show the items paid by landlords and/or contractors. In the table, record complete description(s) of the item(s) a landlord or contractor paid. **Good descriptions of these items are very important.** Each of the items recorded here has to be coded into the same categories as operator and partner expenditures in Section B of the questionnaire. Be sure you record enough information for the survey statistician to code this properly. **Don't group items** unless they would all have been reported in the same cell in Section B if the operation had paid them.

**EXAMPLE:**

The operator reports the amount his landlord paid for some repairs to land improvement. Looking back at Section B, you see that repair of irrigation equipment and pumps is listed separately from repair of farms and buildings and other land improvements. The description you write down in this section **MUST** be exact enough so the State Survey Statistician can code this landlord expenditure into the specific repair type.

Columns are provided for landlord expenditures and for contractor expenditures. These expenses **SHOULD NOT HAVE BEEN INCLUDED** before (be sure they weren't). If the amount was already included, **YOU HAVE TO GO BACK AND SUBTRACT IT OUT OF THE CELL IN WHICH IT WAS INCORRECTLY RECORDED.** If exact figures are not available, enter the respondent's best estimate of landlord expenses.

**Feedlots**

If you are interviewing a **CUSTOM CATTLE FEEDLOT** (operation on face page), you should note that they usually have very accurate records on contractor (cattle owner) expenses. The contractors usually pay for all the feed, veterinary services, etc. In this section include all of the expenses that the contractors reimburse the feedlots for, but exclude the fee that the contractors pay the feedlot for services (this should be included in Section C, Item 2, column 7). In these cases, don't get the contractors' names and addresses---there may be dozens of them.

**Poultry, eggs, hogs, etc.**

If you're interviewing a contractee for poultry, eggs, hogs, etc., get the contractor's name and address. The survey statistician will have to assign someone to contact contractors reported in the survey whose contractees couldn't or wouldn't complete this section. In order to complete the contractee questionnaire, we will have to collect contractor data for contractees. Most contractees have settlement sheets. If they are willing to use them, they can give you the information required in this section. If you have to probe for this information, mention the settlement sheets and ask about their availability.



## Section E - Farm/ranch Assets and Debt

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

Data that have been reported in Sections B and C are used to develop an income statement for the farm operation. Data reported in this section 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 a farm business relative to the amount of debt that 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 that 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, 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 reported in Section B 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 1996. Therefore, we include the value of rented land and leased machinery in estimating the total value of all assets managed by the operation.

## 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, 1996, rather than all of 1996.

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 1996. Get the operator's best estimate of the current market value of specific assets. If operation assets are owned by partners, include the value of assets belonging to all partners. (Exclude the landlord's share.)

**Item 1                      Screening for purchases of assets during 1996**  
**VI**

Additional detail is sought on capital purchases on Version 1. Please note that the Item 1 screening question on Version 1 includes fewer items than the other versions.

Item 1, Version 1 only screens for purchases of irrigation equipment and pumps, new or used cars, trucks and vehicles (except tractors). If none were bought, skip to Item 3. The remainder of capital purchases are screened for in items 3 and 4.

**INCLUDE:**

- (1) Tractors, cars, trucks, pick-ups, sport utility vehicles, buses, vans, campers, etc.
- (2) OTHER motor vehicles.
- (3) Irrigation equipment and pumps.

***Versions 2, 3, 4***

This item screens for purchases of new or used cars and trucks, tractors, vehicles, equipment, irrigation equipment and pumps,



machinery or implements in 1996. If none were bought, skip to Item 5.

**INCLUDE:**

- (1) Tractors, cars, trucks, pick-ups, sport utility vehicles, buses, vans, campers, etc.
- (2) TILLAGE machinery - cultivators, disks, harrows, hoes (rotary), plows, scrapers, subsoilers and similar equipment.
- (3) PLANTING, FERTILIZING and CHEMICAL machinery - drills (grain), dusters and other crop pesticide application machinery, listers, planters, sprayers, spreaders and similar equipment.
- (4) HARVESTING machinery - combines, cutters, diggers, forage harvesters, pickers, shakers and similar equipment.
- (5) HAYING machinery - balers, conditioners, crimpers, crushers, cutters (rotary), loaders, mowers, rakes, shredders, swathers, windrowers and similar equipment.
- (6) OTHER motor vehicles, machinery and equipment - all terrain vehicles (ATVs), airplanes, blowers, crop dryers and equipment, posthole diggers, elevators, gasoline engines, standby electric equipment, feed grinding and mixing equipment, loaders, electric motors, skidloaders, silo unloaders, trailers, wagons and similar equipment.
- (7) LIVESTOCK, DAIRY AND POULTRY equipment - milkers, feeders, etc.
- (8) Irrigation equipment and pumps.

**Item 2**

**Total cost of cars**

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 1996. 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 29a of Section B. Record registration and license fees in Item 30 of Section B.

**Item 2b          Total cost of trucks, etc.**

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 1996. 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 29a of Section B. Record registration and license fees in Item 30 of Section B.

**Item 2c          Total cost of all tractors purchased  
V2, V3, V4**

Record the total purchase price (after trade-ins, rebates, discounts, etc.) of all new and used tractors bought during 1996 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 weren't 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 29a in Section B. Registration and license fees should have been reported in Item 30 of Section B.

**Item 2d**      **Total cost of all SELF-PROPELLED equipment, implements and/or machinery purchased**  
*V2, V3, V4*

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 2e**      **Total cost of all NON-SELF-PROPELLED equipment, implements and/or machinery purchased**  
*V2, V3, V4*

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.

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 2f**      **Irrigation equipment and pumps**  
*V1, V2, V3, V4*

Record the total amount spent for all irrigation equipment, pumps. Include cost of irrigation pipe and pumps. Include delivery charges and sales taxes in the net cost. If the respondent's operation bought irrigation equipment in partnership with another operation, include only the amount that was this operation's share of the machine's total cost.

**Item 3**      **Itemized purchase of tractors**  
*V1*

If the operation purchased any tractors in 1996 (new or used), for each purchase, list the make and model of the tractor in column 1, the power take-off (PTO) horsepower in column 2, the number of tractors of this type in column 3, and the total price in column 4. Record the total purchase price (after trade-ins, rebates, discounts, etc.), including 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 weren't 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 29a in Section B. Registration and license fees should have been reported in Item 30 in Section B.

If more than four tractors of different make and model numbers were purchased in 1996, combine the most similar sized tractors (based on PTO horsepower) on one line. Enter the average PTO horsepower in column 2.

**Item 4**                      **Itemized purchase of farm equipment, machinery, etc.**  
**VI**

Include all purchases of new and used farm equipment, implements, and machinery for crops, livestock, dairy, or poultry. In Column 1, identify the type of equipment or machinery purchased, including name, make and model, if applicable. In column 2 indicate the machine type: 1, tillage; 2, planting; 3, harvesting; 4 haying; and 5, other.

- (1) TILLAGE machinery - cultivators, disks, harrows, hoes (rotary), plows, scrapers, subsoilers and similar equipment.
- (2) PLANTING, FERTILIZING and CHEMICAL machinery - drills (grain), dusters and other crop pesticide application machinery, listers, planters, sprayers, spreaders and similar equipment.
- (3) HARVESTING machinery - combines, cutters, diggers, forage harvesters, pickers, shakers and similar equipment.
- (4) HAYING machinery - balers, conditioners, crimpers, crushers, cutters (rotary), loaders, mowers, rakes, shredders, swathers, windrowers and similar equipment.
- (5) OTHER motor vehicles, machinery and equipment - all terrain vehicles (ATVs), airplanes, blowers, crop dryers and

equipment, posthole diggers, elevators, gasoline engines, standby electric equipment, feed grinding and mixing equipment, loaders, electric motors, skidloaders, silo unloaders, trailers, wagons and similar equipment.  
LIVESTOCK, DAIRY AND POULTRY equipment - milkers, feeders, etc.

Indicate whether the machinery is self-propelled or non-self-propelled in column 3. Report the total cost, after trade-ins, rebates, and discounts in Column 4.

Since we wish to obtain total capital expenditures, if a respondent purchased more than 8 machine items, and multiple items were of the same type, include the number purchased in Column 1, and report the total cost of all similar make and model items in Column 3.

**Item 5                      Computer and office equipment 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 B, Item 30a.

**Item 6                      New construction**

Record the operation's total 1996 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.

**EXCLUDE:**

- (1) expenses for irrigation equipment such as pumps, motors, sprinklers, pipes and fittings that are reported in item 2f.

**Item 6a      Amount for operator's house**

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

**Item 6b      Amount for other farm buildings, houses, etc.**

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

**Item 7a**                    **Market value of *rented* land and buildings**  
**VI**

Record the operator's best estimate of the total market value of all the LAND and buildings CASH OR SHARE RENTED by the operation during 1996. This should correspond to acres reported as rented in Section A, Items 1b(1) and 1b(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 7b**                    **Market value of owned land and buildings**

Record the operator's best estimate of the total market value of all the LAND and buildings OWNED by the operation on December 31, 1996. This should correspond to the acres owned reported in Section A, unless land (and buildings) were purchased at the end of the year, and, thus, were not part of the operation **during** 1996. 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 ISN'T 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 isn't 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 7b(1)**                **Market value of the operator's house**

Record the market value of the operator's house as of December 31, 1996, if it is owned by the operation. This is the dwelling's share of the total value reported in Item 7b.

If the operator can't 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'll 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 7b(2) All other houses**

Record the market value on December 31, 1996 of tenant and hired labor houses, and all other houses owned by this operation, regardless of location. 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 7b(3) All other farm buildings**

Record the value of all other farm buildings owned by the operation. Probe if necessary to obtain values, but don't 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.

**Item 8 Value of beginning/ending year inventories of**  
columns 1&2 machinery, commodities and production inputs

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.

In column 1, record the **market value** of commodities (Items 8c and 8d) or production inputs (Item 8e) on hand at the beginning of the year, on January 1, 1996. This is the value of the beginning year inventory. In column 2, record the **market value** of vehicles and machinery (8a and 8b), commodities (Items 8c and 8d) or production inputs (Item 8e) at the end of the year, on December 31, 1996. This is the value of the end of the year inventory.

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



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in Section A on production, amount (of crops) used on farm, or the quantity (of livestock) sold, and to the sales data reported in Section C. 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 in Column 2.

If the commodity was sold, but the revenue was not recorded in Section C, then the amount of money owed to the operation for these sales goes in Item 9 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 beginning of 1996 and you ask about the value at the end of 1996, **DON'T EVEN THINK ABOUT** saying, "Was it (about) the same?" or "It was the about the same, wasn't it?"

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, 1996, to get the market value of the beginning year inventory. Then you need to consider **all** these things on December 31, 1996, 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've 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. Good notes in this section may be helpful in any case.

**EXAMPLE 1:** The operator reported the January 1, 1996, value of all livestock and poultry on hand was about \$305,000. (This is recorded in column 1 of Item 8c.) He says he thinks the value of the inventory on hand on December 31, 1996, had gone down about \$30,000 since the first of the year, mostly due to sales of breeding stock, resulting in an ending year inventory value of \$275,000. You record 275,000 in column 2.

**EXAMPLE 2:** The operator reported the January 1, 1996, value of all livestock and poultry on hand to be about \$72,000. This was for 60 dairy cows, valued at \$1,200 per head. The enumerator entered 72,000 (= 60 x 1200) in Column 1 of Item 8c. The operator said she still had 60 dairy cows on hand on December 31, 1996.

But five cows were culls that would soon be replaced in 1997. Even though the same number of cows were on hand, their combined value is different. The enumerator probed for the value of the culls. The operator figured they were about 800 pounds each, at about \$50 per hundredweight, so their value would be about \$400 per cull. The remaining 55 dairy cows were still valued at \$1,200 each. So the operator estimated that the value of the dairy herd at the end of the year was about \$68,000, using the following calculation:

$(\$400 \times 5 \text{ culls}) + (\$1,200 \times 55 \text{ remaining dairy cows}) = \$2,000 + \$66,000 = \$68,000.$

You enter 68,000 in Column 2 of Item 8c.

**Item 8a      Value of OWNED trucks, cars, tractors, farm machinery,  
equipment and tools**

In column 2, record the operator's best estimate of the market value of the farm share of trucks, cars, tractors, machinery, tools, equipment and implements owned by the operation on December 31, 1996.

**Item 8b      Value of LEASED trucks, cars, tractors, farm machinery,  
equipment and tools**  
*VI*

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. For example, short term rental of a caterpillar should be reported in Item B14, and no value of the machine reported here .

In column 2, record the operator's best estimate of the market value of the cars, trucks, tractors, machinery, tools, equipment and implements leased by the operation, and kept on the operation on December 31, 1996.

**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 8c Value of livestock and poultry on hand**

In column 1, record the market value of the livestock and poultry owned by and located on the operation on January 1, 1996. In column 2, record the market value of the livestock and poultry owned by and located on the operation on December 31, 1996. Be sure to consider the quantity on hand, their size or weights, and the market prices on the date in question.

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The number of head on hand on December 31, 1996 was reported in Section A. 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. Their value is recorded in Section C, Item 14.

**Item 8c(1) Value of breeding stock**

Of the total value reported in Item 8c for all livestock and poultry, record in column 1 the amount which represented the value of **breeding stock** (including dairy animals) on January 1, 1996. In column 2, record the value of **breeding stock** on December 31, 1996.

**Item 8d Value of all crops**

In column 1, record the market value of all of the crops on hand on January 1, 1996. In column 2, record the market value all of the crops on hand on December 31, 1996. 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 1996 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, 1996.
- (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 8e      Value of all feed, fertilizer, chemicals, fuels, parts, purchased seed and other supplies**

In column 1, record the estimated value of unused supplies of inputs owned by the operation such as seed, feed, chemicals, fertilizers, etc., on January 1, 1996.

In column 2, record the estimated value of this group of assets on December 31, 1996. Exclude the value of any items that should be reported in Item 8d (hay, crops to be used for seed, etc.) Don't include fertilizers and chemicals already applied.

**Item 8f      Production inputs already used for crops**

In column 2, record the amount spent up through December 31, 1996 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, 1996.

**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, 1996.
- (6) 1997 and later year's crops not yet planted as of December 31, 1996.

**Exclude the value of inputs to:**

- (1) crops already harvested (these crop values should be recorded in Item 8d).
- (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, 1996 due to weather or market conditions. An estimated value for these crops should be recorded in Item 8d if they were originally intended for harvest as of December 31, 1996.

**Item 8g      Stock in farm cooperatives**

Record the value on December 31, 1996 of the stock the operation owns in all farm cooperatives. Include stock in the Farm Credit System, input supply, processing, marketing, and distribution cooperatives

**Item 9a      Amount owed from past sales - 12/31/96 (End of Year)**

Record the total amount owed to the operation as of December 31, 1996, for all commodities sold or delivered in 1996 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 1996 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 Section A on production, the amount (of crops) already

used on farm, or the quantity (of livestock) sold, and to the sales data reported in Section C.

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 8d, Column 2. If the commodity was sold, but the revenue was not recorded in Section C, then the amount of money owed to the operation for these sales goes here in Item 9a.

**Item 9b            Amount owed from past sales - 1/1/96 (Beginning of Year)**

Record the total amount owed to the operation as of January 1, 1996 for all commodities sold or delivered in 1995 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 1996 and future years from crops, livestock, poultry or products sold or delivered in 1995 or earlier years.

**Item 10            All other farm assets**

Get the operator's best estimate of the value of all other assets of the farm/ranch, using the Value Codes Table on the Respondent Sheet. Read, or let the respondent read, the prompt-list of items included in this question.

**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 9).
- (3) quotas and allotments owned by the operation, if these values have not already been reflected in the land values reported in Item 7.

**Exclude the value of:**

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

**Item 11                    Agribusiness Investment and Income**

You will likely see few farms/ranches that have investments or income from this type of arrangement. However, where these arrangements exist, they typically represent a very large share of the operation's total assets. Also, the total value of these assets is quite high and significantly affects the level of estimates being made at the state, regional and even the national level. Failing to properly account for these few but highly valued enterprises would seriously misstate the farm economy being described by the data from this survey.

First screen for agribusiness investment and income. Farmers are participating in a variety of joint ventures, producer alliances, and other private organizations which process, assemble, or otherwise add value to their commodities. For example, a group of farmers may form an alliance to produce and market eggs, in an effort to add value to the corn and soybeans they produce. Such alliances will most likely continue to increase in importance in the future. In this section, record both the investment in such ventures and the income that the operation received from its participation in the venture.

**Item 11a                  Agribusiness Investment**

USING THE VALUE CODES TABLE, record the investment the farm had in any alliance or other organization that provides inputs for this operation, or that processes, markets, or distributes agricultural products from this operation. If the alliance operates as a corporation, record the value of the stock owned by the operation. If the alliance operates as a partnership, record the operation's share of the total assets of the alliance, and record the operation's share of the debt of the alliance in Item 14 (Versions 2, 3, 4) or Item 15 (Version 1) in this same section.

**Item 11b                  Agribusiness Income**

Record the income the farm received from any alliance or other organization that provides inputs for this operation, or that processes, markets, or distributes agricultural products from this operation.



**Item 12                    Screening for debt**

*V1*

**Item 13**

*V2, V3, V4*

Ask the respondent if this operation owed money to any federal agencies, banks, co-ops, individuals, or any other lenders on December 31, 1996. If the operation didn't owe any money, then go to Item 17 on the CRR version (V1). **MAKE SURE ITEM 17 IS ASKED IN EVERY VERSION 1 INTERVIEW!** Not having any long term loans does not mean that no short term funds were secured and paid off during the year.

On the economic follow-on versions (V2, V3, V4), skip to Section F if item 13 is "no".

**Include:**

- (1) all monetary obligations of the farm/ranch.
- (2) operating loans or feeder livestock notes.
- (3) accounts at feed mills.
- (4) unpaid custom charges.
- (5) loans for breeding stock, machinery, farm/ranch improvements, etc.
- (6) mortgages or contracts on farm/ranch real estate.
- (7) mortgages on the operator's house if it is owned by the operation.
- (8) farm property owned by the operation which was rented to others.
- (9) non-farm debts which are secured by assets belonging to the operation.

**Exclude:**

- (1) debts for non-agricultural property such as cotton gins, canning factories, sugar mills, motels, retail stores, etc., unless these debts are secured by assets of the operation. Include debt on such businesses if the value of the assets of these businesses has been included in Item 11a above.
- (2) charge accounts that are usually paid in full each month.
- (3) short term debt (usually owed for thirty days or less).
- (4) debt on agricultural land not owned by the operation.

**Items 14a, 14b & 14c Debt outstanding**  
**V2, V3, V4**

If the operation had any debt at the end of 1996, this table should be completed. Debt is separated into three categories:

- debt with an original term of 1 year or less (Item 14a),
- debt having an original term of more than a year, not secured by real estate (Item 14b), and
- debt having a term of more than a year and secured by real estate (Item 14c). Include debt on the operator's house if it is owned by the operation.

**Item 14c(1) Debt on operator's house**  
**V2, V3, V4**

Record total amount of debt owed for the operator's house if it is owned by the operation.

**Item 14, column 1 December 31, 1996, balance**  
**V2, V3, V4**

For Items 14a, 14b, and 14c, enter the end-of-year balance remaining on the debt. Include both principal and unpaid delinquent interest.

**Item 14, column 2 Interest rate**  
**V2, V3, V4**

For each of the categories in which the operation had debt at the end of 1996, enter the rate of interest associated with the debt. If the operation had more than one loan in any category, estimate the average rate of interest. The interest rate should be recorded to the nearest hundredth of a percent, such as 6.75 percent. If a note has an adjustable interest rate, record the percent effective on December 31, 1996.

The interest rate could be zero even with a positive balance if no interest was charged, such as for unpaid veterinarian bills or debt owed to family members. In these situations, write a note explaining why the zero interest rate is valid.

**Item 14, column 3 Variable rate loans**

**V2, V3, V4**

For debt the operation had in the categories listed in items 14b and 14c, record the amount of remaining principal that was financed under a variable rate loan.

**Item 14, column 4      Percent for FARM purposes**  
**V2, V3, V4**

If the loan was obtained entirely for farm purposes, this should be 100. If part of the loan was for non-farm purposes, enter the percent of the original loan used for farm purposes.

If Item 14c includes debt on the operator's house, Column 4 of Item 14c would normally be considered 100% for farm purposes, unless the house is used for an off-farm business.

**Item 15                      Debt outstanding**  
**VI**

If the operation had debt at the end of 1996, 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.

**Item 15, column 1      Lender**  
**VI**

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 here, you are assuring them that your interests are in obtaining what types of loans are typical in their state not where he, personally, have particular debts. On the other hand, if respondents have difficulty in choosing the appropriate loan category,

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such as between a Savings and Loan or a Commercial Bank, don't hesitate to assist them in arriving at the correct response.

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

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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 past due accounts.

**Item 15, column 2      December 31, 1996, balance**

*VI*

Record the 1996 end-of-year balance remaining to be paid. Include both principal and unpaid interest which was delinquent.

**Item 15, column 3      Interest rate**

*VI*

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 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.

**Item 15, column 3      Original term of the loan**

*VI*

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.

**Item 15, column 5      Year obtained**

*VI*

Enter the last two digits of the year 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.

**Item 15, column 6      Percent for FARM purposes**

*VI*

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.

**Item 15, column 7      Type of loan**  
*VI*

Enter the code which best represents the type of loan. For operating loans, enter code 1. For loans not secured by real estate, enter code 2. For loans secured by real estate, enter code 3.

**Item 15, column 8      Loan guaranteed by FmHA/FSA/SBA**  
*VI*

Ask the column 8 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). For loans not coded 2 and 3 in column 1, ask if the loan was **guaranteed** by the Agency. Guaranteed loans are frequently made by banks (code 6 entered in column 1). The Small Business Administration has recently resumed its program for guaranteeing certain qualifying farm business loans.

**Item 16                  Additional debt**  
*VI*

Space is provided to record the details of four loans in the item 15 table. If the operation had more than four loans with balances outstanding at the end of 1996, enter the number of loans above the four identified in the table.

**Item 16a              Additional debt**  
*VI*

If the operation had more than four loans with balances outstanding at the end of 1996, enter the total amount of outstanding debt not recorded in the table. Include both principal and unpaid interest which was delinquent.

**Item 17                  Maximum balance of seasonal loans**

*VI*

**This item should be asked even if the operation had no debt at the end of the year.** It includes only loans taken out in 1996 and **entirely or partially** repaid during the year. Record the largest amount of production loans or other farm loans outstanding at any one time 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 the \$20,000 debt balance in the Item 15 table, entering code 1 in column 4 and code 1 in column 7. Record \$80,000 in Item 17 as the maximum loan amount taken out and repaid during 1996.





## Section F - Farm/ranch Operator and Household

### What's new this year?

- Section F, Version 1 should be filled out by the respondent rather than the enumerator.
- Detailed precision farming questions are on Version 2, the Corn economic follow-on.
- Operator attitudes about the new farm program, financial risk, and availability of loan monies will be measured.

For the first time, the farm and household characteristics section will be self-administered on Version 1 of the CRR questionnaire. This means you will receive a four page Section F supplement for Version 1 that the target operator will complete himself. Some respondents will have questions for the enumerator. Feel free to assist the operator in understanding the questions, but do not suggest responses.

Who should complete the Section F supplement? Ideally, the target operator would complete the entire interview. However, in some interviews the spouse or a partner may be the person reporting for the operation. For Section F, most of the questions relate to the operator's household, (items F1-F26). For these items, it is acceptable to get the data from informed respondents other than the respondent. For items F27-F33, make every attempt to obtain responses from the target operator.

How can you maximize cooperation on the Section F Supplement? This is a good time to say, "This is the last part of the interview. I'll get you started on this part. It will go very quickly. While you're writing down your answers, I'll be rechecking my math on the work we completed together. If you have any questions, feel free to ask. There are no wrong answers." Avoid introducing the supplement with questions such as, "Would you mind doing this last form?" In general, questions will lead to disappointing results; they make the task seem optional and often invite a polite 'no'.

Practice some brief, straightforward answers to questions respondents may have about the purpose of these items. Make use of the

information on the next page that explains how this information is used.

How should the Section F supplement be completed? Encourage the respondent to use a pencil by offering him one with the form. A pencil allows the respondent to change answers more easily, making the form more legible to State Office staff who will edit and key the data.

Some respondents may not be able to complete the questionnaire due to poor vision, language limitations, and so on. In these cases, you should read the questionnaire to the respondent just as you have in Sections A through E. Give these respondents a blank Section F and have them record their answers while you read the questions. You may also need to read the questions if the respondent seems hesitant or would have trouble completing Section F in a timely manner.

Before leaving the operation, briefly review the form for completeness and clarity. For example, if the respondent is a hired manager, he need not answer questions F12-F26. If the respondent is NOT a hired a manager, make sure all items are completed. Make sure that Value Codes (not dollar values) were used where permissible and not anywhere else. Understand what values are typical for items such as household expenditures. If the data are out of range, the respondent may have misinterpreted the reference period (it is a year's expenses, not a month's). When data seem out of range, revisit the question with the respondent by saying, "Sometimes people report their monthly expenses here. Have I got your monthly or annual expenses here or not?"

Section F is not optional. These questions have been removed from the main questionnaire because pretests indicated that respondents could complete the questionnaire faster than it could be read aloud to them. Respondents also preferred to answer the questions privately rather than out loud. If self-administration leads to fewer reports, poorer quality data, then Section F will return to the main questionnaire next year. Do everything you can to put the respondent at ease, facilitate his completing the supplement, and make this effort a success.

Do Version 2, 3 and 4 respondents have to complete the Section F supplement? No, they don't. The only Section F questions the Versions 2, 3, and 4 respondents have to complete are printed in the main questionnaire for those versions. There are so few Section F items for these respondents that they will be interviewer-administered. Where there is a list of responses to choose from on these versions, maximize use of the Respondent Booklets. Read all response categories and let the respondent choose the most appropriate response(s). If the respondent interrupts before you've read every response option, apologize saying you have to make sure every respondent hears the same choices and reread them. This is particularly important on Item 9, the legal arrangement under which the farm/ranch operates.

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

Information on the economic well-being of farm households is needed to evaluate the effect of government farm policies and proposed policies. The questions in this section of the questionnaire provide data that can be used 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 FCRS (now CRR) 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 FCRS 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.

The Federal Government is now phasing out direct payments to farm operators. However, it is more important than ever to monitor farm households to study how they adjust to changes in farm programs. Though direct payments are being phased out, other government programs will continue.

Information is also 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.

**Comparing the Incomes of Farm Operator Households with the Incomes of All U.S. and Non-Farm Households.** 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; some analysts still do this. USDA believes that 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. Plus, 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.

To estimate the income of the farm business correctly, data from Section C is used to ensure that contractor's income is not included and data from Section A is used to exclude any income that belongs to share rent landlords. However, it is still necessary to determine what share of the farm's net income is earned **by farm operators**.

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. Getting 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.

**Farm and Ranch Management Strategies** are collected on Version 1.

We will use responses to these questions to determine the types of strategies that have been used by farmers in the management of their businesses. Farmers face a variety of production, financial, and

marketing risks. Questions in this section are designed to find out what steps farmers are taking to help manage those risks.

Where did they obtain the necessary information to use the risk management strategy? How are different risk management strategies related to the financial success of farms?

Responses to these risk management questions will be shared with USDA's Extension Service for use in designing programs aimed at providing farmers information to help **Manage Change in Agriculture**. In addition, findings about farmers' uses of risk management strategies will be reported to Congress in the Report on the Status of Family Farms, 1996.

How farmers view the success of their farm or ranch may influence the production, marketing, or financing actions taken as well as the strategies used in the business. Rather than assume that all farmers want the same outcome from their business actions, farmers are given an opportunity to identify which criteria are most important to them.

**Item 1                      Major occupation in 1996**

We consider major occupation to be the occupation or work at which an individual spent more than 50% or more work time in 1996. 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 2                      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 age as of his/her last birthday.**

**Item 3                      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 a 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.

**Item 4**                    **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.

Each respondent should 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 5**                    **Race or Origin**  
*VI*

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. The categories should be self-explanatory.

**Item 6**                    **Gender of operator**

The respondent should find this question self-explanatory. On Versions 2-4 the enumerator should record the answer without asking the question.

**Item 7**                    **Number of people in household**  
*VI*

This question provides information about the number of people who depend on farm income and who are affected by the farm's current financial situation. Respondents should include the operator and everyone who **lives in the house with the operator** (including infants, the operator's parents, and partners). Also included are those who are dependent upon this household for support whether they are living in the household or not. An example would be students who are away at school. These students should be counted if they are dependent upon the farm household for support.





**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's created under the laws of individual states. For these operations, the operator is almost always considered a hired manager.

**Cooperative**

This is a voluntarily organized association controlled by its members or patrons.

**Item 9a**      **Number of stockholders**  
*V2, V3, V4*

**Item 10**      **Number of stockholders**  
*VI*

This item applies only if this operation is a family or non-family corporation (Item 9 is code 3 or 4). A code 1 should be entered if this family or non-family corporation has more than 10 stockholders.

**Item 11**      **Screening out hired managers**  
*VI*

If the operator is a hired manager, this item should be coded a '1' and Items 12 - 26 are skipped. If the operator is NOT a hired manager, this item must be coded a '2' and Items 11 - 26 must be completed.

**Item 12**                    **Off-farm work by operator**  
*VI*

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, the respondent should enter 1 for Item 12 and continue to Items 13 and 14.

If the operator did **not** have a job, Items 13 and 14 should be skipped and the respondent should proceed with Item 15.

**Item 13**                    **Weeks worked by operator**  
*VI*

If the respondent responded 'yes' to Item 12, the number of weeks that the operator worked off the farm should be recorded in Item 13.

**Item 14**                    **Average hours per week worked by operator**  
*VI*

For the weeks that the operator worked, the respondent should record the average hours that the operator worked per week. If the operator had more than one job, the respondent should 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 15**                    **Off-farm work by spouse**  
*VI*

The respondent should report whether the operator's spouse worked off-farm. Again, both self-employment and work for others should be included. If the operator's spouse had a non-farm job, the respondent should enter 1 for Item 15 and continue to Items 16 and 17. If operator was not married, respondent should use the code for does not apply and proceed to Item 18.

**Item 16**                    **Weeks worked by spouse**  
*VI*

If the respondent responded yes to item 15, the number of weeks that the spouse worked should also be answered.

**Item 17**                    **Average hours per week worked by spouse**  
*VI*

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

**Item 18**                    **Off-farm/ranch income**  
*VI*

The amount of off-farm/ranch income available to farm households is sizeable. To understand the economic situation of agriculture, it's important to know how much outside income is available to farm/ranch households.

For the seven categories of off-farm income, the respondent should record the CODE (from Table A: Value Codes) that represents off-farm income for the operator and all members of the operator's household (as defined in Item 7) in 1996.

**Include:**

- (1) the operator identified in screening. If the operation is a partnership, and the responding partner can't 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. Normally, you enter a dash to indicate that you asked the question was asked and the answer was zero. Most of the time that works fine, but for these items we need to be able to tell the difference between zero and missing data in the computerized data file. The programs we use for this data store valid zeros and missing data the same way, so we can't tell the difference unless the respondent enters code 1.

**Item 18a      Off-farm wages and salaries**  
*VI*

Include the GROSS cash wages, salaries, tips, paid bonuses, leave pay, etc. received by the operator and all household members in 1996 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 18b      Another farm/ranch**  
*VI*

Include 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 18d.

**Item 18c      Off-farm business**  
*VI*

**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 18d      Rental of farm land**

*VI*

**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 4 and 5. 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.

**Item 18e      Interest and dividends**

*VI*

**Include:**

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

**Item 18f      Social Security, public assistance, etc.**

*VI*

**Include:**

- (1) Disability insurance

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

**Item 18g      Other off-farm income**  
***VI***

**Include:**

- (1) all other NET non-farm income (not included in Items 18a-18f) 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.

NOTE: Net income from renting FARM property should be reported in Item 18d.

**Item 19              Other households**  
***VI***

With these data we can analyze the way asset ownership, debt and farm income are 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. Some operators may share in the net income of the operation, but don't provide (or share in) any assets. The sharing arrangement does not have to be a formal (legal) agreement. If YES, a code 1 should be entered and items F20 through F22a should be completed. If NO, a code 2 should be entered then the respondent should continue with item F23.

**Item 20              Number of households sharing assets**  
***VI***

Record the number of households besides the operator's that owned assets of the operation in 1996. Include partners and family members who contributed assets to the farm/ranch operation. Exclude assets belonging to landlords. Exclude assets belonging to hired workers (except those who are members of the operator's or partners' households). Don't include assets which the operation rented or leased.

**Item 20a      Percent of total assets owned by operator's household**  
*VI*

Record the percent of the total assets (reported in Section E) of the operation which were owned by the operator or members of the operator's household.

**Item 21              Number of households holding debt**  
*VI*

Record the number of households beside the operator's that held any of the debt of the operation in 1996. Include partners and family members who held debts of the farm/ranch operation. Exclude debt held by landlords.

**Item 21a      Percent of total debt held by operator's household**  
*VI*

Record the percent of the operation's total debt (reported in Section E) that was held by the operator or members of the operator's household.

**Item 22              Number of other households sharing net income**  
*VI*

Record the number of households besides the operator's that shared in the net income of the farm operation in 1996. Don't include money paid to landlords, contractors or people who worked on the operation for wages.

**Item 22a      Percent of net income**  
*VI*

Record the percent of the operation's net income that was received by the operator and the operator's household. Don't include net income received by partners or shareholders of the operation UNLESS THEY LIVED IN THE SAME HOUSE AS THE OPERATOR.

**Item 23**                    **Value of all non-farm assets**  
*VI*

This question applies to the operator's household only, not to the operator's farm business. Don't include assets of the operation reported earlier in the questionnaire. Assets of the operation were recorded in Section E (Farm/Ranch Assets and Debt). Include the value of the operator's house here if it is owned separately from the operation.

Record the CODE (from Table A: Value Codes) which includes the value of all other assets owned by the operator and members of the operator's household SEPARATELY from the operation on December 31, 1996. 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 24**                    **Non-farm debt**  
*VI*

This question also refers only to the operator's household SEPARATELY from the farm operation. Record the CODE (from Table A: Value Codes) which best represents the total amount of outstanding debt on December 31, 1996, related to the assets included in Item 23. Include credit card debt. Include the debt associated with the operator's house unless it was collected in Section E. 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 25**                    **Detailed household living expenses**

*VI*

Record the CODE (from Table A: Value Codes) which includes the total amount spent by the operator's household during 1996 for each of the listed groups of items. Be sure living expenses for all the members of the operator's household (as defined in Item 7) are collected. The purpose of these questions is to let us look at the ability of farm families to cover their living expenses.

The cost of home repairs not included in Section B as a farm expense should be included in the amount spent for housing and utilities recorded in Item 25b. Include Social Security self-employment tax in the amount spent on medical expenses, insurance, and contributions to retirement plans recorded in Item 25d.

Alimony and child support payments should be included with all other living expenses recorded in Item 25e.

**Item 26**                    **Operator apply for a new loan?**

*VI*

Respondent should code yes = 1 and no = 2 for the question, does the respondent plan to apply for a new farm loan in 1997, or add to the balance of an existing loan. Do not include drawing upon existing, standing lines of credit. Include any loan secured by assets of the farm.

**Items 27-33**                **Attitudes and financial performance**

*VI*

This group of questions records the respondent's attitudes concerning various statements about farm finances and decision-making. For each question a list of responses are provided. These are the only responses that are possible for these questions. If the respondent seems stuck between two responses, indicate that the respondent should use the code that seems closer to his/her feelings.

**Item 27**                    **Factors affecting farm viability**  
*VI*

This list contains factors that affect the financial viability of the farm business. The respondent should code his or her concern that the list factor would affect the continued operation of the farm. If the respondent feels that the factor would not have much bearing on whether or not the farm continued operating, then the appropriate code would be 4--not concerned at all. If the respondent feels that the factor would determine whether or not the farm continued operating then the appropriate code would be 1--very concerned.

**Item 28**                    **Improving financial performance**  
*VI*

This question asks the farmer what he or she would do if the farm business was faced with financial difficulties. For each item, respondents should use a code that describe whether or not they would do what is described in the item if they were faced with farm financial problems. If the farmer is already doing what is described in the item and asks how to answer, the enumerator may cue them by telling them to code whether they would continue with the practice.

**Item 29**                    **Opinions about lending**  
*VI*

This question has a list of statements about lending and lenders in the farmer's area. If the respondent strongly agrees with the statement, the code entered should be 1. If the respondent strongly disagrees then the code should be 4.

**Item 30**                    **Risk measurement**  
*VI*

This question measures the amount of risk that the operator is willing to take in making decisions for the farm or ranch.

Risk is making a decision with the possibility of a pay-off, but also with the possibility of a loss. Risks to farm/ranch businesses can arise from a variety of sources. Changes in crop, livestock and input prices

are major risks. Government regulations and commodity programs and the general economic, tax, or trade policies can contribute to risk. And the uncertainty of weather always contributes to the risks that farmers/ranchers face. Farmers/ranchers face more than the general business risks that are associated with prices, production and marketing. In addition, they face a variety of financial risks that result from the fixed expenses connected with the use of debt and cash leasing.

For this question, the farmer should determine the amount of risk that he/she is comfortable with. If the respondent does everything he/she can to keep from making risky decisions, then the appropriate code would be 0. If the respondent understands that risk is a part of every day life, but makes decisions without trying to reduce risk, or increase it the risk, the that people is risk neutral and should code 5. If the respondent takes risks because he/she considers that the enjoyment of the risk outweighs any possibility of a loss, then the respondent should use code 10.

**Item 31**                    **Precision farming techniques**  
*VI*

If the respondent used precision farming techniques then the code yes= 1 should be used. Precision farming allows detailed analysis of a field and includes making soil-grid maps and using those maps to analyze nutrient, moisture, and conditioner requirements, using variable rate technology (VRT) to apply fertilizers, chemicals and micro nutrients, or using yield monitors attached to combines to measure yield for various locations throughout the field. Global positioning technology may be used with any of these techniques. If the respondent did not use precision farming techniques, then the code no = 2 should be used.

**Items 32, 33**            **Management strategies and government policy**  
*VI*

These items deal with the marketing, production, and financial strategies used by the operator in the farm/ranch business.

Marketing strategies help reduce uncertainty that results from getting the product to a buyer at a good price. Changes in commodity prices can virtually wipe out a farm operator's profit margin.

Production strategies such as diversification, maintaining flexibility, and producing a stable, dependable income are sound farm management practices.

Financial strategies reduce financial uncertainty through careful management of credit, cash flow, insurance, and of assets used in the production process.

The respondents should consider each item and code their change in use of that practice in 1996 in the first column. In the second column, question 33, respondents should use code yes=1 if they changed their use of that practice as result of the changes in farm legislation in 1996.

**Item 32a      Forward contracting of commodities**  
*VI*

Forward contracting can protect against price changes. Under forward contracting, the price of a product is established before it is ready for the market. The product is actually delivered at the price previously agreed upon. Forward contracting assures farm operators of a place to sell and a established price for the product.

**Item 32b      Spreading sales over the year**  
*VI*

For commodities that can either be stored or harvested several times, sales can be spread across the calendar year to take advantage of changing prices. This item has to do with the operator making his own decision about **when** to **market** commodities, by spreading the sales over the year.

Respondents should not include marketing products with continuous production, such as milk, eggs, etc., as use of a strategy to spread sales over the year. The operator is not considered to have a "choice" when it comes to marketing these commodities. In this case, the operator's

decision was about which commodities to produce, not **when** to market.

Respondents should not include commodities sold as part of a pool (rice, cotton, sugar, etc.). The operator is not the one making the marketing decisions in this case. They are being made on behalf of the operator by the pooling firm or the manager of the pool. The operator is considered to have “hired” someone else to handle the marketing function.

**Item 32c      Diversification**  
*VI*

Farmers can spread their risk by producing commodities that pose different risks. All products grown or raised have yield and price uncertainty. But most markets do not experience problems at the same time. With diversification, output and price of the various commodities are different enough that some stability in income can be maintained.

**Item 32d      Forward contracting for inputs**  
*VI*

Forward contracting for inputs means to contract or agree on prices of inputs to be delivered in the future. This is similar to Item 32a, but this is a promise to **buy** a certain quantity of an **input** at a certain price. For example, a fertilizer dealer may give the farm operator a discount if the operator places an order before fertilizer is needed.

**Item 32e      Keep unused borrowing capacity/line of credit**  
*VI*

Having the flexibility of being able to borrow when money is needed may be one of the most important financial strategies used by farm operators. The cost (the interest rate) of unused credit is zero until it is used. Normally a line of credit is at a bank or other financial institution and used to buy inputs for the farm. Although credit cards can be used as a line of credit, the high interest rates charged make this type of credit for very short-term use only. Respondents should

include the use of credit cards only if the operator **normally** uses them like a line of credit in business activities.

**Item 32f      Maintain cash and assets easily converted to cash**  
*VI*

Most people carry some cash reserves or savings for a “rainy-day fund.” Similarly, farm operators may carry cash reserves or maintain assets, such as commodities on hand, that can be easily sold or converted to cash. This gives them readily available funds to handle emergencies or to take advantage of good opportunities for the business without having to borrow money.

**Item 32g      Custom work**  
*VI*

Sometimes an operator will hire workers and machinery together to do a job like harvesting rather than buying or leasing the machinery and hiring workers to operate it. This practice allows the operator to reduce fixed costs because no regular payment is required for loan payments, lease payments, or for labor.

**Item 32h      Hedging or using futures**  
*VI*

When properly executed, hedging in the formal futures market can protect against price changes. Hedging allows buyers and sellers to establish now the price of products they intend to buy or sell later. Corn, soybeans, broilers, cattle, eggs, hogs, orange juice, cotton, and potatoes are some of the products traded on the futures market. Usually the farmer will not deliver the product, but will complete the transaction financially.

**Item 33                    Changes in farm program**  
*VI*

This item prompts respondents to report whether they changed his use of items listed in Item 32 because of changes in the farm program. ‘*Does not apply*’ is listed as a response option that can be used when

their use of any part of Item 32 was about the same (code 3) or 'never used, not considering' (code 5).

**Item 34-43**      **Total acres precision farmed on the operation**  
V2

This begins the last series of questions in Section F, and all relate to precision farming practices. These items only appear on the Corn CRR questionnaire (Version 2).

Operators who use precision farm typically hire this work to be custom done, though you will find some farmers who have their own yield monitors, etc. 'Precision farming' includes a variety of practices which farmers may only partly engage in. You may hear precision farming referred to with terms such as: variable rate technology, global positioning systems, geographic information systems, prescription-farming, precision-farming, site-specific-farming, and farming-by-the-inch. However, all precision farming makes some use of global positioning system (GPS) data points with a satellite and a satellite receiver on a tractor. These satellite data points may allow a farmer to know soil fertility at specific points in the field, where to apply varying amounts of production inputs based on these data points, and the exact crop yield at a specific GPS point and how it varies across the field. Thus, precision farming may include:

- having soil samples taken in detailed grids using satellites,
- having detailed soil data plotted on a soil map (usually with a computer),
- having production inputs applied using variable rate technology (VRT) with the aid of the detailed soil map data, or
- using a yield monitor to collect precise yield data across a field then possibly to create a detailed yield map.

Items in this series ask about particular precision farming practices the farmer has engaged in, so be sure to read these questions as worded. Otherwise, the farmer may think you are asking about a different precision farming practice.

**Item 34**      **Total acres precision farmed**  
V2





**V2**

Report any 1996 corn acres planted on acres that have been soil grid-sampled and grid-mapped, regardless of the year in which the sampling and mapping were done. Include any corn acres on which only grid-sampling was done, regardless of whether maps have been prepared. These data can always be used at some later date to prepare maps, but grid maps can never be prepared without grid points.

**Item 35b      Corn acres fertilized using Variable Rate Technology (VRT)**  
**V2**

The purpose of having acres soil grid-sampled is to collect data points showing where soil fertility varies across a field. Once collected, these data are used by trucks equipped with satellite receivers to apply fertilizer, lime and other inputs at rates varying according to soil data point recommendations.

In Item 35b record any corn acres on which fertilizer was applied using variable rate technologies, regardless of whether the farmer's own equipment was used or the work was custom done.

**Item 35c      Corn acres limed using Variable Rate Technology (VRT)**  
**V2**

In Item 35c record any corn acres on which lime was applied using variable rate technologies, regardless of whether the farmer's own equipment was used or the work was custom done.

If items 35a, b and c are all zero, skip to item 41.

**Item 36                      Frequency of having acres soil grid-sampled**  
**V2**

Traditionally soil samples have been taken every two years. With precision farming technologies, the frequency of having samples taken on a field is changing. If the operator says he/she is having grid samples taken every year, this is not the answer we're looking for. Most farmers are sampling and mapping their farm's acres a field at a

time and that is probably just what he told you. We want to know the frequency at which the **same** field is now being sampled. In particular, in Item 36 record how often precision soil samples are taken on the corn acres planted in 1996. If the frequency is not listed, for example 'every 6 years', note the number in '*Specify every 6 years*' and enter code '5' in item code 730.

**Item 37**                      **Size of soil sample grid**  
V2

The cost of having acres precision soil-sampled is determined by the number of samples taken per acre. Smaller grids provide more detail but cost more. Therefore, custom operators often sell precision farming services to suit the farmer's demand for detail while meeting their cost constraints. If the average grid size is not listed, for example, 3.3 acres per grid, note the number "3.3 acres per grid" where space is provided in the list of response options. Then enter a code=3 in cell 732.

**Item 38**                      **Cost of precision soil sampling and mapping**  
V2

In order to compete with other custom operators, the cost of precision farming services may be packaged differently. Some custom operators may bundle services, others may itemize and this will affect how the farmer is able to report these costs. Therefore, we first attempt to obtain itemized costs per acre, but if it is not possible to report them, we allow cost to be reported as a 'package deal'.

Where a respondent may need to calculate a cost per acre amount from a total bill, make sure he is only reporting for his 1996 corn acres.

**Item 38a**                      **Average cost per acre for precision farming consulting advice**  
V2

In using their own precision farming equipment, farmers may still pay additional amounts to the manufacturer for advice from consultants. Other farmers may hire the work custom done and pay an extra amount for this service. Still others will get 'free advice' from

manufacturers or custom operators, and this is just part of the overhead hidden in the total bill to the farmer.

Only record an amount in Item 38a if the service is itemized in the bill the equipment manufacturer or custom operator provides to the respondent. If this is an add-on service, but the amount is not known, record a "DK" next to the data cell. Do not write "DK" if the consulting service or advice is not itemized in bills from the manufacturer or custom operator. In this case consulting services are just part of overhead and embedded in other costs to the farmer.

**Item 38b      Cost per acre of soil grid-sampling**

Though precision soil samples may be taken on 2.5 and 3.3 acre grids, etc., the billing is often done on a per acre basis. Make sure YOU know what acreage basis the respondent is reporting to you. Allow the respondent to report cost either way, but make careful notes so that the information can be recalculated to a per acre basis for summary purposes.

**Item 38c      Average cost per acre of soil-mapping**

This service is often billed separately because it is not necessary to have maps to use GPS data. So, some farmers will forego having maps made to minimize cost. Farmers sometimes use precision soil maps together with yield maps to better manage crop production.

Again, make sure YOU know what acreage basis the respondent is reporting to you. Allow the respondent to report cost either way, but make careful notes so that the information can be recalculated to a per acre basis for summary purposes.

**Item 38d      Average cost per acre for both precision soil sampling and mapping**  
**V2**

Whether a farmer is able to itemize cost depends on the availability of billing records, his willingness to use them, and how the bills are itemized. Though we prefer itemized accounting of these costs in items 38b and 38c, this item allows the respondent some flexibility in





**Item 40c**      **Average cost per acre of inputs and custom application services using uniform rate equipment**  
V2

Again, whether a farmer is able to itemize cost depends on the availability of billing records, his willingness to use them, and how the bills are itemized. Though we prefer itemized accounting of these costs in items 40a and 40b, this item is provided to allow the respondent some flexibility in reporting these data. Include only the cost of the inputs and custom application services on 1996 corn acres using traditional uniform rate technologies.

**Item 41**              **Use of yield monitors**  
V2

Yield monitors also use global positioning systems. A combine may be fitted with a monitor and a satellite receiver, or a new combine may be purchased with the equipment already installed. Still other farmers may hire a custom operator to harvest their fields with a combine outfitted with a yield monitor. In any case, record all responses relative to the acres of corn on which a yield monitor was used in 1996.

Record the total acres of corn which were harvested with a combine equipped with a yield monitor in 1996, regardless of who owned the combine. If none, go to Item 42.

**Item 41a**            **Yield mapping corn harvest**  
V2

Yield monitor data are usually fed into a computer to create contour maps of where yield varies across a field. If the respondent will use yield monitor data to have yield maps made, enter a '1' in the data cell and continue. If he will not, skip to Item 42.

**Item 41b**      **Average cost per acre to prepare corn yield maps**  
V2

Again, farmers may be able to report the cost of having the maps prepared separately from the cost for advice from consultants. If this cost of maps can be itemized, report the amount here. If it cannot, report the amount in item 41d.

**Item 41c**      **Average cost per acre for advice from consultants in interpreting corn yield maps**  
V2

Farmers may pay an additional amount to the manufacturer or custom operator for advice from consultants. If this cost of this advice can be itemized, report the amount here. If it cannot, report the amount in item 41d.

**Item 41d**      **Average cost per acre for maps and advice from consultants**  
V2

Again, whether a farmer is able to itemize cost depends on the availability of billing records, his willingness to use them, and how the bills were itemized. Though we prefer itemized accounting of these costs in items 41b and 41c, this item is provided to allow the respondent some flexibility in reporting these data.

Include only the cost of the yield maps and advice from consultants in interpreting the maps on 1996 corn acres.

**Item 42**                      **Attitudes about the impact of precision farming on corn production**  
V2

In some counties, precision farming has been practiced for nearly 10 years. In other counties, it's just getting started. With any new technology, farmers have to make a decision about whether the new technology will enhance their ability to manage the productivity of the farm.





## Back Cover - Conclusion

### Item 1                    **Social Security, Employer ID and State Employer ID**

The operator's Social Security Number (SSN), Federal employer ID number and state (California only) employer ID number are used to check for duplication within the list frame. If these numbers are printed on the label, just verify them. Don't enter them again if they were correct on the label. Be sure the Social Security number you record (or verify if we already have it) belongs to the target name and not to someone else associated with the operation. Don't collect the SSN of the person you're interviewing unless it is the target name.

### Item 2                    **Survey Publication**

After completing the interview, ask the respondent if he would like to receive a copy of the survey results. Releases from the 1996 CRR will be published in July of 1997. 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. Enter code 1 if the respondent was the operator, manager, or partner. Enter code 2 for the operator's spouse. Enter code 3 if the respondent was an accountant or bookkeeper. Enter code 4 if the respondent was someone other than these people. If the respondent was an accountant, bookkeeper or someone other than the codes listed, record the respondent's name and phone number.

## Records Use

### Item 3                    **Frequency of using records during interview**

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 respondents records were used in the interview.

**Item 4**                      **Type of records used in interview**

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's not farm specific.

A formal farm record workbook or account book is created specifically for farm/ranch accounting. It's organized into categories to handle common farm/ranch accounts (seed expense, fuel expense, livestock purchases, etc.)

**Item 5**                      **Completion code for Section F Supplement**

*VI*

For this item, choose the response code that describes how the Section F supplement was completed for the Version 1 respondents. If there are other issues regarding Section F that you want to share with the State Office, make notes where space permits.

## Ending Time

Record the ending 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.

Be sure to include the time spent by the respondent completing the Section F supplement!

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. Use military time.

## 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, 1997, enter 3  
06 97 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.



## **IRRIGATION SUPPLEMENT**

*V2 - KS, NE, & TX only*

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

Information on irrigated agriculture is critical for USDA's Economic Research Service to assess the impact on agriculture, at the farm and regional level, of problems/conflicts associated with water quality, water policy, wildlife, and other environmental issues facing American agriculture. Irrigation data is required across crops for a farm so that economic analysis can correctly estimate all economic costs and benefits to agriculture associated with proposed policy changes that may affect American agriculture.

### **Item 1                    Irrigation during 1996?**

Enter code yes = 1 for operations that irrigated any cropland, alfalfa, other hay or pastureland in 1996.

Include any land that was privately owned or rented and land rented from a public agency which received irrigation as part of the farming operation for this farm in 1996. Exclude irrigation of home gardens.

If no cropland, alfalfa, other hay or pastureland was irrigated in 1996, go to Conclusion, back page.

### **Item 2                    Irrigation table**

This item records specific crops irrigated on the operation during 1996.

#### **Enumerator Instruction**

Refer back to Section A, page 3. For each crop harvested during 1996 (in item 11), determine if it was irrigated. Then, for each crop irrigated, go across the table and complete columns 2 - 8. Ask all the Column 2 - 8 questions about one crop before going on to the next crop.

**Item 2, column 1 Crop**

Alfalfa, other hay and pastureland are pre-listed on their own lines at the bottom of the table because they are often forgotten. Nursery and greenhouse crops may be lumped on one line. All other crops should be reported individually. If more than five other crops were irrigated, identify the four with the most acres irrigated, then lump the rest on the last line.

**Item 2, column 2 Harvest acres irrigated**

Report the irrigated, harvested acreage **to the nearest whole acre** for all irrigated crops, except for tobacco. Irrigated, harvested tobacco acreage should be reported to the nearest tenth of an acre. Acreage irrigated of corn and sorghum/milo harvested for silage should always be recorded on a separate line from irrigated acres harvested for grain. Irrigated wheat acreage harvested for grain should be recorded as all wheat, regardless of type (durum, spring or winter). Irrigated acres of small grains harvested for hay should be recorded under Other Hay.

Include (for each irrigated crop):

- (1) Irrigated acres harvested in 1996.
- (2) Irrigated acres intended for harvest in 1996 even if harvest was delayed until 1997 due to bad weather, etc.

Exclude (for each irrigated crop):

- (1) Double-counting acres from second and later harvests of any crop from a single planting, for example, multiple harvests of hay, a second or third picking of cotton, ratoon crops of rice.
- (2) Irrigated acres of 1995 crops not harvested until 1996 due to weather conditions, etc.

Make sure the respondent is not reporting planted acres by crop when you are asking only for harvested acres.

**Item 2, columns 3 and 4 Yield and Unit Code**

In column 3, record the average yield per acre for each commodity. This is the average yield on the irrigated acres actually harvested. Record the unit reported in column 4. For example, if the respondent reported an average yield per acre of 70 bushels of wheat, you would record 70 in column 3 and in column 4 you would record "4" for bushels.

If a crop is harvested more than once during the year (for example, hay or alfalfa), then sum the average yield per acre for each harvesting.

If the operator reports yield in a unit that is not listed, be sure to record complete information about that unit, including its weight. This allows the State Office to convert the yield into a more common unit and to also evaluate if the unit reported is commonly used for the reported commodity.

**Item 2, column 5 Primary irrigation system type**

Record the primary irrigation system type for each commodity. Be sure to have the respondent refer to the Irrigation System Code List in the Respondent Booklet.

**Item 2, column 6 Average acre-inches of water applied per acre**

Record the average acre-inches of water applied per acre for the growing season for each commodity. Acreage applied water per acre can vary significantly across commodities, ranging from a value of 1 to as high as 70 or more acre-inches per acre. One acre-inch of water is equivalent to the quantity of water required to cover an acre of level-land, one-inch in depth. This is approximately 27,152 gallons. If the respondent reports applied water in terms of acre-feet per acre, divide by 12 to obtain acre-inches per acre.

**Item 2, column 7 Percent of acres irrigated using surface water**

For each commodity, record the percent of acres irrigated using surface water (not well water). This is the percent of irrigated, harvested acres (column 2).

**Item 2, column 8 Percent of acres irrigated using surface water purchased from off-farm water suppliers**

For each commodity, record the percent of acres irrigated using surface water purchased from off-farm water suppliers. This is the percent of irrigated, harvested acres (column 2), not the percent of acres irrigated using surface water (column 7). For each commodity, percents for column 8 will be equal to, or less than, 100 percent, **and** equal to, or less than, percents for column 7.

Off-farm water suppliers may include water purchased from the U.S. Bureau of Reclamation; an irrigation district; mutual, private, cooperative or neighborhood ditches; commercial or municipal water systems.

**Item 3                    Number of irrigation wells used**

Record the number of irrigation wells used on the farm in 1996. Include all types and models actually used for irrigation. **EXCLUDE** wells used for purposes other than irrigation and wells used only for non-farm uses. If no irrigation wells were used, go to item 6.

**Item 4                    Number of wells used with backflow prevention devices**

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

When chemicals are applied to the field through irrigation water, potential water-source contamination problems may occur due to accidental backflow of water containing chemicals, the accidental injection of chemicals, or both, into the water source. Backflow prevention devices involve the use of check valves and vacuum relief valves on the irrigation pump system that prevent water containing



chemicals from siphoning into the water source when the irrigation pump stops. Backflow prevention may also involve interlocking the chemical injection system and the irrigation pump so that the injection of chemicals stops when the irrigation pump stops in order to prevent accidental injections.

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

**Item 4a      Acres irrigated from wells with backflow prevention devices**

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

**Item 5                      Number of wells used with water meter or water-flow measurement device**

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

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

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

**Item 5a                      Acres irrigated from wells with water meter or water measurement devices**

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

**Item 6                      Additional management use of irrigation system**

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

**Item 7                      Management practices table**

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

**Item 7, column 2   Management practices code**

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

**Item 7, column 3   Acres irrigated**

For respondents who are currently using the technique and will continue to use (column 2 = code 6), record the number of harvested acres irrigated using the technique in 1996 in column 3.

**Item 8                      Irrigation information sources**

Determine the three main sources of information used by the respondent in 1996 for deciding when to irrigate and how much water to use for irrigation. Be sure to have the respondent refer to the Irrigation Information Sources Code List in the Respondent Booklet. Check up to 3 codes in the boxes to the left and then enter the codes in the source boxes to the right.

**Item 9                      Improvements to existing irrigation systems**

Enter code yes = 1 for operations that made improvements in 1996 to existing irrigation systems. Include upgrades or new equipment, but do not include maintenance. Irrigation system upgrades may involve

improvements such as switching a center-pivot system from using high-pressure sprinklers to using drop-tubes with attached low-pressure sprinklers. A new irrigation system may involve an investment such as switching from a gravity-flow, gated-pipe system to a low-pressure, sprinkler irrigation system.

If no improvements were made in 1996, go to item 12.

**Item 9a      Acres irrigated using improvements**

Record the number of harvested acres irrigated in 1996 using the improvements identified in item 9.

**Item 10              Irrigation improvement reasons**

Determine the three main reasons for making the improvements identified in item 9. Be sure to have the respondent refer to the Irrigation Reasons Code List in the Respondent Booklet. Check up to 3 codes in the boxes to the left first and then ask item 10a to rank them.

**Item 10a      Irrigation improvement reasons ranking**

Determine the ranking of the three irrigation reasons identified in item 10. Have the respondent rank them from 1 to 3 in order of importance. Enter code 1 for the most important reason, 2 for the second most important reason and 3 for the third most important reason.

**Item 11              Receipt of grants, loans, cost-sharing or other financial assistance**

Enter code yes = 1 for operations that received grants, loans, cost-sharing or other financial assistance from federal or state agencies to make the improvements identified in item 9. If no financial assistance from federal or state agencies was received in 1996, go to item 12.

**Item 11a      Dollar value of assistance received**

Record the dollar value of the assistance received from each of the agencies/sources listed in items 11a(1)-(4).

**Item 12                    Irrigation system improvement barriers**

Determine the three main barriers that exist to implementing irrigation system improvements that would conserve water on the farm. Be sure to have the respondent refer to the Irrigation System Improvement Barriers Code List in the Respondent Booklet. Enter up to 3 codes in the barrier boxes to the right. These are not being ranked.

**Item 13                    Offer to purchase water or water rights**

Check yes (and continue to item 13a) for operations where someone made an offer to purchase water or water rights in the past five years (since January 1992). If no offers were received in the past five years, or the respondent does not know if offers were received, go to item 14.

**Item 13a      Purchaser's intended use**

Determine whether the purchaser's intended use for the water was agricultural or non-agricultural. Enter code 1 for agricultural, 2 for non-agricultural or 3 if the respondent does not know the purchaser's intended use.

**Item 14                    Number of years water rights claims caused reduction or discontinuation of crop irrigation**

Enter the number of years (in the last 10, since January 1987) in which someone with senior water right claims caused the respondent to reduce or discontinue crop irrigation for the farm. Acceptable responses are 0 through 10.

**Enumerator Instruction**

Refer back to Section B, page 7. Copy cell number 178 from item 10a and cell number 192 from item 11a into the dashed cells on the left margin. If the respondent provided percent in cell number 177 instead of dollars, multiply the percent times cell number 176 and enter this in cell number 178.

**Item 15                      Fuel expense for water pumped from wells**

In Item 15, record either the actual dollar amount or the percent of the total fuel cost for irrigation reported earlier (cell number 178) that was for water pumped from wells.

Include only the portion of the total irrigation **fuel** expense associated with operating the pump system(s) that both pump and apply the water pumped from wells on the farm. Exclude the portion of the total irrigation fuel expense associated with applying any water acquired from onfarm surface-water sources or from off-farm water suppliers.

If a respondent indicates a “percent”, the percent value may range from zero to 100 percent. If the respondent identifies the “dollar” value, this value may range from zero to the dollar value in the dashed cell on the left margin to the left of Item 15.

**Item 16                      Electricity expense for water pumped from wells**

In Item 16, record either the actual dollar amount or the percent of the total electricity cost for irrigation reported earlier (cell number 182) that was for water pumped from wells.

Include only the portion of the total irrigation **electricity** expense associated with operating the pump system(s) that both pump and apply the water pumped from wells on the farm. Exclude the portion of the total irrigation electricity expense associated with applying any water acquired from onfarm surface-water sources or from off-farm water suppliers.

If a respondent indicates a “percent”, the percent value may range from zero to 100 percent. If the respondent identifies the “dollar” value, this value may range from zero to the dollar value in the dashed cell on the left margin to the left of Item 16.

**Item 17**                      **Landlord’s contribution**

Determine the percent the landlord(s) contributed to the farm’s total cost in 1996 for items 17a-c. Although similar items were covered in the main questionnaire, these items still need to be asked to ensure these specific breakouts are determined.