

VERS ION

STRATUM

# AGRICULTURAL RESOURCE RT

Form Approved O.M.B. Number 0535-0218 Approval Expires 9/30/99 Project Code 904

**TABLE** 

LINE

SUBTRACT

T-TYPE

**TRACT** 

STATISTICS	WANAGEWENI STUDY
SERVICE	CORN PRODUCTION
U.S. Department of Agriculture Rm 5809, South Building	PRACTICES and COSTS REPO
Washington, D.C. 20250 202-720-7017	101 1990

**ID/SEGMENT** 

	02						0	000	00
		CONT	ACT RECORD			R CODES 3 - COMPLETE			
	DATE	TIME	NOTE	S		4 - SCREENO 5 - NO TARGE COMMO	TT 00	001	
						8 - REFUSAL 9 - INAC./INCC			
						OPTIONAL	00	002	
						OPTIONAL	00	003	
						•	<u>'</u>		
We aspossible Code:	re collecting in the collecting in the collecting in the collection in the collectio	nformation on p for collection of ation will be used urvey is confide	e operator. Rephrase in practices and costs to proinformation on the Corn Fid for economic analysis arential and voluntary.	oduce corn a Production F nd to compil	-	help to make th osts Report is Tit stimates for your	e informati le 7, Sectio region and	ion as accu on 2204 of th I the United	rate as ne U.S. States.
				[N ar [ <b>ENUI</b> ] If box Scree	lame, address nd updated if no MERATOR NO is code 1, con ning Supplem	TE: nplete the	rified	SCREENING	BOX
PAR1	NERS:	L	SF ID			LSF I	D		
PARTNI	ER NAME			PAR	TNER NAME				
ADDRE	SS			ADD	RESS				
CITY	S	STATE ZII	P PHONE NUMBER	CITY	,	STATE ZIF	PH(	ONE NUMBER	7
		L	SF ID			LSF I	D		
PARTNI	ER NAME			PAR	TNER NAME				
ADDRE	SS			ADD	RESS				
CITY	S	STATE ZII	PHONE NUMBER	CITY	,	STATE ZIF	PH(	ONE NUMBER	₹
				PART STRA 182	NERS' 0006 TUM	0007	0008	0009	

CORN FIELD SELECTION

1.	(Ex	w many acres of corn did this operation plant in 1996 ontion of harvesting them for grain?  clude seed corn.)		TOTAL PLANTED ACRES OF CORN FOR GRAIN 0045
2.	Но	w many of the [item 1] corn acres were		ACRES
	a.	owned by this operation?		0046
	b.	rented for CASH?		0047
	C.	SHARE rented?		0048
	d.	used RENT-FREE?		0049
	۷.	4554 1.2.1		[Total must equal item 1.]
<ol> <li>4.</li> </ol>	of c Wh on ( <b>E</b> ) Plea eac (If to	names or describe ted. sest to your permanent residence.) use the Field Selection Supplement of		
FIE		NUMBER, NAME OR DESCRIPTION	FIELD NUMBER, NAME OR DESC	
<u>1</u> 2			<u>10</u> 11	
<del></del> 3			12	
<u>-</u> 4			13	
5			14	
6			<u>15</u>	
7			<u>16</u>	
8			<u>17</u>	
_				

<b>APPLY</b>	"RANDOM	<b>NUMBER</b> "	LABEL	<b>HERE</b>

[ENUMERATOR ACTION:

Circle the pair of numbers on the above label associated with the last numbered field in item 4. Select the field according to the number you circled on the label, and record the selected number.

If only 1 field, enter 1.]

RECORD SELECTED NUMBER HERE

0051

The field selected is (*field number/name/description*). For most of the interview, my questions will be about **this field**. [Be sure the operator can identify the selected field.]

#### FIELD SELECTION SUPPLEMENT

						<u> </u>	 		:	: :		:
												<u>.</u>
										١	1	<u>:</u>
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										:		:

#### **NOTES and CALCULATIONS:**

	5	
D	FIELD CHARACTERISTICSSELECTED FIELD	D
1.	How many acres of corn did this operation plant in the selected field in 1996?	ACRES 0055 ·
2.	Was this field  1 OWNED BY THIS OPERATION?  2 RENTED FOR CASH?	CODE
	3 SHARE RENTED?	0056
	a. [If field is CASH RENTED, item 2 is 2, ask] What was the cash rent paid (per acre)?	DOLLARS & CENTS PER ACRE 0058
	b. [If field is SHARE RENTED, item 2 is 3, ask] What was the landlord's share of the crop from this field?	PERCENT 0059
3.	What average yield per acre do you normally EXPECT for grain from this field?	BUSHELS PER ACRE 0060
4.	When you made your planting decisions for this field, what market price per bushel did you use in your planning (budget) for the 1996 corn crop?	DOLLARS & CENTS PER BUSHEL 0061
5.	On what date was this field planted? [Use CALENDAR showcard and circle planting date.]	MM DD YY 0062 96

			INCHES
7.	What was the row width in inches?		0063
		QUANTITY PER ACRE	UNIT CODE 1=KERNELS 2=POUNDS 3=BUSHELS
8.	What was the seeding rate per acre the first time this field was seeded?	0064 ·	0065

CODE

0066

9. Was one of these pest resistant varieties of seed used in this field-[Show respondent Seed Variety Code List in Respondent Booklet. Choose one and enter code.]

an herbicide resistant hybrid or variety (such as Pioneer 3162R, Beck's 6868IRT)?

a Bt variety for insect resistance, (such as Nature Guard or Maximizer with Knockout)?

- 3 a gray leaf spot resistant variety?
- none of these?

### FIELD CHARACTERISTICS---SELECTED FIELD

		ACRES
12. How many acres in this field had to be reseeded to corn?		0067
12. Flow many acres in this held had to be reseeded to com:		
	DOLLARS AND CENTS PER UNIT	UNIT CODE 1=APPROX. 80,000 KERNEL BAG 2=POUNDS 4=BUSHELS
13. What was the cost per unit of the <b>purchased</b> seed for this field? ( <i>Include landlord's cost.</i> )	0068	0069
a. [Ask only if this field was RENTED, item 2 was 2 or 3.] What was the landlord's cost for seed	PERCENT OR	TOTAL DOLLARS
planted on this field?		
	•	CODE
		0072
14. Has harvest of this field been completed?	YES = 1	

15. Now I need information about the acres harvested (or to be harvested) and the yields from this corn field.

	1	How many acres in the corn field were (will be) harvested for-[column 1]		4 UNIT CODE 2=BUSHELS 4=TONS
		ACRES	UNITS PER ACRE	
a.	grain?	0074	0082	0090
b.	silage (green chop)?	0075 ·	0083	TONS
i.	abandoned?	· <u> </u>		
j.	other use?	0099		

### FIELD CHARACTERISTICS---SELECTED FIELD

D

PARTIAL CROP CODE LIST FOR ITEM 17								
1 Alfalfa hay	8 Cotton	22 Rye	30 Sunflowers					
190 Barley	302 CRP	25 Sorghum for grain	163 Wheat, durum					
3 Dry Beans	311 Grasses other than clover	24 Sorghum for silage	164 Wheat, other spring					
6 Corn for grain	11 Hay, all other	26 Soybeans	165 Wheat, winter					
5 Corn for silage	15 Oats	28 Sugarbeets	318 Fallow or Idle (diverted)					

17. Next I need to know what crops were previously planted on this field, **including cover crops**. [If no crop was planted during the period, use code 318. If crop isn't listed in the code table, record the crop name beside the cell and leave the cell blank.]

	1	2 What crop was planted on this field [column 1]	3 Was this crop irrigated on this field?
		CODE	YES=1
		0103	0108
a.	in FALL of 1995?		
		0104	0109
b.	in SPRING/SUMMER of 1995?		
		0105	0110
C.	in FALL of 1994?		
		0106	0111
d.	in SPRING/SUMMER of 1994?		
		0107	0112
e.	in SPRING/SUMMER of 1993?		

18. [If the most recent crop in item 17 was a SMALL GRAIN,	CODE
18. [If the most recent crop in item 17 was a SMALL GRAIN, such as barley, oats or wheat ask] Was crop residue removed from this field by baling or removing straw, burning, etc.?	0114 YES = 1
19. Was a no-till system used to prepare and plant this corn field?	0445
☐ YES - [Enter code 1 and continue.] ☐ NO - [Go to item 20.]	0115
a. How many consocutive years has no till been used on this field	YEARS
<ul> <li>a. How many consecutive years has no-till been used on this field (regardless of which crop was planted or grown)? [Enter 1 if current year only.]</li> </ul>	0116

23. Was this field covered by crop insurance for the 1996 corn crop? . . . . . . . . . . YES = 1

0125

20. Did your land-use practices for this field include--CODE 0117 grassed waterways? ..... YES = 1 terraces? YES = 1 b. 0119 contour farming? . . . . . . YES = 1 C. 0120 strip cropping? . . . . . . . YES = 1 d. 0121 underground outlets such as tile drainage? . . . . . . . . . . . . . YES = 1 0122 other drainage channels or diversions? ..... YES = 1 f. 0123 0124 22. Has the NRCS (former SCS) notified you that this field contains a wetland? . . . . ---- YES = 1

Ε

CODE

### E FERTILIZER and NUTRIENT APPLICATIONS----SELECTED FIELD

Wha	at FFRTII	IZERS wer	e annlie	d to this fiel	ld for the 1996					EC	OIT TABLE
corr ( <i>Inc</i>	n crop? [ <i>If</i> : <b>lude</b> chei	none, go to mical fertiliz	o item 3. ers. <b>Inc</b>	] c <b>lude</b> custol	m applied fertil	izers.				0201	
earl	ier if this f	zer applied jield was fall o-nutrients.	low.	ıll of 1995 a	ınd those appli	ed	[	T-TY 2			TABLE 001
L 2 → → → I MATERIALS USED N [Enter percentage analysis or actual pounds of plant nutrients applied per acre.]			<b>ED</b> alysis or plant	3 What quantity was applied per acre?  Leave this	4 [Enter material unit code.] 1 POUNDS 12 GALLONS	5 When was this applied? [Show respondent CALENDAR showcard.]	this 1 Broadci without 2 Broadci with inc	6 low was a applied ast, ground ast, ground ast, by air	<b>!?</b> ! tion !	acre tr ii	7 w many es were eated n this lication?
	<b>N</b> Nitrogen	P₂O₅ Phosphate	<b>K₂O</b> Potash	column blank if actual nutrients were reported.]	19 POUNDS of ACTUAL NUTRIENTS	MM DD YY	4 In Seed 5 In irriga 6 Chisel, Knif 7 Banded 8 Foliar o	I furrow tion water Injected or fed in I in or Over ected Spray	Row	A	CRES
01	0205	0206	0207	0208	0209	0210	0211			0212	
02	0205	0206	0207	0208	0209	0210	0211			0212	•
03	0205	0206	0207	0208	0209	0210	0211			0212	•
04	0205	0206	0207	0208	0209	0210	0211			0212	·
05	0205	0206	0207	0208	0209	0210	0211			0212	
99						NI II	MREP OF	OFFIC LINES IN	E USE	0213	
	•					NO		-TYPE	TAB		LINE
								0	00		00
[Ask	only if N	itrogen was	applied	to this field	<i>l</i> .]				01		ODE
	•	• •			•	1?		YES			
Was for t	s a soil tes he 1996 d	st or plant ti corn crop?	ssue tes	st performed	d on this field in	n 1995 or 1996					
П	<b>YES</b> - [ <i>F</i>	nter code 1	and co.	ntinue 1	□ <b>NO</b> - [G	o to item 5.]			01	66	
a.	How muc		t for the	-		e tests on this field					PER ACRE
	How muc	ld was REN h did your L ts on this fie	LANDLO	RD spend	for	0168	PERCE!	NT	<b>OR</b>		DOLLARS
Was	s a Nitroge	en test perfo	ormed?					·	_		ODE
	<b>YES</b> - [ <i>E</i>	nter code 1	and cor	ntinue.]	□ <b>NO</b> - [G	o to item 5.]	<u></u> .	<u>.</u>	01	70	
	applied to less than,	amount of Nothing this field more exactly the nother th	ore thai the amo	n, 2 ount	AMOUN LESS THAN AMOUN EXACTLY TH	T RECOMMENDED THE T RECOMMENDED				71	

5. Is lime ever applied to this field?

Ε	FERTILIZER and NUTRIENT APPL	LICATIONSSELECTED FIELD E
	☐ YES - [Enter code 1 and continue.] ☐ NO - [Go to	0172 o item 8.]
	On average, how many years are there between applicat of lime to this field?	ions 0173
		TONS PER ACRE
	b. How many tons of lime were applied per acre the last time it was applied to this field?	0174 
	c. [Ask only if field was CASH or SHARE RENTED.] What percent of the total cost of lime and its application was paid by the landlord?	<b>PERCENT</b> 0175
8.	. Was manure applied to this field for the 1996 corn crop? (Exclude commercially prepared manure.)	CODE
	☐ YES - [Enter code 1 and continue.] ☐ NO - [Go to	item 9.]
	La 123 - [Enter code l'and continue.]	ACRES
		0177
	a. How many acres was manure applied to?	·
		TOTAL TONS OR TOTAL GALLONS 0178 0179
	b. What was the total amount of manure applied to this field	
	c. Was the manure	
	<ul> <li>Dry Broadcast without Incorporation?</li> <li>Dry Broadcast with Incorporation?</li> <li>Liquid Broadcast without Incorporation?</li> <li>Liquid Broadcast with Incorporation?</li> <li>Injected/Knifed In?</li> </ul>	CODE 0180
	e. Was the major source of the manure from	
	1 BEEF CATTLE? 2 DAIRY CATTLE? 3 HOGS? 4 SHEEP? 5 POULTRY?	0184
	f. Was the manure	
	1 PRODUCED ON THIS OPERATION? 2 PURCHASED? 3 OBTAINED AT NO COST?	0185

### E FERTILIZER and NUTRIENT APPLICATIONS---SELECTED FIELD E

9.	Not including the cost of fertilizer materials, how much was spent for CUSTOM APPLICATION of fertilizers on this field for the 1996 corn crop?  (Include landlord costs. Exclude custom application of lime.)	DOLLARS & CENTS PER ACRE	OR	TOTAL DOLLARS
	[If material and application costs can't be separated, exclude them here and record the total in item 10.]	·		0187
10.	What was the TOTAL MATERIALS cost for all fertilizer, soil conditioners, micronutrients, etc. applied to this field for the 1996 corn crop?  (Include landlord costs. Exclude lime or purchased manure. If custom applied, include the cost of materials ONLY, unless materials and application costs cannot be separated. Include materials applied to this field if it was fallow in 1995.)	DOLLARS & CENTS PER ACRE 0188	OR	TOTAL DOLLARS 0189
[ <i>If</i> :	this field was RENTED, continue; otherwise go to Section F.]			
11.	What was the TOTAL LANDLORD COST for CUSTOM FERTILIZER APPLICATIONS on this field for the 1996 corn crop? ( <i>Exclude material costs.</i> )	PERCENT 0190	OR	TOTAL DOLLARS 0191
12.	What was the TOTAL MATERIALS cost paid by the LANDLORD for fertilizers, soil conditioners and micronutrients applied to this field for the 1996 corn crop?	PERCENT 0192	OR	TOTAL DOLLARS

F	PESTICIDE APPLICATIONSSELECTED FIELD
	I LOTICIDE ALL LICATIONOSELECTED FIELD

1 Word on	v bo	orbicidos insoct	icidos fund	icidas ar athar	chomicals			0301
used on	this	erbicides, insect field for the 199	96 corn cro	o?				
( <b>Include</b> if this fie	app Id w	olications made as fallow. <b>Inclu</b>	in the fall o <b>Jde</b> custom	f 1995 and tho applied materi	se made earlier ials.	•	T-TYPE	TABLE
Exclude	see	ed treatments.)			<b></b>		3	001
☐ YES	- [(	Continue.]	□ <b>NO</b> - [	Go to Section	<b>G</b> . page 14.1			
•			[		e, page : m			
	_	Ι .	1 .	1 4				
		2 What products	3 Was this	4 Was this part	5 When was	How mu	OR 7 uch What wa	8 [Enter unit
	l.	were applied to this field?	product bought in	of a tank mix?	this applied? [Show	was app	olied the total	al code.]
	ׅׅׅׅ֭֚֝֝֝֞֞֝֟֝֝֡֝֟֝֝֝֟֝֝֟֟֝ <del>֡</del>	[Use product codes from	liquid or dry form?	[If tank mix, enter line	respondent CALENDAR	per	applied p	per 12 GALLONS
	N E	Respondent Booklet.]	[Enter L or D.]	number of first product	showcard.]	applicati	ion?   application   in this fie	Id? 14 PINTS 15 OUNCES
NOTES		0305	,	in tank mix.] 0306	MM DD YY 0307	0308	0309	30 GRAMS 0310
	01			0306		·_		
	02	0305		0306	0307	0308	0309	0310
	03	0305		0306	0307	0308	0309	0310
	04	0305		0306	0307	0308	0309	0310
	05	0305		0306	0307	0308	0309	0310
		0305		0306	0307	0308	0309	0310
	06	0305		0306	0307	0308	0309	0310
	07	0205		0306		0308	0309	0310
	80	0305		0306	0307 —— —— ——	0306	- —	0310
	09	0305		0306	0307	0308	0309	0310
							OFFICE	<b>USE</b> 0319
	99					NUMBE	R OF LINES IN TA	BLE
[For pesticion	des	not listed in Re	espondent	Booklet, spec	cify]			
LINE		Pesticide Typ	ne F	PA No. or Tr	adename F	Form Purch	ased Whe	re
LINE	(He	erbicide, Insec Fungicide, etc	ticide	and Formu		(Liquid or E	Ory) Purc [Ask o	hased only if EPA No. of be reported.]

<b>APPLI</b>	CATION	CODES	for column	9
--------------	--------	-------	------------	---

- Broadcast, ground without incorporation 2 Broadcast, ground with incorporation 3 Broadcast, by air

- 4 In Seed Furrow 5 In Irrigation water 6 Chisel/Injected or Knifed in

7 Banded in or Over Row

8 Foliar or Directed spray 9 Spot treatments

#### **[ENUMERATOR NOTE:**

Use these columns only if TOTAL COST (item 4 below) cannot be provided.]

LINE	9 How was this product applied?		11 Were these applications made by 1 Operator, Partner, Family member? 2 Custom applicator? 3 Employee/Other?	What was the PRIMARY target pest for this application? [Use Pest codes from Respondent Booklet.]
01	0311	0312	0313	0314
02	0311	0312	0313	0314
03	0311	0312	0313	0314
04	0311	0312	0313	0314
05	0311	0312	0313	0314
06	0311	0312	0313	0314
07	0311	0312	0313	0314
08	0311	0312	0313	0314
09	0311	0312	0313	0314

İ	OPTIONAL ITEM ④ What was the cost per unit of the product?							
DOLLARS & CENTS PER UNIT	12 G	UNIT C OUNDS ALLONS UARTS	14 15 30	PINTS OUNCES GRAMS				
0315	0316							
0315	0316							
0315	0316							
0315	0316							
0315	0316							
0315	0316							
0315	0316							
0315	0316							
0315	0316							
	T-TYPE	TABLE		LINE				

[If no CUSTOM pesticide applications, go to item 4.] How much was spent for CUSTOM APPLICATION of chemicals and pesticides on this field, excluding the cost of chemicals? (Include landlord cost.) [If material and application costs can't be separated, **exclude** them here and record the total in item 4.] . . . . . .

DOLLAR & CENTS PER ACRE	OR	TOTAL DOLLARS
0215		0216
•		

000

00

What was the TOTAL cost of all herbicides, insecticides, fungicides and other chemicals applied to this field? (Include landlord cost. Include surfactants and wetting agents. Include materials applied to this field before planting and during 1995 fallow period. Exclude seed treatments.) [If custom applied, include the costs of materials ONLY, unless material and application costs can't 

DOLLAR & CENTS PER ACRE	OR	TOTAL DOLLARS
0217 ·		0218

OR

OR

0220

0222

**TOTAL DOLLARS** 

**TOTAL DOLLARS** 

**PERCENT** 

**PERCENT** 

0219

0221

#### [If this field was RENTED, continue; otherwise go to Section G.]

- What was the LANDLORD's share of the total CUSTOM APPLICATION cost of pesticides applied to this field?
- What was the LANDLORD's share of the total cost for CHEMICALS AND PESTICIDES applied to this field?
- Now I have some questions about your pest management decisions and practices used on this

field for the 1996 corn crop. By pests, we mean WEEDS, INSECTS and DISEASES.

2. Let's begin with questions about scouting this field for pests.

	1	2 Was the corn field scouted for	[For rows with \ Was most of the sco	YES =1, ask] outing for [column 1]
		[column 1]	Operator, Partner or Fa     an Employee?     Farm supply or Chemic     Crop consultant or     Commercial scout?	•
		YES=1	COL	DE
	a. weeds	0226	0229	
		0227	0230	
	b. insects	0228		
	c. diseases	0220		
	[Ask only if column 3 of item 2 is code 4; else go to item How much did you pay for the scouting services for this field? [Include landlord cost.]	_	DOLLARS AND CENTS PER ACRE OR 0231	0232
				PERCENT
	a. What percentage of this cost was for insect score	uting?		0233
	<ul> <li>b. [If this field was RENTED, ask]         How much did your LANDLORD pay for scouting services on this field?</li></ul>		PERCENT OR	TOTAL DOLLARS 0235
	[Ask only if column 3 of item 2 is code 1 or 2; else go to How many hours did [operator, partner, family member, spend scouting this field for pests?	employee]		HOURS 0236
	[Ask only if field was SCOUTED (column 2 of item 2 is of Were written or electronic records kept for this field to track the activity or numbers of	code 1); else go i	to item 6.]	
				0237
	a. broadleaf weeds?		YES = 1	
	b. grass weeds?		YES = 1	0238
	d. black cutworms?		YES = 1	0239
	e. corn rootworms?		YES = 1	0240
	f. European corn borers?		YES = 1	0241
	g. spider mites?		YES = 1	0242
6.	[Ask only if HERBICIDES (pesticide codes 4000 - 4999) Section <b>F</b> , item 1 column 2; else go to item 11.]			
	Did you apply herbicides to this field BEFORE weeds er	merged?		CODE

<u>G</u>		PEST MANAGEMENT PRACTICESSELECTED FIELD	G
		YES - [Enter code 1 and continue.]              □             NO - [Go to item 8.]	
7.		you decide to use <b>pre-emergence</b> herbicides based on a routine treatment for weed problems experienced in previous years? YES = 1	
	b.	field mapping of previous weed problems? YES = 1	
	c.	a computerized decision model? YES = 1	δ 
	d.	recommendations from an independent crop consultant? YES = 1	7
8.	Did	you apply herbicides to this field AFTER weeds emerged?	0
		<b>YES</b> - [Enter code 1 and continue.]	5
0	D: 1		
9.		you decide to use <b>post-emergence</b> herbicides based on	9
		a routine treatment? YES = 1	0
	b.	type and/or density of weed(s) present? YES = 1	1
	C.	a computerized decision model? YES = 1	2
	d.	recommendations from an independent crop consultant? YES = 1	
10.	We	ere any weeds on this field resistant to	
		a. Atrazine, Aatrex, Bladex, Extrazine, Princep, Simazine or other <b>TRIAZINE</b> family herbicides?	3
		b. Account, Beacon, Classic, Pinnacle, Pursuit, Septer or other <b>ALS</b> family herbicides? YES = 1	4
11.	Do	you routinely use a soil insecticide at planting time to control corn rootworm on this field?	
		□ YES - [Enter code 1 and go to item 14.] □ NO - [Continue.]	5
		a. Did you scout this field for adult corn rootworm beetles during the 1995 growing season to determine the need for a soil insecticide at planting?	
		☐ YES - [Enter code 1 and go to item 14.] ☐ NO - [Continue.]	6
		b. Did you scout for adult corn rootworm beetles during the 1996 growing season to determine the need for a soil insecticide?	
		VFS - [Enter code 1 and continue]	7

### G

14.

	1	² →	3 [If YES = 1 in column 2, ask] Was your main reason for doing this to control  1 WEEDS 2 INSECTS 3 BOTH
	Did you	YES=1	CODE
a.	control pests on this field by adjusting row spacing or plant density?	0262	0268
b.	reduce (or control) pests by adjusting planting dates on this field?	0263	0269
C.	control pest resistance by alternating pesticides on this field from year to year? (Use pesticides from different families.)	0264	0270
d.	keep pests from spreading into this field by using practices such as tilling, mowing, burning, and/or chopping of field edges, lanes or roadways?	0265	0271
e.	control pests on this field by using water management practices, such as controlled drainage or irrigation scheduling? [ <i>Exclude chemigation</i> .]	0266	0272
f.	reduce the spread of pests to or from this field by cleaning the harvesting and tillage implements?	0267	0273

		3 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
16. Di	d vou	<del></del>	CODE
	-	have a biological soil analysis done on this field to detect the presence of soil pests, such as insects, diseases or nematodes? YES = 1	
		consider beneficial insects in selecting and using pesticides on this field?	0275
	C.	remove weeds in infested areas in this field to prevent insect egg laying?	0276
	d.	use seed treatments for seedling blight control? YES = 1	0277
	e.	submit diseased plants from this field to a lab for diagnosis? YES = 1	0278
17. Di	d you	 	
	•		0279
	a.	purchase and release beneficial insects in this field? YES = 1	
	b.	use pheromone lures in this field to monitor for black cutworm? [Include traps and bait sticks.]	0280
	C.	set and monitor pre-plant grain traps for wireworms? YES = 1	0281
18. [ <i>lf</i>	any of else Who for phe attr	of items 17 a - c are code <b>YES=1</b> , continue; e go to item 19.] nat were the TOTAL materials <b>and</b> application costs all biological pest controls, including pheromones, eromone traps, beneficial insects, and floral lures, actants or repellants applied on this field?  **Clude Bt corn seed**  **Clude Bt corn seed**  **DOLLARS & CENTS PER ACRE  OR  0282	

19. What was your primary outside source of information on pest management recommendations for the 1996 corn crop?
[Ask the respondent to look at Pest Management Information Sources Code List in Respondent Booklet. Choose one and enter code.]

## PEST MANAGEMENT INFORMATION SOURCES CODE LIST

		1	Extension Advisor, Publications or Demonstrations (County, Cooperative or University)					
		2	Farm Supply or Chemical Dealer					
		3	Commercial Scouting Service		<b>CODE</b>			
		4	Crop Consultant or Pest Control Advisor		0201			
		5	Other Growers or Producers					
		6	Producer Associations, Newsletters or Trade Magazines					
		7	Television or Radio Programs, Newspapers					
		8	Electronic Information Services (World Wide Web, DTN, etc.)					
		9	Other					
		10	None					
20. Have	20. Have you (the operator) attended a training session on pest identification and management since October 1, 1995? YES = 1							
21. Have	21. Have you (the operator) completed courses leading to certification for applying "Restricted Use" pesticides?							

OFFICE USE 0015

### H FIELD OPERATIONS, LABOR and CUSTOM SERVICES---SELECTED FIELD H

 Now I need to list all tractors used to produce corn on this selected field. (Include all tractors owned, rented, leased or borrowed and those used to haul corn out of the field to the point of first sale or storage. Exclude tractors provided by custom operators.)

1	2 What tractors were used on THIS FIELD? MAKE and MODEL		4 Is this tractor 2 2-wheel drive? 3 2-wheel drive with front wheel assist? 4 4-wheel drive? 5 crawler? 6 other?	5 What is its PTO horsepower? PTO HORSEPOWER	6 Is it  1 diesel? 2 gasoline ? 3 LP gas 9 other?
1		0320	0326	0332	0338
2		0321	0327	0333	0339
3		0322	0328	0334	0340
4		0323	0329	0335	0341
5		0324	0330	0336	0342
6		0325	0331	0337	0343

### H FIELD OPERATIONS, LABOR and CUSTOM SERVICES---SELECTED FIELD

Next, I need to list field work performed by machines on this field for the 1996 corn crop. Let's begin with the first activity after harvest of the preceding crop and continue through hauling the crop out of the field. Include fertilizer and pesticide applications and ALL custom operations. Please list the operations in the order they occurred AND maintain the order of tandem hook-

(If this field was fallow (idle, diverted) during 1995, list operations starting with the fall of 1994. **Include** plowing, corrugation, land preparation, planting, applying fertilizers and pesticides, preparing for irrigation, harvesting and hauling the corn from the field using carts, trailers, or wagons. **Exclude** the application of lime.)

#### **CODES FOR COLUMN 5**

1 You (The Operator)? 2 Partner?

3 Unpaid Worker?

4 Paid Part-time or Seasonal Worker? 5 Paid Full-time Worker? 6 Custom Applicator? --[Go to Column 13.]

### INCLUDE FERTILIZER and PESTICIDE IMPLEMENTS

#### **INCLUDE CUSTOM OPERATIONS**

	L		ppca.co: _ [00			6 (CUSTOM), sk	in columns 7-1	11	
2 SEQUENCE	3 What operation or equipment was used?	4 [Record machine\ code from Responde nt Booklet.]	5 Who was the machine operator [Enter code from above. If code = 6 (CUSTOM), go to column 13.]	7 What was the size or swath of the [machine] used?	8 [Record size code.] 1 FEET 2 ROW 3 MOLDBOARD (bottoms) HAULING 4 POUNDS 5 BUSHELS 6 TONS	9 Which tractor was used? [Record line number from item 1.] 66 Animal Drawn 77 Pick-Up 88 Other Trucks 99 Self-Propelled	10 How many acres were covered?	11 What were the acres covered per hour?	13 In what month was this operation done?
No.			CODE				ACRES	ACRES PER HOUR	ММ
0369		0394	0424	0471	0501	0531	0561	0586	0641
0370		0395	0425	0472	0502	0532	0562	0587	0642
0371		0396	0426	0473	0503	0533	0563	0588	0643
0372		0397	0427	0474	0504	0534	0564	0589	0644
0373		0398	0428	0475	0505	0535	0565	0590	0645
0374		0399	0429	0476	0506	0536	0566	0591	0646
0375		0400	0430	0477	0507	0537	0567	0592	0647
0376		0401	0431	0478	0508	0538	0568	0593	0648
0377		0402	0432	0479	0509	0539	0569	0594	0649
0378		0403	0433	0480	0510	0540	0570	0595	0650
0379		0404	0434	0481	0511	0541	0571	0596	0651
0380		0405	0435	0482	0512	0542	0572	0597	0652
0381		0406	0436	0483	0513	0543	0573	0598	0653
0382		0407	0437	0484	0514	0544	0574	0599	0654
0383		0408	0438	0485	0515	0545	0575	0600	0655
0384		0409	0439	0486	0516	0546	0576	0601	0656
0385		0410	0440	0487	0517	0547	0577	0602	0657

For backhoes, disk border maker, ditch closer, ditcher, levee-plow disk, quarter drain machine and rear mounted blade, AND for hauling operations, enter total HOURS, not acres. Then leave column 11 blank.

**OFFICE USE** 0017

#### **LABOR**

I need to get some additional information about labor used on this field. I would like to list ALL workers, both paid and unpaid, that worked on this field to produce the 1996 corn crop,

### H FIELD OPERATIONS, LABOR and CUSTOM SERVICES---SELECTED FIELD H

including you (the operator) and any partners. (List individuals or groups of workers. If workers are grouped, indicate type and number. **Exclude** contract and custom labor.)

[Enumerator Instructions: First, list the workers in column 1. Probe to include workers who worked on the field during the fall of 1995 and earlier if the field was left fallow during 1995. When all workers are listed in column 1, complete the table.]

[Ask only if (worker in column 1) is PAID, column 3=code1.]

column 3=code1.]					
1     WORKERS 	<b>2</b> [Enter number of workers.]	3 Was (worker) 1 PAID 2 UNPAID [Go to column 6.]	4 Was (worker) 1 FULL TIME 2 PART TIME 3 SEASONAL	What was the average cash wage rate paid per hour for ALL of (worker's) work on this field?	6 What was the TOTAL number of hours (worker) worked on activities for this field, OTHER THAN THE HOURS JUST REPORTED OPERATING MACHINES? (Include time spent loading materials into equipment, scouting, irrigating, hauling with trucks, drying and management activities.)
Ī		CODE	CODE	DOLLARS & CENTS PER HOUR	TOTAL HOURS
☐ You (the operator)		0022	0022	. =	0683
☐ Partners	0684				0685
☐ Spouse		0686	0687	0688 ·	0689
i	0690	0703	0716	0729 •	0742
	0691	0704	0717	0730 ·	0743
<u> </u>	0692	0705	0718	0731 ·	0744
	0693	0706	0719	0732	0745
<u> </u>	0694	0707	0720	0733	0746
<u> </u>	0695	0708	0721	0734	0747
	0696	0709	0722	0735	0748
<u> </u>	0697	0710	0723	0736 ·	0749
<u> </u>	0698	0711	0724	0737	0750
<u> </u>	0699	0712	0725	0738	0751
<u> </u>	0700	0713	0726	0739	0752
<u> </u>	0701	0714	0727	0740 ·	0753
<u> </u>	0702	0715	0728	0741 •	0754

3.	[Ask only if UNPAID labor was reported in column 3 of item 5.]	PERCENT
٠.	What percentage of the total hours worked on this field by	0755
	UNPAİD workers were worked by children under 16 years old?	

### H FIELD OPERATIONS, LABOR and CUSTOM SERVICES---SELECTED FIELD H

7. Now I need some information on how much was spent for custom and technical services used on this field for the 1996 corn crop.

	CUSTOM or TECHNICAL SERVICE [Check CUSTOM operations reported in item 3. Complete columns 2 and 3 for all items checked.]	2 (Including landlord's cost) How much was spent for [custom or technical service in column 1] on this field for the 1996 corn crop?	LANDLO for this s	3 ch did your RD spend service on rn field?
		DOLLARS & CENTS PER	PERCENT	OR TOTAL
□ b	custom land preparation, shaping and/or leveling?	0757 ·——	0765	0773
□ <sub>c.</sub>	custom cultivating?	0758	0766	0774
□ <sub>d</sub>		0759 ·	0767	0775
□ <sup>f.</sup>	custom harvesting and hauling of crop from field to storage or point of first market?	0761 ·	0769	0777
⊠ <sup>h</sup>		0763 . <u> </u>	0771	0779

### **IRRIGATION---**SELECTED FIELD

		ACRES	3
1.	How many acres in this field were irrigated for the 1996 corn crop?	0785	
	[If none, go to Section <b>J</b> , page 25.]		•

2. Now, I have some questions about irrigation systems and water used on this field for the 1996 corn crop.

	<b>\</b>	UNIT	SYSTEM 1	SYSTEM 2
a.	What type(s) of irrigation system(s) were used to irrigate this field? [Ask Respondent to look at <b>System Type Codes</b> in the Respondent Booklet. Enter <b>System Type Code</b> for up to two systems covering the most field acres.]	SYSTEM TYPE CODE	0786	0798
b.	What was the <b>total</b> number of inches of water applied <b>per acre</b> to this field during the entire growing season? [Include ALL water used from both on-farm and off-farm sources.]	INCHES PER ACRE	0787	0799
C.	[If operator cannot provide item b, ask] What is the <b>total</b> number of <b>hours</b> this system was used to apply water to this field during the corn growing season?	TOTAL HOURS	0788	0800
e.	What percentage of the water used to irrigate this field through this system came from surface water sources?	PERCENT	0789	0801
f.	What was the number of times this field was irrigated during the corn growing season using this system? [Include any pre-plant irrigation.]	NUMBER OF IRRIGATIONS	0790	0802
g.	Was the pump type [Enter code for most common pump type.] (If more than one pump in the system, enter type for pump closest to water source.)  1 TURBINE? 2 SUBMERSIBLE? 3 CENTRIFUGAL? 4 BOOSTER? 5 SIPHON? 99 NO PUMP-? [Go to item m.]		0791	0803
h.	What was the average pumping rate?	GALLONS PER MINUTE	0792	0804
i.	[If item 2a is code 1-9 (PRESSURE SYSTEM), ask] What was the system operating pressure?	POUNDS PER SQUARE INCH		0805
j.	What was the motor type?  1 DIESEL 2 GASOLINE 3 LP GAS 4 NATURAL GAS 5 ELECTRICITY 6 SOLAR POWER	CODE	0794	0806
k.	What was the average motor size?	HORSE- POWER	0795	0807
m.	[Ask only if NO PUMP was used (item g is code 99); else go to item n.] What was the average flow rate?	GALLONS PER MINUTE	0796	0808
n.	How many <b>other</b> crop acres on this operation were irrigated using this field's irrigation system during the 1996 growing season? [ <b>Exclude</b> this field.]	ACRES	0797 •	0809

ı

### IRRIGATION---SELECTED FIELD

3.	Wa ( <b>In</b>	is any water purchased to irrigate this field?  clude landlord's share. Include purchases from all sources.)		
	`	,	CODE	
			0817	
		YES - [Enter code 1 and continue.]    NO - [Go to item 4.]		
			PERCENT	
			0818	
	_	What paraentage of the water used on this field was purchased?	00.0	
	a.	What percentage of the water used on this field was purchased?	DOLLADO	
	b.	What was the total cost for the water purchased for	DOLLARS 0819	
		this field during the 1996 growing season?	0819	
		[Include landlord's cost.]		
4.	[ <i>If</i> \$	SIPHON TUBES were used (line a of item 2 is 10 or 11), ask]	0820	
	Wr	at would be the total cost to replace all the siphon tubes used on this field?		
5.	ΓIFI	POLY PIPE system was used (line a of item 2 is 14), ask]		
J.	\/\/h	at was the total amount spent for poly pipe used on	0821	
	this	at was the total amount spent for poly pipe used on silend during the 1996 growing season?		
			INCHES	
6.	Γ <i>IF (</i>	GATED PIPE system was used (line a of item 2 is 15 or 16), ask]	0822	
Ο.	[// \	What was the average diameter of gated pipe used to irrigate this field?		
	u.	with was the average diameter of gatea pipe used to imgate this held:	FEET	
			0823	
	L	What was the total leventh of material mine was dO	0020	
	D.	What was the total length of gated pipe used?		
_	١٨/-	an confliction of the complete industry for contact for this fields		
7.	vve	ere wells used to supply irrigation water for this field?	CODE	
	_	м <b>го</b> (5 )	0824	
	Ш	YES - [Enter code 1 and continue.]		
			NUMBER	
			0825	
	a.	How many wells were used to irrigate this field?		
		, and the second	INCHES	
			0826	
	b.	What was the average diameter of the outer well casing?		
	٥.	Trial vide the diverage diameter of the outer well eaching.		
	C.	What was the average pumping depth of these wells during		
	0.	the irrigation season?	FEET	
		[Pumping depth is the depth to water at the start of the irrigation	0827	
		season, plus an average decline in the water level caused by		
		pumping during the irrigation season.	L	

**IRRIGATION---**SELECTED FIELD Other than pipe that is part of the system, was any additional mainline or lateral pipe used to carry water from the source to this field? (*Include underground pipe*.) ☐ **YES** - [Continue.] □ **NO** - [Go to item 9.] PIPE TYPE CODES **ALUMINUM - (NON-HI-**1 CODE PRESSURE) ALUMINUM'- (HI-PRESSURE) 0828 2 3 4 What was the most common type **ASBESTOS CONCRETE** of additional pipe used? . . . . . . . . . STEEL 5 **PLASTIC** 6 **OTHER INCHES** 0829 What was the average diameter (in inches) of the most common type of this additional pipe used? . **FEET** 0830 How many feet of this additional pipe were used to carry water to this field? . . . . . . 9. [If this field was RENTED, continue; else go to item 10.] What was the LANDLORD's share of the total cost for--**PERCENT** TOTAL DOLLARS 0831 0832 fuel, lubrication and electricity used to irrigate this field? . . . . . . . 0833 0834 b. repairs for irrigation equipment used to irrigate this field? ..... 0835 0836 purchased irrigation water used to irrigate this field? . . . . . . . . . **RUN-OFF CODES** retained at the end of the field? CODE re-used to irrigate on the farm?

collected in evaporation ponds

on the farm? drained from the farm?

or is there no run off?

3

5

10. Is the run off from this field-- . .

0837

**DRYING** 

			_	PERCENT	
1.	What was (do you expect to be) the moisture from this field at harvest?	content of the corn		·	
2.	Now I have some questions about drying core	n from this field.	_		
	1	2 Was most of [column 1]'s (share of) corn from this field  1 DRIED USING OPERATION'S FACILTIES 2 DRIED USING LANDLORD'S FACILITIES 3 CUSTOM DRIED (Include drying on another operation.) 4 NOT DRIED	3 [If CUSTOM DRIED (column 2 is code 3), ask] How much did [column 1] pay for custom drying?  OR		
		T NOT BRIED	CENTS PER BUSHEL	TOTAL DOLLARS	
	a. this operation (Exclude landlord's share.)	0841	0843	0845	
	[Ask only if field was share rented.] b. the landlord	0842	0844	0846	
3.	[ENUMERATOR INSTRUCTION: If ANY of (columns)	corn was DRIED using operator's o o 2 is code 1 or 2) → continue; else,	r landlord's facili go to Section <b>K</b>	ities K, page 27.]	
4.	[If the selected field was SHARE RENTED, or How much did your LANDLORD contribute for	)r	RCENT OR	TOTAL DOLLARS	
	a. fuel and/or electricity used for drying corr the selected field?	of from 0847		848	
	b. repairs of the facilities used for drying confrom the selected field?	n	0	850	

_	
	J DRYING J
	J INTERPRETATION DE LA CONTRACTION DEL CONTRACTION DEL CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION DE LA CONTRACTION

5. Now, I need a description of the facilities and methods used for drying the corn from the selected field. (*Include* only those facilities used to remove moisture from corn by drying or cooling.)

	1	Dittiento	3 Was the main drying method 1 HIGH TEMP 2 LOW TEMP	4 How many of this type of facility were used to dry corn from the ENTIRE 1996 crop?	5 What was the TOTAL holding capacity of these dryers?	6 What was the main power source used?  1 DIESEL 2 GASOLINE 3 LP GAS 4 NATURAL GAS 5 ELECTRICITY 9 OTHER CODE
a.	What was the main type of on-farm drying facility that used heat to dry the corn from this field? (If more than one type was used, report the type used to dry the most corn.)	0851	0852	0853	0854	0855
b.	What was the main type of on-farm cooling or aeration facility used to dry the corn from this field? (If more than one type was used, report the type used to dry the most corn).	0856		0857	0858	

6.	[Ask, if BIN drying was used (column 2 of item 5 is code 1), else go to item 7.]	NUMBER 0859
	How many of the bins were equipped with grain stirrators or recirculators?	
		PERCENT
7.	Of the total bushels of <b>all</b> crops dried with all of these facilities, what percentage were bushels of corn?	0860

#### 1. Now I'm done with questions about this field.

My last questions are about **all** vehicles and trucks that were used on the **entire** 1996 crop of corn planted **for grain** (no matter which field it was grown in). (**Exclude** seed corn.) (**Include** all vehicles owned, rented, leased or borrowed, and those used to haul corn out of the field to the point of first sale or storage. **Exclude** vehicles provided by custom operators.)

1 VEHICLES	2 How many [vehicles] were there?	What was the total mileage driven by these [vehicles] for all farm uses during the past 12 months?	What percent of these miles were for the corn crop?
Pick-ups, Cars & Sport Utility Vehicles	<b>NUMBER</b> 0861	MILES 0863	PERCENT 0865
ATVs and Motorcycles	0862	0864	0866

1 What other trucks were used for the 1996 corn crop? (Exclude pick-ups)	2 Is this truck- 1 diesel? 2 gasoline? 3 LP gas? 9 other?	3 Is it 1 single axle? 2 tandem axle? 3 semi?	4 How many total miles was this truck driven for all farm uses during the past 12 months?	5 What percentage of these farm-use miles were for the entire corn crop?
MAKE	CODE	CODE	MILES	PERCENT
	0867	0873	0879	0885
	0868	0874	0880	0886
	0869	0875	0881	0887
	0870	0876	0882	0888
	0871	0877	0883	0889
	0872	0878	0884	0890

### CONCLUSION

OFFICE USE--COUNTY FIPS CODE

0021

#### LOCATION OF SELECTED FIELDS

1. I need to locate the selected field of corn on this map.

What county is the selected corn field in?					
ENUMERATOR ACTION: Mark the map to indicate where the selected corn field is located.  Be sure the "X" you mark on the map is in this county.]					
2. Reporting the operator's Social request them is Title 7, Section within the National Agricultural S	Security and Federal Employer Identification number is volu 2204 of the U.S. Code. These numbers will be used only Statistics Service for identification.	ntary. The authority to			
0022 <b>OPERATOR'S SSN</b>	0023 <b>OPERATION EIN</b>				
3. There's other information we not asking about year-end informat are complete. I'll call you then [Offer survey results or other A	3. There's other information we need in order to complete the profile of your operation. Because we'll be asking about year-end information, we will contact you in February or March, 1997, when your records are complete. I'll call you then to set up a time that's good for you.  [Offer survey results or other Agency publications. Thank the respondent, then review this questionnaire.]				
RESPONDENT	1 OPERATOR/MANAGER/PARTNER 2 SPOUSE 3 ACCOUNTANT/BOOKKEEPER 4 OTHER	0025			
Respondent's name [ <i>if code 3 or 4</i> ]					
Phone	()				
Did the respondent use farm/r	anch records to report <b>fertilizer</b> data? YES = 1	0027			
·	anch records to report <b>chemical</b> data? YES = 1	0028			
·	h records to report	0029			
SUPPLEMENTS USED	FERTILIZER APPLICATIONS	NUMBER 0033			
Record the total number of ea	CHEMICAL CHEVE OF Supplement APPLICATIONS	0034			
used to complete this interview	0035				
	0036				
ENDING TIME [MILITARY]	0037  MM DD YY				
DATE:	0038				
ENUMERATOR		ENUMERATOR ID 0039 EVALUATION			
		0040			