



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

KS

SP no. 90-10

GIANNINI FOUNDATION OF  
AGRICULTURAL ECONOMICS  
LIBRARY

WITHDRAWN  
APR 24 1990

# STAFF PAPER

FARM MANAGEMENT DATA BANK\*  
DOCUMENTATION

LARRY N. LANGEMEIER\*\*

April 1990  
No. 90-10

Department of Agricultural Economics

Kansas State University.

FARM MANAGEMENT DATA BANK<sup>\*</sup>  
DOCUMENTATION

LARRY N. LANGEMEIER<sup>\*\*</sup>

April 1990  
No. 90-10

<sup>\*</sup>Contribution No. 90-447-D from the Kansas Agricultural Experiment Station, Kansas State University, Manhattan, KS 66506.

<sup>\*\*</sup>Professor, Department of Agricultural Economics, Kansas State University, Manhattan, Kansas.



Department of Agricultural Economics  
Kansas State University, Manhattan, Kansas 66506

---

Publications and public meetings by the Department of Agricultural Economics are available and open to the public regardless of race, color, national origin, sex, or handicap.

## TABLE OF CONTENTS

SECTION I: FARM MANAGEMENT DATA BANK, SAS DATA FILE . . . . .	1
Introduction To Farm Management Data Bank, SAS Data File . . . . .	2
Special Data Items . . . . .	3
Family Living Expenses-Taxes-Nonfarm Income and Expenses . . . . .	6
Livestock Feed Disappearance . . . . .	6
Livestock and Grain Sales and Purchases . . . . .	7
Other Livestock, Misc. Income, Machinery, and Building Purchases . . . . .	10
Livestock, Grain, Forage, and Cash Crop Inventories . . . . .	11
Misc. Assets, Land Machinery-Equipment, and Building Inventories . . . . .	13
Farm Income Items, Accrual . . . . .	14
Farm Cash Operating Expenses . . . . .	14
Depreciation . . . . .	15
Unpaid Family Labor and Net Worth Opportunity Cost Change . . . . .	15
Rate of Returns and Net Worth Change . . . . .	15
Current-Intermediate Assets, Land Value, and Capital Managed . . . . .	16
Acres--Total, Owned, and Rented . . . . .	16
Crop Machinery Investment and Costs . . . . .	17
Livestock Numbers, Weanings, Number Handled, and Production . . . . .	17
Crops--Acres . . . . .	18
Crops--Production . . . . .	19
Gross Crop Value and Production Costs . . . . .	20
Current and Long-Term Loans and Accounts Receivable . . . . .	20
Crop Labor and Net Worth Percentages . . . . .	21
Nonfarm Assets and Loans; Intermediate Loans and Accounts Receivable . . . . .	22
Harvested Acres . . . . .	22

## TABLE OF CONTENTS (CONT.)

Special Farm and Nonfarm Income and Expense . . . . .	22
Appendix Table A--Farm Type Codes and Methods . . . . .	23
SECTION II: WHOLE-FARM MANAGEMENT DATA BANK; K-MAR-105	
DIRECTORY AND RAW DATA FILE; SOURCE OF VARIABLES . . . . .	29
Introduction to Whole-Farm Farm Management Data Bank, K-MAR-105 Directory and Raw Data File; Source of Variables . . . . .	30
Special Data Items . . . . .	31
Business Type-Operator Numbers-Age . . . . .	31
Family Living Expenses . . . . .	31
Taxes-Family-Outside Income and Expense . . . . .	32
Livestock Feed Disappearance . . . . .	32
Livestock and Grain Sales and Purchases . . . . .	32
Other Livestock, Misc. Income, and Machinery and Building Purchases . . . . .	33
Livestock, Grain, Forage, and Cash Crop Inventories; Beginning and Ending . . . . .	33
Misc. Assets, Land, Machinery-Equipment, and Building Inventories; Beginning and Ending . . . . .	33
Farm Income Items, Accrual . . . . .	34
Farm Cash Operating Expenses . . . . .	34
Depreciation . . . . .	35
Unpaid Family Labor and Net Worth Opportunity Cost Charge . . .	35
Rate of Returns and Net Worth Change . . . . .	35
Current-Intermediate Assets, Land Value, and Capital Managed . .	35
Acres--Total, Owned, and Rented . . . . .	35
Crop Machinery Investment and Costs . . . . .	35
Livestock Numbers--Units . . . . .	35
Livestock Weanings--Units . . . . .	35
Livestock Number--Average Head Handled . . . . .	36

## TABLE OF CONTENTS (CONT.)

Livestock Births . . . . .	36
Livestock Production . . . . .	36
Crops--Acres . . . . .	36
Crops--Production . . . . .	36
Gross Crop Value and Production Costs . . . . .	36
Current and Long-Term Loans and Accounts Receivable . . . . .	37
Crop Labor and Net Worth Percentages . . . . .	37
Nonfarm Assets and Loans, Intermediate Loans and Accounts Receivable; Beginning and Ending . . . . .	37
Harvested Acres . . . . .	37
Special Farm and Non-Farm Income and Expense . . . . .	37
 SECTION III: FARM MANAGEMENT WHOLE-FARM DATA BANK SYSTEM, K-MAR-105 RAW DATA FILE AND RETRIEVAL SYSTEM . . . . .	
	38
Introduction To Farm Management Whole-Farm Data Bank System, K-MAR-105 Raw Data File and Retrieval System . . . . .	39
Special Data Items . . . . .	40
Business Type-Operator Numbers-Age . . . . .	40
Family Living Expenses . . . . .	40
Taxes-Family Living-Outside Income and Expense . . . . .	40
Livestock Feed Disappearance . . . . .	41
Livestock and Grain Sales and Purchases . . . . .	41
Other Livestock, Misc. Income, and Machinery and Building Purchases . . . . .	42
Livestock Grain, Forage, and Cash Crop Inventories; Beginning and Ending . . . . .	42
Misc. Assets, Land, Machinery-Equipment, and Building Inventories; Beginning and Ending . . . . .	42
Farm Income Items, Accrual . . . . .	43
Farm Cash Operating Expenses . . . . .	43

## TABLE OF CONTENTS (CONT.)

Depreciation . . . . .	43
Unpaid Family Labor and Net Worth Opportunity Cost Change . . . .	43
Rate of Returns and Net Worth Change . . . . .	44
Current-Intermediate Assets, Land Value, and Capital Managed . .	44
Acres--Total, Owned, and Rented . . . . .	44
Crop Machinery Investment and Costs . . . . .	44
Livestock Numbers --Units . . . . .	44
Livestock Weanings--Units . . . . .	44
Livestock Numbers--Average Number Handled . . . . .	44
Livestock Births . . . . .	44
Livestock Production . . . . .	45
Crops--Acres . . . . .	45
Crops--Production . . . . .	45
Gross Crop Value and Production Costs . . . . .	45
Current and Long-Term Loans and Accounts Receivable; Beginning and Ending . . . . .	45
Crop Labor and Net Worth Percentages . . . . .	46
Nonfarm Assets and Intermediate Loans and Accounts Receivable; Beginning and Ending . . . . .	46
Harvested Acres . . . . .	46
Special Farm and Non-Farm Income and Expense . . . . .	46

SECTION I  
FARM MANAGEMENT DATA BANK  
SAS DATA FILE



INTRODUCTION  
FARM MANAGEMENT DATA BANK  
SAS DATA FILE

Section I outlines in-depth the whole-farm variables stored on the Farm Management Whole-Farm Data Bank, SAS Data File. This file currently contains 483 variables per farm for approximately 2,300 to 3,000 farms for the years 1973 through 1989. Subsequent years' data will be added to the overall file when made available. Other SAS data files will be developed from this comprehensive data bank, such as a file that contains only farms that have continuous data for a given period.

The data sources are farms enrolled in the Kansas Farm Management Association program. For each farm, the variable values are on a per operator basis, except for "Gross Value of Crops (451)," which includes the landlord's share of the value of crop production. Except where indicated by decimal format, the values are whole numbers. Section II titled "K-MAR-105 Directory and Raw Data File" provides additional information on the source of the data as obtained from the Kansas Farm Management Association Account Book and the K-MAR-105 Year-End Whole-Farm Business and Enterprise Analysis program.

The SAS Data File provides a means whereby extension, instruction, and research personnel can easily access the data bank to obtain information for numerous projects. Every user, through the Department of Agricultural Economics Systems Analyst, has access to the data bank information using a simple, but standardized, procedure.

FARM MANAGEMENT DATA BANK  
SAS DATA FILE\*

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
---------------	---------------------	-------------------

SPECIAL DATA ITEMS:

Farm	Farm Number and Year of Data	
	1 -- Association Number	
	2-3 -- County Number	
	4-8 -- Farm Number	
Year	9-10 -- Year of Data	
001	Farm Type Code	
	<p>1976-Present: Farm typing is done by labor utilization. For farms to be classified as a single enterprise farm, 70 percent of the total labor must be utilized with that enterprise; whereas in a dual enterprise farm type, 35 percent of the total labor must be utilized with each enterprise.</p> <p>1973-75: Same as above, except farms were classified as "Cash Crop Dry or Irrigated" if 50 percent or more of the labor was used for crop production. If 50 percent of the labor was not used in crop production, then other single or dual enterprise farm types were determined. Also, a number of additional farm types were added in 1976.</p> <p>(See Appendix Table A for a definition of the various farm types).</p>	
002	Crop Acres	9 (6).9
	Total (owned and rented) crop acres.	
003	PMWU -- Production Man Work Units	9 (7).99
	<p>Each acre of each different crop and each livestock unit is assigned a "labor factor" as a fraction of a 10-hour day or productive man work units.</p>	

---

\*Except where noted, the variable values are whole numbers. The decimal format is indicated for those variables that carry a decimal. For example, the variable "Crop Acres" has a decimal format of 9(6).9, which means that there are 6 digits before the decimal and one digit after the decimal.

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
	Labor standards were revised in 1976. Kansas Agricultural Experiment Station Bulletins 587, 589, and 593, "Labor Requirements for Eastern, Central, and Western Kansas Crops", list the standards used for the periods 1973-75 and 1976-present. The current labor standards are also listed in KSU Farm Management Guide, MF-670, "Labor Standards for Forward Planning".	
004	Capital Managed (\$)	
	Total farm assets plus value of rented land.	
005	Gross Farm Income (\$)¹	
	Total farm income computed on accrual basis.	
006	Net Farm Income (\$)¹	
	Equals Gross Farm Income minus cash operating expense minus depreciation. Represents a return to operator's unpaid labor, management, and net worth.	
007	Farm Summary Usage Code	
	0 -- Farm was used in Summary and Analysis Report	
	1 -- Farm was not used in Summary and Analysis Report	
	If a farm is coded "1", then the Farm Management Fieldman determined that this farm's data contained an error or the farm was not typical of farms in the county or region. Thus, the farm was removed from that year's Summary and Analysis Report.	
008	Business Organization Type	
	1 -- Corporations	
	2 -- Partnership, Owner	
	3 -- Partnership, Part-Owner	
	4 -- Partnership, Tenant	
	5 -- Sole Proprietor, Owner	

¹The variables "Gross Farm Income" and "Net Farm Income" include off-farm income such as custom work, but not non-farm income.

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
	6 -- Sole Proprietor, Part-Owner 7 -- Sole Proprietor, Tenant	
	Owner, part-owner, and tenant classification based entirely on whether owned and/or rented crop acres.	
009	Tax Code	
	0 -- Cash 1 -- Accrual	
	Variable has no real importance, since all income is computed on accrual basis.	
010	Number of Operators	9 (1).9
	Represents number of unpaid operators. In the case of corporations, shareholders' salary was removed from labor expense and number of months of operator labor recorded under unpaid operator labor. For a few farms each year, the Farm Management Fieldmen may have recorded zero months of unpaid labor for an incorporated farm. In these cases, the number of operators would be zero.	
011	Number of Men	9 (2).9
	Represents number of unpaid operators plus number of hired employees.	
012	Number Family Dependents	
	Total number of family dependents. In cases of partnership and corporation farms, the value for number of family dependents will be for the "primary" operator.	
013	Operator's Age	
	Age of the operator. For partnership and corporation farms, the value for operator's age will be for the "primary" operator. For a few corporation farms, no primary operator was selected, and thus the value for operator's age will be zero.	
014	Oldest Child's Age	

VARIABLE	ITEM -- EXPLANATION	DECIMAL
#		FORMAT

Represents age of oldest child correlated with variables "012" and "013". This variable is used to develop the family living expense summaries in the Summary and Analysis Reports.

#### FAMILY LIVING EXPENSES-TAXES-NONFARM INCOME AND EXPENSE:

VARIABLES "015-034" REPRESENT FAMILY LIVING EXPENDITURES, TAXES, AND NONFARM INCOME AND EXPENSE. THE NONFARM INCOME VALUES REPRESENT ONLY THE INFORMATION RECORDED IN THE FARM AND HOME ACCOUNT BOOKS AND THUS MAY NOT REPRESENT THE TOTAL NONFARM INCOME.

FAMILY LIVING EXPENDITURES ARE PROVIDED FOR THOSE PRODUCERS THAT KEPT A FAMILY LIVING ACCOUNT BOOK. A TEST ON SPECIFIC VARIABLES, SUCH AS FOOD EXPENSES GREATER THAN \$1700.00, CAN BE USED TO DETERMINE WHICH FARMS PROVIDED A COMPLETE FAMILY LIVING SUMMARY. FOR OTHER FARMS, THE DATA MAY NOT BE CORRECT.

A NUMBER OF THE VARIABLES WERE REVISED IN 1976-1980.

015	Medical Care (\$)
016	Contributions (\$)
017	Food (\$)
018	Clothing (\$)
019	Household Operations <sup>2</sup> (\$)
020	Education <sup>2</sup> (\$)
021	Furniture and Household Equipment (\$)
022	Utilities (\$)
023	Auto Expense (\$)
024	Miscellaneous Taxable Nonfarm Income <sup>3</sup> (\$)
025	Non-Taxable Income <sup>3</sup> (\$)
026	Gifts <sup>2</sup> (\$)
027	Personal-Recreation <sup>2</sup> (\$)
028	Life Insurance <sup>2</sup> (\$)
029	Deductible Nonfarm Expense <sup>2</sup> (\$)
030	Wages <sup>4</sup> (\$)
031	Rent and Royalties <sup>4</sup> (\$)
032	Dividends and Interest <sup>4</sup> (\$)
033	Income, Social Security, and Property Tax <sup>3</sup> (\$)
034	House Upkeep and Repairs <sup>2</sup> (\$)

<sup>2</sup>Revised in 1976.

<sup>3</sup>New 1979 and revised 1980.

<sup>4</sup>New/revised 1980.

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
---------------	---------------------	-------------------

LIVESTOCK FEED DISAPPEARANCE:

035	Livestock Feed Disappearance (\$)
-----	-----------------------------------

Represents feed disappearance, both raised and purchased, computed on a dollar basis. Price shifts from beginning and ending inventory will influence this value. The value does not include wheat or cash crops, such as soybeans.

LIVESTOCK AND GRAIN SALES AND PURCHASES:

VARIABLES "036-155" REPRESENT LIVESTOCK-GRAIN SALES AND PURCHASES. FOR EACH SPECIFIC TYPE OF LIVESTOCK OR CROP, FOUR VALUES ARE PROVIDED: TI (K-MAR-105 CODE), UNITS, POUNDS, AND DOLLARS. FOR EXAMPLE, RAISED BEEF SALES WILL HAVE THE FOLLOWING VARIABLES:

036 --	Raised Beef Sales, TI = 11
037 --	Raised Beef Sales, Units
038 --	Raised Beef Sales, Pounds
039 --	Raised Beef Sales, Dollars

THE UNITS AND POUNDS OF A LIVESTOCK-GRAIN SALE OR PURCHASE WERE NOT RECORDED IN MOST FARM ACCOUNT BOOKS; THUS, THESE VALUES WILL BE ZERO FOR MOST OF THE VARIABLES. THE TI (K-MAR-105 CODE) VALUE HAS NO REAL IMPORTANCE.

036	Raised Beef Sales, TI = 11
037	Raised Beef Sales, Units
038	Raised Beef Sales, Pounds
039	Raised Beef Sales, Dollars
040	Raised Dairy Sales, TI = 12
041	Raised Dairy Sales, Units
042	Raised Dairy Sales, Pounds
043	Raised Dairy Sales, Dollars
044	Raised Sheep Sales, TI = 13
045	Raised Sheep Sales, Units
046	Raised Sheep Sales, Pounds
047	Raised Sheep Sales, Dollars
048	Raised Swine Sales, TI = 14
049	Raised Swine Sales, Units
050	Raised Swine Sales, Pounds
051	Raised Swine Sales, Dollars
052	Raised Poultry Sales, TI = 16
053	Raised Poultry Sales, Units
054	Raised Poultry Sales, Pounds
055	Raised Poultry Sales, Dollars

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
056	Raised Grain Sales, TI = 17	
057	Raised Grain Sales, Units	
058	Raised Grain Sales, Pounds	
059	Raised Grain Sales, Dollars	
060	Raised Hay and Forage Sales, TI = 18	
061	Raised Hay and Forage Sales, Units	
062	Raised Hay and Forage Sales, Pounds	
063	Raised Hay and Forage Sales, Dollars	
064	Raised Cash Crop Sales, TI = 19	
065	Raised Cash Crop Sales, Units	
066	Raised Cash Crop Sales, Pounds	
067	Raised Cash Crop Sales, Dollars	
068	Poultry Purchases, TI = 40	
069	Poultry Purchases, Units	
070	Poultry Purchases, Pounds	
071	Poultry Purchases, Dollars	
072	Feed Purchases, TI = 44	
073	Feed Purchases, Units	
074	Feed Purchases, Pounds	
075	Feed Purchases, Dollars	
076	Purchase for Resale, Beef Sales, TI = 61	
077	Purchase for Resale, Beef Sales, Units	
078	Purchase for Resale, Beef Sales, Pounds	
079	Purchase for Resale, Beef Sales, Dollars	
080	Purchase for Resale, Dairy Sales, TI = 62	
081	Purchase for Resale, Dairy Sales, Units	
082	Purchase for Resale, Dairy Sales, Pounds	
083	Purchase for Resale, Dairy Sales, Dollars	
084	Purchase for Resale, Sheep Sales, TI = 63	
085	Purchase for Resale, Sheep Sales, Units	
086	Purchase for Resale, Sheep Sales, Pounds	
087	Purchase for Resale, Sheep Sales, Dollars	
088	Purchase for Resale, Swine Sales, TI = 64	
089	Purchase for Resale, Swine Sales, Units	
090	Purchase for Resale, Swine Sales, Pounds	
091	Purchase for Resale, Swine Sales, Dollars	
092	Purchase for Resale, Grain Future Sales, TI = 66	
093	Purchase for Resale, Grain Future Sales, Units	
094	Purchase for Resale, Grain Future Sales, Pounds	
095	Purchase for Resale, Grain Future Sales, Dollars	
096	Purchase for Resale, Grain-Hay-Forage Sales, TI = 67	
097	Purchase for Resale, Grain-Hay-Forage Sales, Units	
098	Purchase for Resale, Grain-Hay-Forage Sales, Pounds	
099	Purchase for Resale, Grain-Hay-Forage Sales, Dollars	
100	Purchase for Resale, Beef Purchases, TI = 71	
101	Purchase for Resale, Beef Purchases, Units	

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
102	Purchase for Resale, Beef Purchases, Pounds	
103	Purchase for Resale, Beef Purchases, Dollars	
104	Purchase for Resale, Dairy Purchases, TI = 72	
105	Purchase for Resale, Dairy Purchases, Units	
106	Purchase for Resale, Dairy Purchases, Pounds	
107	Purchase for Resale, Dairy Purchases, Dollars	
108	Purchase for Resale, Sheep Purchases, TI = 73	
109	Purchase for Resale, Sheep Purchases, Units	
110	Purchase for Resale, Sheep Purchases, Pounds	
111	Purchase for Resale, Sheep Purchases, Dollars	
112	Purchase for Resale, Swine Purchases, TI = 74	
113	Purchase for Resale, Swine Purchases, Units	
114	Purchase for Resale, Swine Purchases, Pounds	
115	Purchase for Resale, Swine Purchases, Dollars	
116	Purchase for Resale, Grain Future Purchases, TI = 76	
117	Purchase for Resale, Grain Future Purchases, Units	
118	Purchase for Resale, Grain Future Purchases, Pounds	
119	Purchase for Resale, Grain Future Purchases, Dollars	
120	Purchase for Resale, Grain-Hay-Forage Purchases, TI = 77	
121	Purchase for Resale, Grain-Hay-Forage Purchases, Units	
122	Purchase for Resale, Grain-Hay-Forage Purchases, Pounds	
123	Purchase for Resale, Grain-Hay-Forage Purchases, Dollars	
124	Breeding Livestock, Beef Sales, TI = 81	
125	Breeding Livestock, Beef Sales, Units	
126	Breeding Livestock, Beef Sales, Pounds	
127	Breeding Livestock, Beef Sales, Dollars	
128	Breeding Livestock, Dairy Sales, TI = 82	
129	Breeding Livestock, Dairy Sales, Units	
130	Breeding Livestock, Dairy Sales, Pounds	
131	Breeding Livestock, Dairy Sales, Dollars	
132	Breeding Livestock, Sheep Sales, TI = 83	
133	Breeding Livestock, Sheep Sales, Units	
134	Breeding Livestock, Sheep Sales, Pounds	
135	Breeding Livestock, Sheep Sales, Dollars	
136	Breeding Livestock, Swine Sales, TI = 84	
137	Breeding Livestock, Swine Sales, Units	
138	Breeding Livestock, Swine Sales, Pounds	
139	Breeding Livestock, Swine Sales, Dollars	
140	Breeding Livestock, Beef Purchases, TI = 91	
141	Breeding Livestock, Beef Purchases, Units	
142	Breeding Livestock, Beef Purchases, Pounds	
143	Breeding Livestock, Beef Purchases, Dollars	



VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
144	Breeding Livestock, Dairy Purchases, TI = 92	
145	Breeding Livestock, Dairy Purchases, Units	
146	Breeding Livestock, Dairy Purchases, Pounds	
147	Breeding Livestock, Dairy Purchases, Dollars	
148	Breeding Livestock, Sheep Purchases, TI = 93	
149	Breeding Livestock, Sheep Purchases, Units	
150	Breeding Livestock, Sheep Purchases, Pounds	
151	Breeding Livestock, Sheep Purchases, Dollars	
152	Breeding Livestock, Swine Purchases, TI = 94	
153	Breeding Livestock, Swine Purchases, Units	
154	Breeding Livestock, Swine Purchases, Pounds	
155	Breeding Livestock, Swine Purchases, Dollars	

OTHER LIVESTOCK, MISC. INCOME, MACHINERY AND BUILDING PURCHASES:

VARIABLES "156-179" REPRESENT SALES AND PURCHASES OF OTHER LIVESTOCK (HORSES, DOGS, ETC.), MISCELLANEOUS INCOME, AND PURCHASES OF MACHINERY, EQUIPMENT, AND BUILDINGS. FOR EACH SPECIFIC ITEM, TWO VALUES ARE PROVIDED: TI (K-MAR-105 CODE) AND COLLARS. FOR EXAMPLE, RAISED, OTHER LIVESTOCK SALES WILL HAVE THE FOLLOWING TWO VARIABLES:

156--Raised, Other Livestock Sales, TI = 15  
157--Raised, Other Livestock Sales, Dollars

The TI (K-MAR-105 CODE) VALUE HAS NO REAL IMPORTANCE.

156	Raised, Other Livestock Sales, TI = 15
157	Raised, Other Livestock Sales, Dollars
158	Machine Work, TI = 32
159	Machine Work, Dollars
160	Patronage Refunds, TI = 35
161	Patronage Refunds, Dollars
162	Gas Tax Refunds, TI = 37
163	Gas Tax Refunds, Dollars
164	Purchase for Resale, Other Livestock Sales, TI = 65
165	Purchase for Resale, Other Livestock Purchases, Dollars
166	Purchase for Resale, Other Livestock Purchases, TI = 75
167	Purchase for Resale, Other Livestock Purchases, \$\$
168	Breeding Livestock, Other Livestock Sales, TI = 85
169	Breeding Livestock, Other Livestock Sales, Dollars
170	Basis of Machinery, Sold, TI = 90
171	Basis of Machinery, Sold, Dollars

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
172	Breeding Livestock, Other Livestock Purchases, TI - 95	
173	Breeding Livestock, Other Livestock Purchases, \$\$	
174	Motor Vehicle Purchases, TI - 96	
175	Motor Vehicle Purchases, Dollars	
176	Machinery-Equipment Purchases, TI - 97	
177	Machinery-Equipment Purchases, Dollars	
178	Building Purchases, TI - 98	
179	Building Purchases, Dollars	

LIVESTOCK, GRAIN, FORAGE, AND CASH CROP INVENTORIES:

VARIABLES "180-257" REPRESENT THE BEGINNING AND ENDING INVENTORY VALUES FOR LIVESTOCK, GRAIN, FORAGE, CASH CROPS, AND FEED. EACH SPECIFIC ITEM HAS THE FOLLOWING SIX VALUES: BEGINNING INVENTORY OF UNITS, POUNDS, AND DOLLARS; AND ENDING INVENTORY OF UNITS, POUNDS, AND DOLLARS. FOR EXAMPLE, BEEF FEEDERS WILL HAVE THE FOLLOWING SIX VARIABLES:

180--Beginning Inventory, Beef Feeders, Units  
181--Beginning Inventory, Beef Feeders, Pounds  
182--Beginning Inventory, Beef Feeders, Dollars  
183--Ending Inventory, Beef Feeders, Units  
184--Ending Inventory, Beef Feeders, Pounds  
185--Ending Inventory, Beef Feeders, Dollars

FOR BREEDING LIVESTOCK, THE BEGINNING AND ENDING INVENTORY VALUES ARE LOWERED ANNUALLY FROM THE PURCHASE COST UNTIL A SALVAGE VALUE IS OBTAINED. AT THAT TIME, THE VALUE IS HELD CONSTANT FOR APPROXIMATELY FIVE YEARS AND IS NOT CHANGED AS MARKET PRICE FLUCTUATES.

180 Beginning Inventory, Beef Feeders, Units  
181 Beginning Inventory, Beef Feeders, Pounds  
182 Beginning Inventory, Beef Feeders, Dollars  
183 Ending Inventory, Beef Feeders, Units  
184 Ending Inventory, Beef Feeders, Pounds  
185 Ending Inventory, Beef Feeders, Dollars  
186 Beginning Inventory, Beef Breeding Stock, Units  
187 Beginning Inventory, Beef Breeding Stock, Pounds  
188 Beginning Inventory, Beef Breeding Stock,  
Dollars  
189 Ending Inventory, Beef Breeding Stock, Units  
190 Ending Inventory, Beef Breeding Stock, Poundsss  
191 Ending Inventory, Beef Breeding Stock, Dollars  
192 Beginning Inventory, Dairy Breeding Stock, Units  
193 Beginning Inventory, Dairy Breeding Stock,  
Pounds

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
194	Beginning Inventory, Dairy Breeding Stock, Dollars	
195	Ending Inventory, Dairy Breeding Stock, Units	
196	Ending Inventory, Dairy Breeding Stock, Pounds	
197	Ending Inventory, Dairy Breeding Stock, Dollars	
198	Beginning Inventory, Sheep Feeders, Units	
199	Beginning Inventory, Sheep Feeders, Pounds	
200	Beginning Inventory, Sheep Feeders, Dollars	
201	Ending Inventory, Sheep Feeders, Units	
202	Ending Inventory, Sheep Feeders, Pounds	
203	Ending Inventory, Sheep Feeders, Dollars	
204	Beginning Inventory, Sheep Breeding Stock, Units	
205	Beginning Inventory, Sheep Breeding Stock, Pounds	
206	Beginning Inventory, Sheep Breeding Stock, Dollars	
207	Ending Inventory, Sheep Breeding Stock, Units	
208	Ending Inventory, Sheep Breeding stock, Pounds	
209	Ending Inventory, Sheep Breeding Stock, Dollars	
210	Beginning Inventory, Swine Feeders, Units	
211	Beginning Inventory, Swine Feeders, Pounds	
212	Beginning Inventory, Swine Feeders, Dollars	
213	Ending Inventory, Swine Feeders, Units	
214	Ending Inventory, Swine Feeders, Pounds	
215	Ending Inventory, Swine Feeders, Dollars	
216	Beginning Inventory, Swine Breeding Stock, Units	
217	Beginning Inventory, Swine Breeding Stock, Pounds	
218	Beginning Inventory, Swine Breeding Stock, Dollars	
219	Ending Inventory, Swine Breeding Stock, Units	
220	Ending Inventory, Swine Breeding Stock, Pounds	
221	Ending Inventory, Swine Breeding Stock, Dollars	
222	Beginning Inventory, Poultry, Units <sup>5</sup>	
223	Beginning Inventory, Poultry, Pounds <sup>5</sup>	
224	Beginning Inventory, Poultry, Dollars <sup>5</sup>	
225	Ending Inventory, Poultry, Units <sup>5</sup>	
226	Ending Inventory, Poultry, Pounds <sup>5</sup>	
227	Ending Inventory, Poultry, Dollars <sup>5</sup>	
228	Beginning Inventory, Other Livestock-Futures, Units <sup>5</sup>	
229	Beginning Inventory, Other Livestock-Futures, Pounds <sup>5</sup>	
230	Beginning Inventory, Other Livestock-Futures, Dollars <sup>5</sup>	
231	Ending Inventory, Other Livestock-Futures, Units <sup>5</sup>	

---

<sup>5</sup>New/revised 1980.

VARIABLE	#ITEM -- EXPLANATION	DECIMAL FORMAT
232	Ending Inventory, Other Livestock-Futures, Pounds <sup>6</sup>	
233	Ending Inventory, Other Livestock-Futures, Dollars <sup>6</sup>	
234	Beginning Inventory, Grain, Units <sup>6</sup>	
235	Beginning Inventory, Grain, Pounds <sup>6</sup>	
236	Beginning Inventory, Grain, Dollars <sup>6</sup>	
237	Ending Inventory, Grain, Units <sup>6</sup>	
238	Ending Inventory, Grain, Pounds <sup>6</sup>	
239	Ending Inventory, Grain, Dollars <sup>6</sup>	
240	Beginning Inventory, Hay and Forage, Units <sup>6</sup>	
241	Beginning Inventory, Hay and Forage, Pounds <sup>6</sup>	
242	Beginning Inventory, Hay and Forage, Dollars <sup>6</sup>	
243	Ending Inventory, Hay and Forage, Units <sup>6</sup>	
244	Ending Inventory, Hay and Forage, Pounds <sup>6</sup>	
245	Ending Inventory, Hay and Forage, Dollars <sup>6</sup>	
246	Beginning Inventory, Cash Field Crops, Units <sup>6</sup>	
247	Beginning Inventory, Cash Field Crops, Pounds <sup>6</sup>	
248	Beginning Inventory, Cash Field Crops, Dollars <sup>6</sup>	
249	Ending Inventory, Cash Field Crops, Units <sup>6</sup>	
250	Ending Inventory, Cash Field Crops, Pounds <sup>6</sup>	
251	Ending Inventory, Cash Field Crops, Dollars <sup>6</sup>	
252	Beginning Inventory, Feed, Units	
253	Beginning Inventory, Feed, Pounds	
254	Beginning Inventory, Feed, Dollars	
255	Ending Inventory, Feed, Units	
256	Ending Inventory, Feed, Pounds	
257	Ending Inventory, Feed, Dollars	

MISCEL. ASSETS, LAND, MACHINERY-EQUIPMENT, AND BUILDING INVENTORIES:

VARIABLES "258-273" REPRESENT THE BEGINNING AND ENDING INVENTORY DOLLAR VALUES FOR MISCELLANEOUS ASSETS, LAND, MOTOR VEHICLES, MACHINERY-EQUIPMENT, AND BUILDINGS. EACH SPECIFIC ITEM WILL HAVE TWO VALUES: BEGINNING INVENTORY DOLLARS AND ENDING INVENTORY DOLLARS. FOR EXAMPLE, PRODUCTS AND MISC.-LIVESTOCK-CROP SUPPLIES WILL HAVE THE FOLLOWING TWO VARIABLES:

- 258 -- Beginning Inventory, Products and Misc.-  
Livestock-Crop Supplies, Dollars<sup>6</sup>
- 259 -- Ending Inventory, Products and Misc.-  
Livestock, Crop Supplies, Dollars<sup>6</sup>

THE VALUE OF MOTOR VEHICLES, MACHINERY-EQUIPMENT, AND BUILDINGS REPRESENTS THE REMAINING BASIS (UNDEPRECIATED) FROM THE DEPRECIATION SCHEDULE.

---

<sup>6</sup>New/revised 1980.

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
	LAND IS REVALUED EVERY FIVE YEARS AND THEN HELD AT A CONSTANT VALUE. LAND WAS REVALUED IN 1973, 1975, 1980, AND 1985. ON A GIVEN FARM, LAND VALUE MAY VARY FROM YEAR TO YEAR BECAUSE OF LAND SALES AND/OR PURCHASES.	
258	Beginning Inventory, Products and Misc. - Livestock-Crop Supplies, Dollars <sup>7</sup>	
259	Ending Inventory, Products and Misc. - Livestock-Crop Supplies, Dollars <sup>7</sup>	
260	Beginning Inventory, Fuel and Oil, Dollars	
262	Beginning Inventory, Miscellaneous Assets, Dollars	
263	Ending Inventory, Miscellaneous Assets, Dollars	
264	Beginning Inventory, Motor Vehicles, Dollars	
265	Ending Inventory, Motor Vehicles, Dollars	
266	Beginning Inventory, Machinery-Equipment, Dollars	
267	Ending Inventory, Machinery-Equipment, Dollars	
268	Beginning Inventory, Buildings, Dollars	
269	Ending Inventory, Buildings, Dollars	
270	Beginning Inventory, Owned Land, Dollars	
271	Ending Inventory, Owned Land, Dollars	
272	Beginning Inventory, Cash and Misc., Dollars	
273	Ending Inventory, Cash and Misc., Dollars	

FARM INCOME ITEMS, ACCRUAL:

274	Beef, Accrual
275	Dairy, Accrual
276	Sheep, Accrual
277	Swine, Accrual
278	Poultry, Accrual
279	Other Livestock, Futures, Accrual
280	Milk Product Sales
281	Egg Sales
282	Grain, Accrual
283	Hay and Forage, Accrual
284	Cash Crops, Accrual
285	Other Product Sales (Fruits, Wool, Hides, Other) <sup>7</sup>
286	Product Inventory Change
287	Government Payments
288	Other Income <sup>7</sup>

<sup>7</sup>New/revised 1980.

VARIABLE		DECIMAL
#	ITEM -- EXPLANATION	FORMAT

FARM CASH OPERATING EXPENSES:

289	Hired Labor
290	Machinery Repairs, Irrig. Expense
291	Building Repairs
292	Interest paid
293	Feed Purchased
294	Seed and Crop Insurance
295	Fertilizer and Lime
296	Machine Hire
297	Organization Fees, Misc., Etc.
298	Vet-Medicine-Drugs
299	Crop Storage-Marketing
300	Livestock marketing and Breeding
301	Gas-Fuel-Oil
302	Real Estate Taxes
303	Personal Property Taxes
304	General Farm Insurance
305	Telephone and Electricity
306	Cash Farm Rent
307	Herbicide and Insecticide
308	Conservation
309	Auto Expense
310	Expense Inventory Change

DEPRECIATION:

311	Motor Vehicle Depreciation
312	Machinery-Equipment Depreciation
313	Building Depreciation

UNPAID FAMILY LABOR AND NET WORTH OPPORTUNITY COST CHANGE:

VARIABLES "314-316: REPRESENT AN OPPORTUNITY COST CHARGE ON NET WORTH AND FAMILY LABOR. THE OPPORTUNITY COST INTEREST AND LABOR RATES WERE:

INTEREST RATES:

1973-81-- 6.0%  
1982- 10.0%

LABOR RATES/OPERATOR:

1973-79-- \$ 7,500  
1980-81-- \$10,000  
1982- -- \$15,000

314	Interest Charge on Equity in Current and Intermediate Assets
315	Interest Charge on Equity in Long-Term Assets (Land Buildings)
316	Charge for Unpaid Family Labor

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
---------------	---------------------	-------------------

RATE OF RETURNS AND NET WORTH CHANGE:

VARIABLES "317-319" REPRESENT A RESIDUAL RETURN TO CAPITAL MANAGED AND NET WORTH, AND THE CHANGE IN NET WORTH. THE RATE OF RETURNS TO CAPITAL MANAGED AND NET WORTH ARE OBTAINED AFTER REMOVING A CHARGE FOR OPERATOR LABOR EQUAL TO \$7,500 FOR 1973-79, \$10,000 FOR 1980-81, AND \$15,000 FOR 1982 TO THE PRESENT AND 10% OF GROSS FARM INCOME FOR A MANAGEMENT CHARGE.

317	Rate of Return on Capital Managed (%)	9 (9).99
318	Rate of Return on Net Worth (%)	9 (9).99
319	Change in Net Worth (\$)	9 (9).99

CURRENT-INTERMEDIATE ASSETS, LAND VALUE, AND CAPITAL MANAGED:

VARIABLES "320-323" REPRESENT FARM SIZE. CURRENT-INTERMEDIATE ASSETS AND OWNED LAND VALUE ARE THE AVERAGE OF THE BEGINNING AND ENDING INVENTORY VALUES. CURRENT-INTERMEDIATE ASSETS REPRESENT THE VALUE OF ALL ASSETS EXCEPT LAND AND BUILDINGS. RENTED LAND VALUE REPRESENTS THE VALUE AT THE END OF THE YEAR. TOTAL CAPITAL MANAGED EQUALS TOTAL ASSETS PLUS VALUE OF RENTED LAND. THE VALUE OF BUILDINGS CAN BE OBTAINED AS FOLLOWS: TOTAL CAPITAL MANAGED MINUS RENTED LAND VALUE MINUS OWNED LAND VALUE MINUS CURRENT-INTERMEDIATE ASSETS.

320	Current-Intermediate Assets
321	Owned Land Value
322	Rented Land Value
323	Total Capital Managed

ACRES--TOTAL, OWNED, AND RENTED:

VARIABLES "324-341" REPRESENT TOTAL ACRES OPERATED, BOTH OWNED AND RENTED, WITH BREAKDOWN BY IRRIGATED AND DRYLAND CROPS, PASTURE, AND FARMSTEAD-WASTE. EACH SPECIFIC ITEM WILL HAVE THREE VALUES: TOTAL, OWNED, AND RENTED. FOR EXAMPLE, ACRES OPERATED WILL HAVE THE FOLLOWING THREE VARIABLES:

	324--Acres Operated, Total
	325--Acres Operated, Owned
	326--Acres Operated, Rented
324	Acres Operated, Total
325	Acres Operated, Owned
326	Acres Operated, Rented
327	Irrigated Crop Acres, Total
328	Irrigated Crop Acres, Owned
329	Irrigated Crop Acres, Rented

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
330	Dryland Crop Acres, Total	
331	Dryland Crop Acres, Owned	
332	Dryland Crop Acres, Rented	
333	Total Crop Acres, Total	
334	Total Crop Acres, Owned	
335	Total Crop Acres, Rented	
336	Pasture Acres, Total	
337	Pasture Acres, Owned	
338	Pasture Acres, Rented	
339	Farmstead-Waste, Total	
340	Farmstead-Waste, Owned	
341	Farmstead-Waste, Rented	

#### CROP MACHINERY INVESTMENT AND COSTS:

VARIABLES "342-343" REPRESENT TOTAL CROP MACHINERY INVESTMENT AND CROP MACHINERY COSTS. CROP MACHINERY INVESTMENT IS EQUAL TO THE AVERAGE OF THE BEGINNING AND ENDING REMAINING BASIS (UNDEPRECIATED VALUE) VALUES FOR MOTOR VEHICLES AND MACHINERY-EQUIPMENT USED FOR CROP PRODUCTION.

CROP MACHINERY COSTS EQUALS: (CROP SHARE OF MACHINERY REPAIRS, GAS-FUEL-OIL, FARM AUTO EXPENSE, MOTOR VEHICLE DEPRECIATION, AND MACHINERY-EQUIPMENT DEPRECIATION) PLUS CROP MACHINE HIRE EXPENSE PLUS OPPORTUNITY INTEREST CHARGE ON CROP MACHINERY INVESTMENT MINUS MACHINE WORK INCOME.

342	Total Crop Machinery Investment
343	Total Crop Machinery Costs

#### LIVESTOCK NUMBERS, WEANINGS, NUMBER HANDLED, AND PRODUCTION

344	Beef, Number Cows--Avg. No./Year	
345	Sheep, Number Ewes--Avg. No./Year	
346	Swine, Number Litters--Avg. No./Year	
347	Dairy, Number Cows--Avg. No./Year	
348	Poultry, Number Head--Avg. No./Year	
349	Beef, Number Calves Weaned	
350	Sheep, Number Lambs Weaned	
351	Swine, Number Pigs Weaned	
352	Beef Feeders, Avg. Number Head Handled	
353	Sheep Feeders, Avg. Number Head Handled	
354	Swine Feeders, Avg. Number Head Handled	
355	Beef, Percent Calf Crop	9 (3).99
356	Sheep, Percent Lamb Crop	9 (3).99
357	Swine, Pigs Weaned Per Litter	9 (3).99



VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
358	Dairy, Milk Receipts	
359	Poultry, Egg Receipts	
360	Beef, Accrual Dollar Production	
361	Sheep, Accrual Dollar Production	
362	Swine, Accrual Dollar Production	

CROP PRODUCTION--ACRES:

363	Wheat, Total Irrigated Acres	9 (4).9
364	Wheat, Owned Irrigated Acres	9 (4).9
365	Wheat, Rented Irrigated Acres	9 (4).9
366	Wheat, Total Dryland Acres	9 (4).9
367	Wheat, Owned Dryland Acres	9 (4).9
368	Wheat, Rented Dryland Acres	9 (4).9
369	Corn, Total Irrigated Acres	9 (4).9
370	Corn, Owned Irrigated Acres	9 (4).9
371	Corn, Rented Irrigated Acres	9 (4).9
372	Corn, Total Dryland Acres	9 (4).9
373	Corn, Owned Dryland Acres	9 (4).9
374	Corn, Rented Dryland Acres	9 (4).9
375	Grain Sorghum, Total Irrigated Acres	9 (4).9
376	Grain Sorghum, Owned Irrigated Acres	9 (4).9
377	Grain Sorghum, Rented Irrigated Acres	9 (4).9
378	Grain Sorghum, Total Dryland Acres	9 (4).9
379	Grain Sorghum, Owned Dryland Acres	9 (4).9
380	Grain Sorghum, Rented Dryland Acres	9 (4).9
381	Soybeans, Total Irrigated Acres	9 (4).9
382	Soybeans, Owned Irrigated Acres	9 (4).9
383	Soybeans, Rented Irrigated Acres	9 (4).9
384	Soybeans, Total Dryland Acres	9 (4).9
385	Soybeans, Owned Dryland Acres	9 (4).9
386	Soybeans, Rented Dryland Acres	9 (4).9
387	Sugar Beets, Total Irrigated Acres	9 (4).9
388	Sugar Beets, Owned Irrigated Acres	9 (4).9
389	Sugar Beets, Rented Irrigated Acres	9 (4).9
390	Sugar Beets, Total Dryland Acres	9 (4).9
391	Sugar Beets, Owned Dryland Acres	9 (4).9
392	Sugar Beets, Rented Dryland Acres	9 (4).9
393	Alfalfa Hay, Total Irrigated Acres	9 (4).9
394	Alfalfa Hay, Owned irrigated Acres	9 (4).9
395	Alfalfa Hay, Rented Irrigated Acres	9 (4).9
396	Alfalfa Hay, Total Dryland Acres	9 (4).9
397	Alfalfa Hay, Owned Dryland Acres	9 (4).9
398	Alfalfa Hay, Rented Dryland Acres	9 (4).9
399	Silage, Total Irrigated Acres	9 (4).9
400	Silage, Owned Irrigated Acres	9 (4).9
401	Silage, Rented Irrigated Acres	9 (4).9

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
402	Silage, Total Dryland Acres	9 (4).9
403	Silage, Owned Dryland Acres	9 (4).9
404	Silage, Rented Dryland Acres	9 (4).9
405	Other Grain, Total Irrigated Acres	9 (4).9
406	Other Grain, Owned Irrigated Acres	9 (4).9
407	Other Grain, Rented Irrigated Acres	9 (4).9
408	Other Grain, Total Dryland Acres	9 (4).9
409	Other Grain, Owned Dryland Acres	9 (4).9
410	Other Grain, Rented Dryland Acres	9 (4).9
411	Other Hay, Total Irrigated Acres	9 (4).9
412	Other Hay, Owned Irrigated Acres	9 (4).9
413	Other Hay, Rented Irrigated Acres	9 (4).9
414	Other Hay, Total Dryland Acres	9 (4).9
415	Other Hay, Owned Dryland Acres	9 (4).9
416	Other Hay, Rented Dryland Acres	9 (4).9
417	Other Cash Crops, Total Irrigated Acres	9 (4).9
418	Other Cash Crops, Owned Irrigated Acres	9 (4).9
419	Other Cash Crops, Rented Irrigated Acres	9 (4).9
420	Other Cash Crops, Total Dryland Acres	9 (4).9
421	Other Cash Crops, Owned Dryland Acres	9 (4).9
422	Other Cash Crops, Rented Dryland Acres	9 (4).9

CROPS -- PRODUCTION:

423	Wheat, Owned Irrigated Production	9 (7).99
424	Wheat, Rented Irrigated Production	9 (7).99
425	Wheat, Owned Dryland Production	9 (7).99
426	Wheat, Rented Dryland Production	9 (7).99
427	Corn, Owned Irrigated Production	9 (7).99
428	Corn, Rented Irrigated Production	9 (7).99
429	Corn, Owned Dryland Production	9 (7).99
430	Corn, Rented Dryland Production	9 (7).99
431	Grain Sorghum, Owned Irrigated Production	9 (7).99
432	Grain Sorghum, Rented Irrigated Production	9 (7).99
433	Grain Sorghum, Owned Dryland Production	9 (7).99
434	Grain Sorghum, Rented Dryland Production	9 (7).99
435	Soybeans, Owned Irrigated Production	9 (7).99
436	Soybeans, Rented Irrigated Production	9 (7).99
437	Soybeans, Owned Dryland Production	9 (7).99
438	Soybeans, Rented Dryland Production	9 (7).99

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
439	Sugar Beets, Owned Irrigated Production	9 (7).99
440	Sugar Beets, Rented Irrigated Production	9 (7).99
441	Sugar Beets, Owned Dryland Production	9 (7).99
442	Sugar Beets, Rented Dryland Production	9 (7).99
443	Alfalfa Hay, Owned Irrigated Production	9 (7).99
444	Alfalfa Hay, Rented Irrigated Production	9 (7).99
445	Alfalfa Hay, Owned Dryland Production	9 (7).99
446	Alfalfa Hay, Rented Dryland Production	9 (7).99
447	Silage, Owned Irrigated Production	9 (7).99
448	Silage, Rented Irrigated Production	9 (7).99
449	Silage, Owned Dryland Production	9 (7).99
450	Silage, Rented Dryland Production	9 (7).99

#### GROSS CROP VALUE AND PRODUCTION COSTS:

VARIABLES "451-453" REPRESENT GROSS VALUE OF CROPS, FERTILIZER COST, AND CROP PRODUCTION COSTS. GROSS VALUE OF CROPS REPRESENTS THE TOTAL VALUE OF PRODUCTION FROM CROPLAND, INCLUDING THE LANDLORD'S. THE VARIABLE INCLUDES INSURANCE PROCEEDS AND GOVERNMENT PAYMENTS.

FERTILIZER COST REPRESENTS THE OPERATOR'S SHARE OF FERTILIZER.

CROP PRODUCTION COSTS ARE DEFINED AS: TOTAL CROP EXPENSE PLUS OPPORTUNITY COST CHARGE ON MOTOR VEHICLES, MACHINERY-EQUIPMENT, AND BUILDINGS MINUS UNPAID OPERATOR AND FAMILY LABOR MINUS INTEREST PAID MINUS CASH RENT MINUS OPPORTUNITY COST CHARGE ON NET WORTH MINUS MACHINE WORK INCOME.

451	Gross Value of Crops	9 (9).99
452	Fertilizer Cost	9 (9).99
453	Crop Production Costs	9 (9).99

#### CURRENT AND LONG-TERM LOANS AND ACCOUNTS RECEIVABLE:

VARIABLES "454-467" PROVIDE FINANCIAL INFORMATION ON BEGINNING AND ENDING INVENTORY VALUES OF LOANS AND ACCOUNTS RECEIVABLE. CURRENT, INTERMEDIATE, AND LONG-TERM LOANS AND ACCOUNTS RECEIVABLE ARE DEFINED AS:

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
---------------	---------------------	-------------------

CURRENT--LESS THAN ONE YEAR  
INTERMEDIATE--ONE TO SEVEN YEARS  
LONG-TERM--OVER SEVEN YEARS

CURRENT LOANS DO NOT INCLUDE THE VALUE OF CURRENT YEAR'S  
PAYMENTS OF INTERMEDIATE AND LONG-TERM LOANS.

454	Current Loans, Beginning Inventory	9 (9).99
455	Current Loans, Ending Inventory	9 (9).99
456	Long-Term Loans, Beginning Inventory	9 (9).99
457	Long-Term Loans, Ending Inventory	9 (9).99
458	Current Accts. Receivable, Beginning Inventory	9 (9).99
459	Current Accts. Receivable, Ending Inventory	9 (9).99
460	Long-Term Accts. Receivable, Beginning Inventory	9 (9).99
461	Long-Term Accts. Receivable, Ending Inventory	9 (9).99
462	Current-Intermediate Assets to Current-Intermediate Loans Ratio, Beginning Inventory	9 (9).99
463	Current-Intermediate Assets to Current-Intermediate Loans Ratio, Ending Inventory	9 (9).99
464	Total Loans to Net Worth Ratio,	9 (9).99
465	Total Loans to Net Worth Ratio, Ending	9 (9).99
466	Capital Accounts, Beginning Inventory <sup>8</sup>	9 (9).99
467	Capital Accounts, Ending Inventory <sup>8</sup>	9 (9).99

#### CROP LABOR AND NET WORTH PERCENTAGES:

VARIABLES "468-470" PROVIDE SPECIFIC PERCENTAGE VALUES THAT  
ALLOW FOR THE TOTAL DIVISION OF ALL EXPENSES BETWEEN THE CROP  
AND LIVESTOCK SEGMENTS OF THE BUSINESS WHEN USED WITH THE  
PERCENTAGES STORED ON THE MAIN FARM HEADERS. THE "MAIN FARM  
HEADERS" ARE A RAW DATA FILE.

468	Crop Labor Percentage <sup>9</sup>	9 (9).99
469	Crop Current-Intermediate Asset Equity Opportunity Cost Charge Percent <sup>9</sup>	9 (9).99
470	Crop Long-Term Asset Equity Opportunity Cost Charge Percent <sup>9</sup>	9 (9).99

<sup>8</sup>New/revised 1980.

<sup>9</sup>Revised 1982.

VARIABLE #	ITEM -- EXPLANATION	DECIMAL FORMAT
---------------	---------------------	-------------------

NONFARM ASSETS AND LOANS; INTERMEDIATE LOANS AND ACCTS. RECEIVABLE:

VARIABLES "471-478" PROVIDE FINANCIAL INFORMATION ON BEGINNING AND ENDING INVENTORY VALUES FOR NONFARM ASSETS AND LOANS, AND INTERMEDIATE LOANS AND ACCOUNT RECEIVABLES.

471	Nonfarm Assets, Beginning Inventory <sup>10</sup>	
472	Nonfarm Assets, Ending Inventory <sup>10</sup>	
473	Intermediate Loans, Beginning Inventory <sup>10</sup>	
474	Intermediate Loans, Ending Inventory <sup>10</sup>	
475	Nonfarm Loans, Beginning Inventory <sup>10</sup>	
476	Nonfarm Loans, Ending Inventory <sup>10</sup>	
477	Intermediate Accts. Receivable, Beginning Inv. <sup>10</sup>	
478	Intermediate Accts. Receivable, Ending Inv. <sup>10</sup>	

HARVESTED ACRES:

VARIABLE "479" PROVIDES INFORMATION ON HARVESTED ACRES. THIS VARIABLE, IN CONJUNCTION WITH TOTAL CROP ACRES, CAN BE USED TO DETERMINE THE AMOUNT OF CROPLAND THAT IS SUMMER FALLOWED, LEFT IDLE, OR IN GOVERNMENT PROGRAMS.

479	Harvested Acres <sup>10</sup>	9 (6).9
-----	-------------------------------	---------

SPECIAL FARM AND NONFARM INCOME AND EXPENSE:

480	Nontaxable and Capital Receipts <sup>11</sup>	
481	Income Tax and Capital Distributions <sup>11</sup>	
482	Motor Vehicle-Machinery Sales <sup>11</sup>	
483	Building Sales <sup>11</sup>	

---

<sup>10</sup>New 1977.

<sup>11</sup>New 1979 and revised 1980.

# APPENDIX TABLE A

## FARM TYPE CODES

<u>CODE</u>	<u>FARM TYPE</u>	<u>CODE</u>	<u>FARM TYPE</u>
01	Cash Crop Dryland	23	Cash Crop - Sow & Litter (Market)
02	Cash Crop Irrigated	24	Cash Crop - Sow & Litter (Feeder Pig)
03	Cash Crop Irrigated Beets	25	Cash Crop - (Feeder Pig)
04	Stock-Ranch Cowherd	26	Cash Crop - Ewe and Lamb
05	Cowherd	27	Cash Crop - Feeder Lamb
06	Dairy	28	Cash Crop - Beef (Non-Cowherd)
07	Sow & Litter (Market)	29	Cash Crop - Laying Hen
08	Sow & Litter (Feeder Pig)	30	Beef - Swine
09	Feeder Pig	31	Beef - Laying Hen
10	Ewe and Lamb	32	Dairy - Swine
11	Feeder Lamb	33	Dairy - Beef
12	Laying Hen	34	Dairy - Laying Hen
13		35	General Farm
14		36	Cowherd - Backgrounding
15	Backgrounding	37	Cowherd - Finishing
16		38	Cowherd - Background-Finishing
17		39	Cash Crop - Backgrounding
18	Beef-Finishing	40	Cash Crop - Finishing
19	Background-Finish	41	Cash Crop - Backgrounding - Finishing
20		42	Cash Crop - Beef
21	Cash Crop - Cowherd	43	Cash Crop - Swine
22	Cash Crop - Dairy	44	Cash Crop - Sheep

# APPENDIX TABLE A

## RATIO FORMULAS\*

- 
- (1)  $\frac{\text{A grass operated}}{\text{A crops operated}}$
  - (2)  $\frac{\text{TCP}}{\text{TP}}$
  - (3)  $\frac{\text{dryland crop P}}{\text{TCP}}$
  - (4)  $\frac{\text{beef cow P}}{\text{TP}}$
  - (5)  $\frac{\text{dairy P}}{\text{TP}}$
  - (6)  $\frac{\text{swine litters P}}{\text{TP}}$
  - (7)  $\frac{\text{ewe P}}{\text{TP}}$
  - (8)  $\frac{\text{laying hen P}}{\text{TP}}$
  - (11)  $\frac{\text{beef background P + beef grazing P}}{\text{TP}}$
  - (14)  $\frac{\text{beef finish P + beef custom feeding P}}{\text{TP}}$
  - (15)  $\frac{\text{beef background P + beef grazing P + beef finish P + beef custom feeding P}}{\text{TP}}$
  - (17)  $\frac{\text{sugar beet P}}{\text{TP}}$
  - (18)  $\frac{\text{feeder pig raised P}}{\text{feeder pig purchased P + feeder pig raised}}$
  - (19)  $\frac{\text{ewe P}}{\text{feeder lamb purchased P + feeder lamb raised}}$
  - (20)  $\frac{\text{feeder pig P plus feeder pig purchased P}}{\text{TP}}$

APPENDIX TABLE A  
RATIO FORMULAS\* (Cont.)

---

(21)  $\frac{\text{ewe P plus feeder lamb purchases P}}{\text{TP}}$

(22)  $\frac{\text{total beef P}}{\text{TP}}$

(23)  $\frac{\text{total hog P}}{\text{TP}}$

(25) number beef cows - units of 5110 (1) Farm Typing Card.

(26) number dairy cows - units of 512 (1) Farm Typing Card.

(27) number litters - units of 514 (1) Farm Typing Card.

(28) number ewes - units of 513 (1) Farm Typing Card.

(29) number laying hens - units of 516 (1) Farm Typing Card.

---

\*Calculated from Production Man Work Units (PMWU) except (1).

PMWU's = P

Acres = A

Total crop PMWU's = TCP

Total PMWU's = TP



# APPENDIX TABLE A

## METHODS

---

IF (2) GTE 0.35 AND (4) GTE 0.35 and (25) GT 10.0	21 = cash crop - cowherd
IF (2) GTE 0.35 and (5) GTE 0.35 and (26) GT 10.0	22 = cash crop - dairy
IF (2) GTE 0.35 and (6) GTE 0.35 and (18) GTE .55	23 = cash crop - sow & litter (market)
IF (2) GTE 0.35 and (6) GTE 0.35 and (18) LT .55 and (20) LT 0.35	24 = cash crop - sow & litter (feeder pig)
IF (2) GTE 0.35 and (18) LT .55 and (20) GTE 0.35	25 = cash crop - feeder pig
IF (2) GTE 0.35 and (7) GTE 0.35 and (19) GTE .55	26 = cash crop - ewe and lamb
IF (2) GTE 0.35 and (21) GTE 0.35 and (19) LT .55	27 = cash crop - feeder lamb
	28 = cash crop - beef (non-cowherd)
IF (2) GTE 0.35 and (8) GTE 0.35	29 = cash crop - laying hen
IF (22) GTE 0.35 and (23) GTE 0.35	30 = beef - swine
IF (22) GTE 0.35 and (8) GTE 0.35	31 = beef - laying hen
IF (23) GTE 0.35 and (5) GTE 0.35	32 = dairy - swine
IF (5) GTE 0.35 and (22) GTE 0.35	33 = dairy - beef
IF (5) GTE 0.35 and (8) GTE 0.35	34 = dairy - laying hen
IF (4) GTE 0.35 and (11) GTE 0.35	36 = cowherd - backgrounding
IF (4) GTE 0.35 and (14) GTE 0.35	37 = cowherd - finishing
IF (4) GTE 0.35 and (15) GTE 0.35	38 = cowherd - background-finishing
IF (2) GTE 0.35 and (11) GTE 0.35	39 = cash crop - backgrounding
IF (2) GTE 0.35 and (14) GTE 0.35	40 = cash crop - finishing
IF (2) GTE 0.35 and (15) GTE 0.35	41 = cash crop - backgrounding- finishing

# APPENDIX TABLE A

## METHODS (Cont.)

---

IF (2) GTE 0.35 and 922) GTE 0.35	42 - cash crop - beef
IF (2) GTE 0.35 and (23) GTE 0.35	43 - cash crop - swine
IF (2) GTE 0.35 and (21) GTE 0.35	44 - cash crop - sheep
IF (2) GTE 0.65 and (3) GTE 0.40	1 - cash crop dryland
IF (2) GTE 0.65 and (3) GTE 0.40 and (17) LT .5	2 - cash crop irrigated
IF (2) GTE 0.65 and (3) LT 0.40 and (17) GTE .5	3 - cash crop irrigated beets
IF (4) GTE 0.65 and (25) GT 10.0 and (1) GTE 5.0	4 - stock-ranch cowherd
IF (4) GTE 0.65 and (25) GT 10.0 and (1) LT 5.0	5 - cowherd
IF (5) GTE 0.65 and (26) GT 20.0	6 - dairy
IF (6) GTE 0.65 and 927) GT 10.0 and (18) LT .55	7 - sow & litter (market)
IF (6) GTE 0.65 and (27) GT 10.0 and (18) LT .55	8 - sow & litter (feeder pig)
IF (18) GTE .55 and 920) GTE 0.65	9 - feeder pig
IF (21) GTE 0.65 and (28) GT 50.0 and (19) GTE .55	10 - ewe and lamb
IF (21) GTE 0.65 and (19) LT .55	11 - feeder lamb
IF (8) GTE 0.65 and (29) GTE 500.0	12 - laying hen
	13 -
	14 -
IF (11) GTE 0.65	15 - backgrounding
	16 -
	17 -

# APPENDIX TABLE A

## METHODS (Cont.)

---

IF (14) GTE 0.65	18 - beef-finishing
IF (15) GTE 0.65	19 - background-finish
	20 -
All farms not meeting above	35 - general farm

SECTION II  
WHOLE-FARM FARM MANAGEMENT DATA BANK  
K-MAR-105 DIRECTORY AND RAW DATA FILE  
-SOURCE OF VARIABLES-

INTRODUCTION  
WHOLE-FARM MANAGEMENT DATA BANK  
K-MAR-105 DIRECTORY AND RAW DATA FILE  
SOURCE OF VARIABLES

Section II outlines in-depth the original source of the variables stored on the Farm Management Whole-Farm Raw Data Bank and SAS Data Files. As background information, the Raw and SAS Data Files contain approximately 485 variables per farm for 2,300 to 3,000 farms for the years 1973 through 1989. Subsequent years' data will be added to the raw data file when made available. These data files store data for farms enrolled in the Kansas Farm Management Association program. For each farm, the variable values are on a per operator basis, except for "Gross Value of Crops," which includes the landlord's share of the value of crop production.

Section II should be studied if the user has any questions relating to the original source and/or definition of specific variables stored on the SAS or Raw Data Files. For the information to be stored on either file, a farm's data must first be processed through the K-Mar-105 Year-End Whole-Farm Business and Enterprise Analysis program. The data for this computer program are derived from the input pages of the Kansas Farm Management Association Account Book.

In Section II, the "ATIG" represents the Account, Transaction, Item, and General codes of the K-MAR-105 Code System. Each record transaction listed in the account book input pages includes a specific "ATIG" code. For example, the "ATIG" for raised beef sales is "0110". The Section Numbers in the documentation represent specific sections in the Year-End Whole-Farm Business and Enterprise Analysis printout. For example, "Gross Value of Crops" is obtained from Section 38 of the analysis printout.

The SAS and Raw Data Files provide a means whereby extension, instruction, and research personnel can easily access the data bank to obtain information for numerous projects. The accuracy of a data bank user's analysis will depend on the complete understanding of the original source of the data and the definition of each variable. This document can provide the necessary background information required by the user.

WHOLE-FARM  
FARM MANAGEMENT DATA BANK

K-MAR-105 DIRECTORY AND RAW DATA FILE

Source of Variables from Year-End Business Analysis  
and Account Book

DIRECTORY FILE:

<u>TABLE</u>	<u>ITEM</u>	<u>LENGTH</u>
00	01 Association No.	1
	02 County No.	2
	03 Farm Number	5
	04 Retrieval ID	4
	05 Year of Data	2
	06 Farm Type	2
	07 Crop Acres	4
	08 PMWU (Production Man Work Units)	5
	09 Capital Managed	6
	10 Gross Farm Income	6
	11 Net Farm Income	6
	12 Farm Summary Usage	1
	13 Family Living Summary Usage	1

RETRIEVAL FILES:

01	BUSINESS TYPE-OPERATOR NUMBERS - AGE	<u>LENGTH</u>
	01 Assn/Co/Farm #	8
	02 Year of Data	2
	03 Business Organization Type	1
	04 Tax Code	1
	05 # Operators	2
	06 # Men	2
	07 # Family Dependents	2
	08 Operator's Age	2
	09 Oldest Child's Age	2
02	FAMILY LIVING EXPENSES (\$)	<u>ATIG</u>
	01 Medical Care	0041, 0042, 0044
	02 Contributions	0043
	03 Food	0051
	04 Clothing	0052
	05 Household Operations <sup>1</sup>	0053, 0045
	06 Education <sup>1</sup>	0055
	07 Furniture & Household Equipment	0056
	08 Utilities (Non-Farm)	007
	09 Auto Expense (Non-Farm)	008

---

<sup>1</sup>Revised 1976.

<u>TABLE</u>	<u>ITEM</u>	<u>ATIG</u>
03	TAXES-FAMILY-OUTSIDE INCOME & EXPENSE (\$)	
	01 Misc. Taxable Non-Farm Income <sup>2</sup>	0010, 0015, 0016, 0018
	02 Non-Taxable Income <sup>2</sup>	0032-0038
	03 Gifts <sup>3</sup>	0057
	04 Personal-Recreation <sup>3</sup>	0054
	05 Life Insurance <sup>3</sup>	0058
	06 Deductible Non-Farm Expense <sup>3</sup>	010
	07 Wages <sup>4</sup>	0011, 0019
	08 Rent and Royalties <sup>4</sup>	0012, 0014
	09 Dividends and Interest <sup>4</sup>	0013, 0017
	10 Income, Social Security, & Property Tax <sup>2</sup>	0046-0049
	11 House Upkeep and Repairs <sup>3</sup>	0059
04	01 LIVESTOCK FEED DISAPPEARANCE (\$)	Section 35
05	LIVESTOCK AND GRAIN SALES AND PURCHASES (TI, Units, Pounds, Dollars)	<u>ATI</u>
	Raised Beef Sales	011
	Raised Dairy Sales	012
	Raised Sheep Sales	014
	Raised Swine Sales	014
	Raised Poultry Sales	016
	Raised Grain Sales	017
	Raised Hay & Forage Sales	018
	Raised Cash Crop Sales	019
	Poultry Purchases	040
	Feed Purchases	044
	Purchase for Resale, Beef Sales	061
	Purchase for Resale, Dairy Sales	062
	Purchase for Resale, Sheep Sales	063
	Purchase for Resale, Swine Sales	064
	Purchase for Resale, Grain Futures Sales	066
	Purchase for Resale, Grain-Hay-Forage Sales	067
	Purchase for Resale, Beef Purchases	071
	Purchase for Resale, Dairy Purchases	072
	Purchase for Resale, Sheep Purchases	073
	Purchase for Resale, Swine Purchases	074
	Purchase for Resale, Grain Futures Purchase	076
	Purchase for Resale, Grain-Hay-Forage Purchases	077
	Breeding Livestock, Beef Sales	081
	Breeding Livestock, Dairy Sales	082
	Breeding Livestock, Sheep	083
	Breeding Livestock, Swine Sales	084

---

<sup>2</sup>New 1979 and revised 1980.

<sup>3</sup>Revised 1976.

<sup>4</sup>New/revised 1980.

TABLEITEM

	Breeding Livestock, Beef Purchases	091
	Breeding Livestock, Dairy Purchases	092
	Breeding Livestock, Sheep Purchases	093
	Breeding Livestock, Swine Purchases	094
06	OTHER LIVESTOCK, MISCEL. INCOME, AND MACHINERY & BUILDING PURCHASES (TI, \$)	<u>ATI</u>
	Raised, Other Livestock	015
	Machine Work	032
	Patronage Refunds	035
	Gas Tax Refunds	037
	Purchase for Resale, Other Livestock Sales	065
	Purchase for Resale, Other Livestock Purchases	075
	Breeding Stock, Other Livestock Sales	085
	Basis of Machinery Sold <sup>5</sup>	090
	Breeding Stock, Other Livestock Purchases	095
	Motor Vehicle Purchases	096
	Machinery Purchases	097
	Building Purchases	098
07	LIVESTOCK, GRAIN, FORAGE, AND CASH CROP INVENTORIES-- BEGINNING & ENDING (Units, Pounds, Dollars) <u>ATIC</u>	
	Beef Feeders	561, 571, 5110-5116, 5119
	Beef Breeding Stock	581, 591, 5117, 5118
	Dairy Breeding Stock	512, 562, 572, 582, 592
	Sheep Feeders	653, 573, 5130-5136, 5139
	Sheep Breeding Stock	583, 593, 5137, 5138
	Swine Feeders	564, 574, 5140-5146, 5149
	Swine Breeding Stock	584, 594, 5147, 5148
	Poultry <sup>5</sup>	516, 540
	Grain	5170-5178, 5670-5676, 566, 576, 5770-5776
	Hay and Forage <sup>5</sup>	518, 5677, 5678, 5777, 5778
	Cash Field Crops <sup>5</sup>	569, 579, 5190-5198, 5679, 5779
	Feed	544
08	MISC. ASSETS, LAND, MACHINERY-EQUIPMENT, AND BUILDING INVENTORIES-BEGINNING AND ENDING (\$) <u>ATI</u>	
	Products, Misc. Supplies, Crop	568, 578, 520-529,
	Supplies & Livestock Supplies <sup>5</sup>	541-543, 545-551, 553- 559
	Fuel and Oil	552
	Miscellaneous Assets	580, 590
	Motor Vehicles	586, 596

---

<sup>5</sup>New/revised 1980.



<u>TABLE</u>	<u>ITEM</u>	<u>ATI or SECTION</u>
	Machinery	587, 597
	Buildings	588, 598
	Land, Owned	589, 599
	Cash and Miscellaneous Assets	501
09	FARM INCOME ITEMS, ACCRUAL (\$)	
	01 Beef, Accrual	Section 35 Production
	02 Dairy, Accrual	Section 35 Production
	03 Sheep, Accrual	Section 35 Production
	04 Swine, Accrual	Section 35 Production
	05 Poultry, Accrual	Section 35 Production
	06 Other Livestock, Futures, Accrual	Section 35 Production
	07 Milk Product Sales	022
	08 Egg Sales	026
	09 Grain, Accrual	Section 35 Production
	10 Hay and Forage, Accrual	Section 35 Production
	11 Cash Crops, Accrual	Section 35 Production
	12 Other Product Sales (Fruits, Hides, Other) <sup>6</sup>	(068-078, 020, 021 023-025, 027-029
	13 Product Inventory Change	520-539, 568, 578
	14 Government Payments	036
	15 Other Income <sup>6</sup>	(086+087+088)-090) 030-035, 037, 038, 039
10	FARM CASH OPERATING EXPENSES (\$)	<u>ATIG</u>
	01 Hired Labor	041
	02 Machinery Repairs <sup>7</sup>	0420-0424, 053
	03 Building Repairs	0425-0429
	04 Interest Paid	043
	05 Feed Purchased	044
	06 Seed & Crop Ins.	045
	07 Fertilizer & Lime	046
	08 Machine Hire, Storage	047
	09 Organization Fees, etc.	048
	10 Vet-Medicine-Drugs	049
	11 Crop Storage-Marketing <sup>7</sup>	053
	12 Livestock Marketing & Breeding	051
	13 Gas-Fuel-Oil	052
	14 Real Estate Taxes	0541, 0540, 0543-0549
	15 Personal Property Taxes	0542
	16 General Farm Insurance	055
	17 Telephone & Electricity	056, 007
	18 Cash Farm Rent	057
	19 Herbicide and Insecticide	058
	20 Conservation	059
	21 Auto Expense	008

---

<sup>6</sup>New/revised 1980.

<sup>7</sup>Revised 1982.

<u>TABLE</u>	<u>ITEM</u>	<u>ATI</u>
	22 Inventory Change	541-544, 548-549, 551-552, 554-556
11	DEPRECIATION (\$)	
	01 Motor Vehicles	696
	02 Machinery	697
	03 Buildings	698
12	UNPAID FAMILY LABOR AND NET WORTH OPPORTUNITY COST CHARGE (\$)	<u>Section</u>
	01 Interest on C & I Assets	Section 36
	02 Interest on Long-Term Assets <sup>8</sup>	Section 36
	03 Unpaid Family Labor <sup>8</sup> Family Labor Months x 1,250	
13	RATE OF RETURNS AND NET WORTH CHANGE (%) (\$)	<u>Section</u>
	01 Rate of Return on Capital Managed (%)	Section 37
	02 Rate of Return on Net Worth (%)	Section 37
	03 Change in Net Worth (\$)	Section 32
14	CURRENT-INTERMEDIATE ASSETS, LAND VALUE, AND CAPITAL MANAGED (\$)	<u>Section</u>
	01 C & I Assets	Section 38
	02 Land Value, Owned	Section 38
	03 Land Value, Rented	Section 38
	04 Total Capital Managed	Section 38
15	ACRES--TOTAL, OWNED, AND RENTED	<u>Section</u>
	Acres Operated	Section 34
	Irrigated Crop Acres	Section 34
	Dry Crop Acres	Section 34
	Total Crop Acres	Section 34
	Acres in Grass	8990-8997
	Farmstead Acres	8998-8999
16	CROP MACHINERY INVESTMENT AND COSTS (\$)	<u>Section</u>
	01 Total Crop Investment	Section 38
	02 Crop Machinery Costs	Section 38
17	LIVESTOCK NUMBERS--UNITS	<u>ATIG</u>
	01 Beef Cows	5118, 5818, 5918
	02 Sheep, Ewes	5138, 5838, 5938
	03 Swine, Litters	5148, 5848, 5948
	04 Dairy, Cows	5128, 5828, 5928
	05 Poultry, Head	5162, 5402
18	LIVESTOCK WEANINGS--UNITS	<u>ATI</u>
	01 Beef, Calves	811

---

<sup>8</sup>Revised 1982.

<u>TABLE</u>	<u>ITEM</u>	
	02 Sheep, Lambs	813
	03 Swine, Pigs	814
19	LIVESTOCK NUMBER--AVERAGE HEAD HANDLED	<u>Section</u>
	01 Beef Feeders	Section 38
	02 Sheep Feeders	Section 38
	03 Swine Feeders	Section 38
20	LIVESTOCK BIRTHS	<u>Section</u>
	01 Beef, Calf Crop (%)	Section 38
	02 Sheep, Lamb Crop (%)	Section 38
	03 Swine, Pigs Weaned per Litter	Section 38
	(Units)	
21	LIVESTOCK PRODUCTION (\$)	<u>Section</u>
	01 Dairy	Section 38
	02 Poultry	Section 38
	03 Beef	Section 35 Production
	04 Sheep	Section 35 Production
	05 Swine	Section 35 Production
22	CROPS--ACRES (Irr., Dry, Total Owned, Rented)	<u>ATIG</u>
	Wheat	8176
	Corn	8172
	Grain Sorghum	8173
	Soybeans	8191
	Sugar Beets	8193
	Alfalfa Hay	8181
	All Silage	8185-8186
	Other Grain	8170-8171, 8174-8175, 8177-8179
	Other Hay	8180, 8182-8184, 8187- 8189
	Other Cash Crops	8190, 8192, 8194-8198
23	CROPS--PRODUCTION (Irr., Dry, Owned Rented)	<u>ATIG</u>
	Wheat	8176
	Corn	8172
	Grain Sorghum	8173
	Soybeans	8191
	Sugar Beets	8193
	Alfalfa Hay	8181
	All Silage	8185-8186
24	GROSS CROP VALUE AND PRODUCTION COSTS (\$)	<u>Section</u>
	01 Gross Value of Crops	Section 38
	02 Fertilizer Cost	Section 36
	03 Crop Production Costs	Section 38

25	CURRENT AND LONG-TERM LOANS AND ACCOUNTS RECEIVABLE (BEGINNING AND ENDING) (\$)	<u>ATIG</u>
	Current Loans	1020-1026, 107- 109, 140-159, 170-179
	Long-Term Loans	1029, 190-195, 198, 199
	Current Accts. Rec.	1060-1066, 101, 103, 111-139, 160-169
	Long-Term Accts. Rec.	1068, 1069, 180- 185, 188, 189
	C & I Assets/C & I Loans	Section 32
	Total Loans/Net Worth	Section 32
	Capital Accounts <sup>9</sup>	Section 32 or 1028
26	CROP LABOR AND NET WORTH PERCENTAGES <sup>10</sup>	<u>Section</u>
	01 Labor %	Section 36
	02 C & I Asset %	Section 36
	03 Long-Term Asset %	Section 36
27	NONFARM ASSETS AND LOANS, INTERMEDIATE LOANS AND ACCOUNTS RECEIVABLE (BEGINNING & ENDING) (\$)	<u>ATIG</u>
	01 Nonfarm Assets <sup>11</sup>	503-505, 507-509, 510, 101, 103
	02 Intermediate Loans <sup>11</sup>	1027, 196 197
	03 Nonfarm Loans <sup>11</sup>	104, 105, 107-109, 110
	04 Intermediate Accts, Rec. <sup>11</sup>	1067, 186, 187
28	01 HARVESTED ACRES <sup>11</sup>	<u>Section</u> Section 36
29	SPECIAL FARM & NON-FARM INCOME & EXPENSE <sup>12</sup> (\$)	<u>ATIG</u>
	01 Nontaxable and Cap. Receipts	0039
	02 Income Tax & Cap. Distr.	0098
	03 Motor Vehicles-Machinery Sales	086, 087
	04 Building Sales	088

---

<sup>9</sup>New/revised 1980.

<sup>10</sup>Revised 1982.

<sup>11</sup>New 1977.

<sup>12</sup>New 1979 and revised 1980.

SECTION III  
FARM MANAGEMENT WHOLE-FARM DATA BANK SYSTEM  
K-MAR-105 RAW DATA FILE AND RETRIEVAL SYSTEM

INTRODUCTION  
FARM MANAGEMENT WHOLE-FARM DATA BANK SYSTEM  
K-MAR-105 RAW DATA FILE AND RETRIEVAL SYSTEM

Section III outlines in-depth the variables stored on the Farm Management Whole-Farm Raw Data Bank for use with the K-MAR-105 Retrieval System. The file contains approximately 485 variables per farm for approximately 2,300 to 3,000 farms for the years 1973 through 1989. Subsequent years' data will be added to the raw data file when made available.

The data sources are farms enrolled in the Kansas Farm Management Association program. For each farm, the variable values are on a per operator basis, except for "Gross Value of Crops", which includes the landlord's share of the value of crop production.

Section III must be used when utilizing the K-MAR-105 Retrieval System to access data from the raw data file. The Retrieval System includes numerous programs, such as the "Summary and Analysis" and "Whole-Farm Factor Retrieval". For example, the Summary and Analysis program can be used to provide an aggregate analysis of farms for a given variable such as county, farm type, or business organization. If desired, range values can be inserted on certain variables, such as crop acres or gross farm income. Dual breakdowns also can be done, such as an analysis of farms on crop acres by farm type.

The variables are accessed through the use of the "Table" and "Item" numbers listed under the "Directory File" and Retrieval File". Each variable has a four-digit number. For example, if an analysis on "Operator's Age" is desired, then the variable number would be "0108" as obtained from Table 01. For tables that have numerous values, the formula listed with the table is used to obtain the desired variable number. For example, if the "Ending Dollar Value for Swine Breeding Stock" from Table 07 is desired, the formula listed with Table 07 is used to obtain the variable number of "0741".

The K-MAR-105 Retrieval system provides a means whereby extension, instruction, and research personnel can easily access the raw data bank to obtain aggregate farm analysis of specific farms for numerous projects. Thus, every user has access to the raw data bank information through a simple, but standardized, procedure.

FARM MANAGEMENT WHOLE-FARM DATA BANK SYSTEM  
K-MAR-105 RAW DATA FILE AND RETRIEVAL SYSTEM

DIRECTORY FILE:

<u>TABLE</u>	<u>ITEM</u>
00	01 Association No.
	02 County No.
	03 Farm Number
	04 Retrieval ID
	05 Year of Data
	06 Farm Type
	07 Crop Acres
	08 PMWU (Production Man Work Units)
	09 Capital Managed
	10 Gross Farm Income
	11 Net Farm Income
	12 Farm Summary usage
	13 Family Living Summary Usage

RETRIEVAL FILE:

01	<u>BUSINESS TYPE-OPERATOR NUMBERS - AGE</u>
	01 Assn/Co/Farm #
	02 Year of Data
	03 Business Organization Type
	04 Tax Code
	05 # Operators
	06 # Men
	07 # Family Dependents
	08 Operator's Age
	09 Oldest Child's Age
02	<u>FAMILY LIVING EXPENSES (\$)</u>
	01 Medical Care
	02 Contributions
	03 Food
	04 Clothing
	05 Household Operations <sup>1</sup>
	06 Education <sup>1</sup>
	07 Furniture & Household Equipment
	08 Utilities (Non-Farm)
	09 Auto Expense (Non-Farm)
03	<u>TAXES-FAMILY LIVING-OUTSIDE INCOME &amp; EXPENSE (\$)</u>
	01 Miscel. Taxable Non-Farm Income <sup>2</sup>

---

<sup>1</sup>Revised 1976.

<sup>2</sup>New 1979 and revised 1980.

TABLE      ITEM

	02	Non-Taxable Income <sup>3</sup>		
	03	Gifts <sup>4</sup>		
	04	Personal-Recreation <sup>4</sup>		
	05	Life Insurance <sup>4</sup>		
	06	Deductible Non-Farm Expense <sup>4</sup>		
	07	Wages <sup>5</sup>		
	08	Rent and Royalties <sup>5</sup>		
	09	Dividends and Interest <sup>5</sup>		
	10	Income, Social Security, and Property Tax <sup>3</sup>		
	11	House Upkeep and Repairs <sup>4</sup>		
04	01	LIVESTOCK FEED DISAPPEARANCE (\$)		
05		LIVESTOCK AND GRAIN SALES AND PURCHASES	<u>A</u>	<u>B</u>
		(Formula = 4A + B - 4)		
		Raised Beef Sales (11)	1	TI=1
		Raised Dairy Sales (12)	2	UNITS=2
		Raised Sheep Sales (13)	3	POUNDS=3
		Raised Swine Sales (14)	4	DOLLARS=4
		Raised Poultry Sales (16)	5	
		Raised Grain Sales (17)	6	
		Raised Hay & Forage Sales (18)	7	
		Raised Cash Crop Sales (19)	8	
		Poultry Purchases (40)	9	
		Feed Purchases (44)	10	
		Purchase for Resale, Beef Sales (61)	11	
		Purchase for Resale, Dairy Sales (62)	12	
		Purchase for Resale, Sheep Sales (63)	13	
		Purchase for Resale, Swine Sales (64)	14	
		Purchase for Resale, Grain Future Sales (66)	15	
		Purchase for Resale, Grain-Hay-Forage Sales (67)	16	
		Purchase for Resale, Beef Purchases (71)	17	
		Purchase for Resale, Dairy Purchases (72)	18	
		Purchase for Resale, Sheep Purchases (73)	19	
		Purchase for Resale, Swine Purchases (74)	20	
		Purchase for Resale, Grain Future Purchases (76)	21	
		Purchase for Resale, Grain-Hay-Forage Purchases (77)	22	
		Breeding Livestock, Beef Sales (81)	23	
		Breeding Livestock, Dairy Sales (82)	24	
		Breeding Livestock, Sheep Sales (83)	25	
		Breeding Livestock, Swine Sales (84)	26	

---

<sup>3</sup>New 1979 and revised 1980.

<sup>4</sup>Revised 1976.

<sup>5</sup>New/revised 1980.



TABLEITEM

	Breeding Livestock, Beef Purchases (91)	27		
	Breeding Livestock, Dairy Purchase (92)	28		
	Breeding Livestock, Sheep Purchases (93)	29		
	Breeding Livestock, Swine Purchases (94)	30		
06	OTHER LIVESTOCK, MISCEL. INCOME, AND MACHINERY AND BUILDING PURCHASES (\$)			
	(Formula = 2A + B - 2)	<u>A</u>	<u>B</u>	
	Raised, Other Livestock (15)	1	TI-1	
	Machine Work (32)	2	DOLLARS=2	
	Patronage Refunds (35)	3		
	Gas Tax Refunds (37)	4		
	Purchase for Resale, Other Lvst. Sales (65)	5		
	Purchase for Resale, Other Lvst. Purchases (75)	6		
	Breeding Stock, Other Lvst. Sales (85)	7		
	Basis of Machinery Sold <sup>6</sup> (90)	8		
	Breeding Stock, Other Lvst. Purchases (95)	9		
	Motor Vehicle Purchases (96)	10		
	Machinery Purchases (97)	11		
	Building Purchases (98)	12		
07	LIVESTOCK GRAIN, FORAGE, AND CASH CROP INVENTORIES; BEGINNING AND ENDING			
	(Formula = 6A + 2B + C - 8, IF B = 2, ADD 1)	<u>A</u>	<u>B</u>	<u>C</u>
	Beef Feeders	1	Beg.=1	UNITS=1
	Beef Breeding Stock	2	End.=2	POUNDS=2
	Dairy Breeding Stock	3		DOLLARS=3
	Sheep Feeders	4		
	Sheep Breeding Stock	5		
	Swine Feeders	6		
	Swine Breeding Stock	7		
	Poultry <sup>6</sup>	8		
	Other Livestock - Futures	9		
	Grain <sup>6</sup>	10		
	Hay and Forage <sup>6</sup>	11		
	Cash Field Crops <sup>6</sup>	12		
	Feed	13		
08	MISC. ASSETS. LAND, MACHINERY - EQUIPMENT, AND BUILDING INVENTORIES BEGINNING AND ENDING (\$)			
	(Formula = 2A + B - 2)	<u>A</u>	<u>B</u>	
	Products, Miscellaneous Supplies, Crop Supplies & Lvst. Supplies <sup>6</sup>	1	Beg.=1	
	Fuel and Oil	2	End.=2	
	Miscellaneous Assets	3		
	Motor Vehicles	4		

<sup>6</sup>New/revised 1980.

TABLEITEM

	Machinery	5
	Buildings	6
	Land, Owned	7
	Cash and Miscellaneous Assets	8
09	FARM INCOME ITEMS, ACCRUAL (\$)	
	01 Beef, Accrual	
	02 Dairy, Accrual	
	03 Sheep, Accrual	
	04 Swine, Accrual	
	05 Poultry, Accrual	
	06 Other Livestock, Futures, Accrual	
	07 Milk Product Sales	
	08 Egg Sales	
	09 Grain, Accrual	
	10 Hay and Forage, Accrual	
	11 Cash Crops, Accrual	
	12 Other Product Sales (Fruits, Wool, Hides, Other) <sup>7</sup>	
	13 Product Inventory Change	
	14 Government Payments	
	15 Other Income <sup>7</sup>	
10	FARM CASH OPERATING EXPENSES (\$)	
	01 Hired Labor	
	02 Machinery Repairs, Irrig. Expense	
	03 Building Repairs	
	04 Interest Paid	
	05 Feed Purchased	
	06 Seed & Crop Ins.	
	07 Fertilizer & Lime	
	08 Machine Hire	
	09 Organization Fees, etc.	
	10 Vet-Medicine-Drugs	
	11 Crop Storage-Marketing	
	12 Livestock Marketing & Breeding	
	13 Gas-Fuel-Oil	
	14 Real Estate Taxes	
	15 Personal Property Taxes	
	16 General Farm Insurance	
	17 Telephone & Electricity	
	18 Cash Farm Rent	
	19 Herbicide and Insecticide	
	20 Conservation	
	21 Auto Expense	
	22 Inventory Change	
11	DEPRECIATION (\$)	
	01 Motor Vehicles	
	02 Machinery	
	03 Buildings	

---

<sup>7</sup>New/revised 1980.

<u>TABLE</u>	<u>ITEM</u>		
12	UNPAID FAMILY LABOR AND NET WORTH OPPORTUNITY COST CHARGE (\$)		
	01 Interest on C & I Assets <sup>8</sup>		
	02 Interest on Long-Term Assets <sup>8</sup>		
	03 Unpaid Family Labor <sup>8</sup>		
13	RATE OF RETURNS AND NET WORTH CHANGE		
	01 Rate of Return on Capital Managed (%)		
	02 Rate of Return on Net Worth (%)		
	03 Change in Net Worth (\$)		
14	CURRENT - INTERMEDIATE ASSETS, LAND VALUE, AND CAPITAL MANAGED (\$)		
	01 C & I Assets		
	02 Land Value, Owned		
	03 Land Value, Rented		
	04 Total Capital Managed		
15	ACRES--TOTAL, OWNED, AND RENTED (Formula = 3A + B - 3)	<u>A</u>	<u>B</u>
	Acres Operated	1	TOTAL=1
	Irrigated Crop Acres	2	OWNED=2
	Dry Crop Acres	3	RENTED=3
	Total Crop Acres	4	
	Acres in Grass	5	
	Farmstead Acres	6	
16	CROP MACHINERY INVESTMENT AND COSTS		
	01 Total Crop Investment		
	02 Crop Machinery Costs		
17	LIVESTOCK NUMBERS (uNITS)		
	01 Beef, Cows		
	02 Sheep, Ewes		
	03 Swine, Litters		
	04 Dairy, Cows		
	05 Poultry, Head		
18	LIVESTOCK WEANINGS--UNITS		
	01 Beef, Calves		
	02 Sheep, Lambs		
	03 Swine, Pigs		
19	LIVESTOCK NUMBER--AVERAGE HEAD HANDLED		
	01 Beef Feeders		
	02 Sheep Feeders		
	03 Swine Feeders		
20	LIVESTOCK BIRTHS		
	01 Beef, Calf Crop (%)		

---

<sup>8</sup>Revised 1982.

<u>TABLE</u>	<u>ITEM</u>			
	02	Sheep, Lamb Crop (%)		
	03	Swine, Pigs Weaned per Litter (Units)		
21		LIVESTOCK PRODUCTION (\$)		
	01	Dairy		
	02	Poultry		
	03	Beef		
	04	Sheep		
	05	Swine		
22		CROPS--ACRES (Irr., Dry, Total, Owned, Rented)		
		(Formula = $6A + 2B = C - 8$ ,		
		IF B = 2, ADD 1)	<u>A</u>	<u>B</u> <u>C</u>
		Wheat	1	IRRIG=1 TOTAL=1
		Corn	2	DRY=2 OWNED=2
		Grain Sorghum	3	RENTED=3
		Soybeans	4	
		Sugar Beets	5	
		Alfalfa Hay	6	
		All Silage	7	
		Other Grain	8	
		Other Hay	0	
		Other Cash Crops	10	
23		CROPS--PRODUCTION (Irr., Dry, Owned, Rented)		
		(Formula = $4A + 2B + C - 6$ )	<u>A</u>	<u>B</u> <u>C</u>
		Wheat	1	IRRIG=1 OWNED=1
		Corn	2	DRY=2 RENTED=2
		Grain Sorghum	3	
		Soybeans	4	
		Sugar Beets	5	
		Alfalfa Hay	6	
		All Silage	7	
24		GROSS CROP VALUE AND PRODUCTION COSTS (\$)		
	01	Gross Value of Crops		
	02	Fertilizer Cost		
	03	Crop Production Costs		
25		CURRENT AND LONG-TERM LOANS AND ACCOUNTS RECEIVABLE;		
		BEGINNING AND ENDING		
		(Formula = $2A + B - 2$ )	<u>A</u>	<u>B</u>
		Current Loans	1	BEG.=1
		Long-Term Loans	2	END.=2
		Current Accts. Rec.	3	
		Long-Term Accts. Rec.	4	
		C & I Assets/C & I Loans	5	
		Total Loans/Net Worth	6	
		Capital Accounts <sup>9</sup>	7	

---

<sup>9</sup>New/revised 1980.

<u>TABLE</u>	<u>ITEM</u>
26	CROP LABOR AND NET WORTH PERCENTAGES <sup>10</sup>
	01 LABOR %
	02 C & I Assets %
	03 Long-Term Asset %
27	NONFARM ASSETS AND INTERMEDIATE LOANS AND ACCOUNTS RECEIVABLE (BEGINNING AND ENDING) (\$)
	01 Nonfarm Assets <sup>11</sup>
	02 Intermediate Loans <sup>11</sup>
	03 Nonfarm Loans <sup>11</sup>
	04 Intermediate Accts. Rec. <sup>11</sup>
28	01 HARVESTED ACRES <sup>11</sup>
29	SPECIAL FARM AND NON-FARM INCOME AND EXPENSE <sup>12</sup> (\$)
	01 Nontaxable and Cap. Receipts
	02 Income Tax and Cap. Distr.
	03 Motor Vehicle-Machinery Sales
	04 Building Sales

---

<sup>10</sup>Revised 1982.

<sup>11</sup>New 1977.

<sup>12</sup>New 1979 and revised 1980.

