### DEVELOPING A FARM PLAN

by

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and

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#### IT PAYS TO FARM WELL

	ASHTABU	LA CO. #	WYANDC	pr co. #	WOOD	CO. #
	Well	Poorly	Well	Poorly	Well	Poorly
	Organized	Organized	Organized	Organized	Organized	Organized
	Farms	Farms	Farms	Farms	Farms	Farms
Number of farms	9	20	12	15	12	16
Annual productivity balance	+.42	34	+.94	38	+.12	63
Percent of rotated area						
In corn	24.2	20.0	26.0	28.4	30.0	37.0
In soybeans	0.8	3.8	*	*	1.8	1.0
In small grain	29.5	22.7	29.8	32.4	35.0	42.0
In hay & rotation pasture	44.4	44.0	43.1	37.5	31.5	16.3
Restorative factor for hav	+1.9	+0.4	+1.4	+ .9	+1.9	+1.6
Manure, ton per rotated acre	4.2	1.9	2.3	1.4	1.9	1.2
Yield per acre 1935						
Corn, bushels	46	32	61	53	57	54
Oats, bushels	38	28	45	29	49	45
Wheat, bushels	30	18	29	25	*	*
Hay, ton	1.6	1.1	*	* *	• • • • •	*
Animal units per 100 rotated A's	48	24	34	21	18	9
Hay consuming animal units						
per 100 rotated acres	42	21	21	14	10	6
Hogs produced per 100 rotated					and the second second	
acres, cwt.	*	*	118	71	70	13
Average size of farm, acres	127	99	141	144	145	122
Rotated acres per farm	58	48	104	115	125	111
		-,				
Labor income per farm, 1935	\$1070	\$393	\$1604	\$1166	\$1754	\$1061
Labor income per rotated A.	<b>\$</b> 18.34	\$8.12	\$15.42	\$10.09	\$14.02	\$9.54

#### The following are examples of the affect of organization on farm income

# In each county the soil resources & market outlets were the same for both groups of farms.

\* Data not available. Source - Ohio Agr. Exp. St. Bulleton 694.

#### A GOOD FARM ORGANIZATION IS ESSENTIAL TO PROFITABLE FARMING

Some of the more important characteristics of a good farm organization are -

First - It efficiently utilizes the resources which the farmer has at his command.

Second - It maintains and improves the productivity of the resources.

Third - It produces sufficient income to adequately meet the needs of the farm family.

#### THE FIRST STEP IN ACHIEVING A GOOD ORGANIZATION IS TO DEVELOP A SOUND FARM PLAN

These forms are designed for use in teaching farm organization and management in Vocational Agriculture Schools. However, the forms may also be used by individuals who wish to work out a detailed farm plan.

#### DEVELOPING A FARM PLAN

A PLAN FOR THE		FARM
LOCATED IN THE	COUNTY	TOWNSHIP

# I INVOICING AND APPRAISING THE RESOURCES A. Inventory of the Present Land Use

Type of Use		Acres
Rotated crop land		
Permanent pasture land	<u></u>	
Woodland pastured		
Woodland not pastured		
Farmstead, roads, waste and idle land		
Total Farm Area		

### B. Inventory of the Water Supply

Water for human consumption -			
Sources: spring shallow well	deep well	cistern	.other
Wholesomeness of supply	Has	it been tested for pur	rity?
Adequacy of supply		-	
Dependability of supply		· · · · · · · · · · · · · · · · · · ·	
If not free flowing, how pumped			
Water for livestock at the buildings -			
Sources, spring shallow well	deen well	cistern nond	stream
Adequacy of supply			Sticam
Dependability of supply			·····
If not free flowing, how pumped			
Water for livestock on pasture -			
Sources: Springs shallow wells	deep wells	ponds	streams
Adequacy of supply	· · · ·	· · · · · · · · · · · · · · · · · · ·	
Dependability of supply			
If not free flowing, how pumped			
Comments on the water supply situation			

1. MAP OF FARM SHOWING PRESENT LAND USE WATER SUPPLY & FIELD LAY OUT

# C. Inventory of Soil Resources1. Soil analysis and lime requirements

		Acres represented	Produc - tivity	Results of soil analysis			Tons Agr. Ground		
Field and					Active	· .		Limesto	Limestone per A.
Number	Soil type or color	by Sample	soil type	Ph	Ca	avai P	lable K	Clover	Alfalfa
		· · · · · · · · · · · · · · · · · · ·							
					·				
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				1					
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								,	
								4	

4

# 2. MAP OF FARM SHOWING MAJOR SOIL TYPES

## 3. History of lime applications

Field Number	Acres	Dates limed	Total tons applied	Kind of liming material used
· · · · · · · · · · · · · · · · · · ·				
-				
	-			

# D. Inventory of Topographic Conditions1. Acres of land by different slope classes

	Acres of different slope classes as they are related to the type of control and use necessary if erosion is to be minimized.							
Type of land use at present	Level to slightly undulating. No special control or use needed	Undulating to slightly rolling. Contour crop- ping usually desirable if cultivated often.	Rolling to slightly hilly. Contour crop- ping or permanent pasture necessary.	Hilly or bro- ken. Perma- nent pasture and woods.				
Crop land								
Permanent pasture land								
Wood land								
Other land								

# General comments on erosion situation

### 2. MAP OF FARM SHOWING TOPOGRAPHY OR SLOPE CLASSES

E. Inventory of Drainage and Flood Conditions

Type of land use	Drainage adequate Acres	Drainage inadequate Acres	Land subject to flood Acres	Adjustments needed to correct trouble
Crop land				
Permanent pasture land				
Other land				
General Comments	3,			
	· · · · · · · · · · · · · · · · · · ·			
F. Inventory of	the Climatic	Conditions		
Do late sprir	ng frosts cau	ise irequent d	amage?Do o	early fall frosts cause frequent damage?
Is growing s	eason always	s long enough	to mature a good	d corn crop?
Is snow cove	r generally	adequate to p	rotect fall sown g	grain and meadow crops?
Are summer	temperatur	es too high fo	r good yields of	oats? Potatoes?
Is the area s wind storm	ubjected dur s?	ing the crop s (c) heavy ra	season to f <b>reque</b> ains(	nt - (a) hail storms(b) destructive d) floods(e) droughts
Other comm	ents on clim	ate		

G. Inventory of Fences

External or line fences	Internal or division fences
Rods in good condition	Rods in good condition
Rods in fair condition	Rods in fair condition
Rods in poor condition	Rods in poor condition
Rods of new line fence needed	Rods of temporary fence in use

General comments on fence \_\_\_\_\_

8

1. MAP OF FARM SHOWING DRAINAGE SYSTEM, AREAS SUBJECT TO FLOOD, AND LOCA-TION AND CONDITION OF FENCES

MAJOR ROTATION	f		MINOR ROTATION		
List crops in the rotation in order grown	Total acres of each crop raised in a complete rotation	Ave. acres of each crop raised per yr. in rotation	List crops in the rotation in order grown	Total acres of each crop raised in a complete rotation	Ave. acres of each crop raised per yr, in rotation
lst yr.			lst yr.		
2nd yr.			2nd yr.		
3rd yr.			3rd yr.		
4th yr.			4th yr.		
	8				

Summary of Present Crop and Pasture Program -

· · ·	Average	Soil Treatment per acre	3 yr. Ave.	per A. yield	Average annual	
Crops and pasture	acreage per year	(lbs. fertilizer & loads manure)	on this Farm	in this county	Production on this farm	
Clean tilled crops- Corn						
Soybeans						
Small grain crops- Wheat Oats						
1st yr. sod crops- Hay, kind						
Rotation pasture						
2nd yr. sod crops- Hay, kind						
Hay, kind Rotation pasture						
3rd yr. sod crops- Hay, kind Rotation pasture						
Pasture on hay stubble Pasture on new seedings						
Woods pasture Crops not harvested or						
pastured but plowed down						

# The Soil Productivity Balance of Cropland

An engineering "yardstick" by which to measure the rate of rise or fall in the producing capacity of a farm's cropland. By it, all forces-good and bad-making up soil productivity, are reduced to a single over-all figure. The procedure is in terms of the individual farm's own conditions; the answer, arithmetic; its meaning usable, rendering the fate of cropland predictable.

		A second seco					
		Sod Crop GRAZED or MOWED	for Hay	ACRES	FACTOR	POINTS	
	•			8.	D	axb	
	1	TALLALLA, Seeded 1 yr. Del	0.010		+4.0	<b>T</b>	
	2	*Alfalfa, seeded 2 yrs. be	fore		+0.5	+	•
	3	*Alfalfa, seeded 3 yrs. be	fore		0	0	
	4	*Common Clovers, seeded 1 y	r.before		+2.0	+	
	5	Clov-tim.Mix. seeded 1 yr.	before.		+1,25	+	
	•	Tim-clov.Mix. seeded 2 yrs	• Delore		+0.25	+	
	7	Timothy, seeded 1 yr. bero	re		+0.25	+	
	8	Timothy, seeded 2 yrs. bef	ore		0,	0	
	9	*Sweet Clover, seeded 1 yr	• before		+3•0	+	
	10	(See Sch	edule A)		+	+	
	11	For RESTORATIVE CROPS Harv	ested				+
1	r	-		1.6.770	-	Do Toma	
	Mat	terial NOT REMOVED from the	Land	ACRES 8	FACTOR b	axb	
12	Sweet C:	lover,MATURED, ungrased this	year		+3.5	+	
13	Sweet C	lover, GREEN, plowed this yes	ar		+2.5	+	
14		(See Sched	ule A)		+	+	
15	RESIDUES Corn sta	5 left on land from one year alk, soy and grain straw(Sch	's crop: edule A)		+0.25	+	
1							
10		Sum of CREDITS TOP CPOP MA	NUKE ELEI	RESIDUE.	******		-
	CONT	ROLS and PROTECTIONS	ACRES	SLOPE	FACTOR	POINTS	
	In SOD	over winter and summer:	8.	Ъ	0	ахрхс	
17	(Item	s 11 plus 12)		4	+1/10	+	
18	(Item 20	5, 13,& 14 if applicable)		- B	+1/20	+	
19	In ROW & CONTOUR TERRACE	& SPRING DRILLED CROPS on and/or STRIPPED and/or D land (Items 25,27,28,29)		Ite	+1/20	+	
20	(	Credits for CONTROLS in operation	ation aga	inst EROS	ION		+
Ī						F	
5 <sup>1</sup> 5		ADDED to SOIL during Crop Y	ear	TONS	FACTOR	POINTS	
21	Fertili	ser in terms of SINGLE Stren (Item 2) Schedule (	gth:	<u> </u>	1 1 5	L	
22	Manure j	(Item 21, Schedule C) Manure produced on CROPLAND during GRAZING:			-1•0		
23	Manure j	(Item 22, Schedule B)			+0.15	+	1
		(Item 23, Schedule B	)		+0.15	+	
24		Sum of Credits for MANURE	AND FERT	ILIZER			+
	Either stra stitutes	aight stands or mixtures in whic 50 per cent or more (by weight)	h this legu	ime con-			

	ROW and DRILL Crops Harvested	ACRES a	FACTOR b	POINTS axb				
5	Corn, beet, tobacco, potato		-2.0	•				
5	Rye, winter wheat, winter barley		-1.0	•				
7	Oats, spring wheat, spring barley.		-1.0	•				
в	Soybean, as seed and/or hay		-0.5	-				
9	(See ScheduleA)		-	<b>-</b> ,				
For DEGRADING CROPS Harvosted								
	-		-					
	Acres of all Estimated S CROPLAND ON FARM all Cropl	LOPE of and	FACTOR	POINTS				

CI (Ita	ROPLAND ON FARM ems 11,12,14,30)	all Cropland Ft. fall in 100 Ft	FACIOR	FUINIS
	a	Ъ	c	axbxc
			-1/10	-
	Debits for EROS	TON assuming no contro	18	











Supporting Schedules appear on reverse side.

# SCHEDULE A-Productivity **Factors for Cropland**

Item 10	FORAGE CROP AND SO USED PACTOR	
· · ·	Brome grassSame as timothy	
1.1	Orchard grassSame as timothy	
	Red top Same as timothy	
	Lespedeza, annual +0.5	
	Serica +1.0	
Item 14	GREEN CROP MANURE AND WINTER COVER CROP	FACTOR
	Alfalfa, top growth left on land	+3.0
1.11	Clovers, common, top growth left on land	+2.7
	Clover-timothy, top growth left on land	+2.0
	Grasses, top growth left on land	+1.0
	Serios, top growth left on land	+1.5
	Timothy, top growth left on land	+1.0
	Buckwheat, turned under green	+0.5
	Cowpea, turned under green	+1.5
	Crimson elover, turned under green	+1.0
	Huban clover, turned under green	+1.0
	Corn, turned under at tasseling stage	+1.5
	Soybean, turned under groen	+1.5
	Small grain cover crop, turned under or clippe	d +0.5
Item 15	CROP RESIDUE LEFT ON LAND FACTOR	
	Best tops +0.25	
	Chaff, from combining alfalfa seed +0.25	
	Chaff, from combining timothy seed +0.25	
	Tomato vines	
Item 29	CROP HARVESTED OR GRAZED FACTOR	
	Buckwheet1.5	
	Cabbage	
	Caming pea0.5	
	Cowpee	
	Cropland, fallowed0.5	
	Cropland, idle 0	
	Plax1.0	
	Fruit trees, cultivated2.5	
	Willet	
	Onion	
	Popeorn2.0	
	Hape	
	Sorghume	
	Sweet corna.	
	Sugan grassessesses =1.5	
	Vineward, cultivated	

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Agricultural College Extension Service, H. C. Ramsower, Director, Columbus, Ohio

# SCHEDULE B-Tonnage of Manure Produced for Cropland

TO ESTIMATE the tonnage of manure available for Cropland in a single year, one of the two following methods may be employed.

Method I - Based on Estimated Loads Hauled (less accurate)



Method II - Based on Numbers of Livestock (more accurate)

1	GRA	GRAZED on Cropland SOD				Livest	ock in 3	BARN & O	PEN-LOT
	HEAD a	MONTHS IN FIELD b	TONS per Mo. per Hd. c**	TONNAGE of MANURE a x b x c	KIND	HEAD a	MONTHS Con- fined b	TONS per Mo. per Hd. c***	TONNAGE of MANURE axbxo
			0•8		••••••• Horses & Mules •••••••			1.2	
			0.7		Cows kept			1.0	
			0.3		••••• Young Cattle (not veal) •••••			0.4	
			0.6		Beef Cattle fattened			0.8	
			0.3		Sows kept			0.4	
			0.06		•Pigs fed out: raised &/or bought.			0.12	
			0.03		Ewes kept			0.12	
			0.03		.Lambs fed out:raised &/or bought.			0.05	
			0.005		Pcultry			0.01	
Item 22	On GRAZ	ED Crop	land		Item 23 Combined Tonnag	e in BA	RN & OP	en-lot.	
					OF abo pro	the win out what oduced i	ter-pro FRACTI n an OP	duced Ma ON is no EN-LOT:	nure, rmally $(\gamma)$
* Standa ** Amounthe eq *** Amounthe eq	ard spread nts (no b uivalent d nts (inclu		on; large have been manure. dding) ha	size 1½ tons n adjusted t ave been ad		2/3	1/2 1/	3 1/4	1/5 0

justed to the equivalent of cattle manure as measured by crop-producing effect.



(Above fraction x Item 23)

Item 21 Ex

# SCHEDULE C-Fertilizer Tonnage Applied to Cropland within a Single Crop Year

on cropland	ACRES TREATED	WITH 0-20-0 0-14-6 0-10-10	WITH 0-21-9 3-18-9 3-9-18	WITH 0-44-0 0-20-20 4-24-12	TOTAL AMOUNT Expressed as Single Strength
	£	2-12-6 4-10-6 etc. b	etc.	eto.	lxaxb or laxaxc or 2 xaxd
		lbs./acre	lbs./acre	lbs./acre	lbs./yearly
Corn					
Wheat					
Oats, barley					
Beets, tobacco					
•••					
Total on Cropland Y	lbs.				
Expressed as Tons o	tons				

# SCHEDULE D-Residue from Crops and **Bedding Needs**

	MATERIAL Soybean straw Wheat straw Oats straw Corr stover	ACRES Har- vostod a	Normal YIELD of GRAIN b bu./aore	STRAW per bu.of Grain o lbs. 110 100 55 55	Estima: RESID Produce a x b x lbs.	ted JE ed	
	RESIDUE material pr	oduced (	)		tons		
	BEDDING NEEDED by L		tons				
Item 15	NOT NEEDED for Bedd	ing (Dif	ference)	•••••		tons	8.0 <b>r</b> es

# SCHEDULE E—Performance in Some Soil Practices

		Actual	Desirable
Average	Rate of Manuring Each Acre Yearly (Item 22 plus 23 ÷ Item 31a)	tons	3 to 4
Average	Rate of Fertilizing Each Acre Yearly (Item 21 x 2000 + Item 51a)	lbs.	100 or up
Percent	of Cropland Receiving Residue Yearly (Item 15 ÷ Ttem 31a)	%	20 to 40
Renewal	of Soil Tilth:% of Cropland in Sod Yearly. (Item 17 ÷ Item Sla)	%	40 to 60

#### I. Inventory of Present Livestock System 1. Inventory of the dairy enterprise

Number and quality of dairy cattle on farm

Beginning Inventory Jan. 1	Closing Inventory Jan. 1	Individua	l Productive Ability
List cows by name or number (Include all dry cows and cows and heifers producing milk at the time)		Butterfat test Percent	Estimated annual butter fat production, pounds
		31 <sup>0</sup>	
	· · · · · · · · · · · · · · · · · · ·		
Total number listed above			
Number of all other dairy animals except veal calves kept for sale		XXXX	XXXXXX

Average number of cows in dairy herd (add the number on hand at the beginning inventory to the number on hand at the closing inventory and divide by two)\_\_\_\_\_

Quantity of butterfat produced during the year covered by the inventory -

(a) Pounds of butterfat sold during the 12 months period -

Jan	Apr	July	Oct
Feb	May	Aug	Nov
Mar	June	Sept	Dec

Total pounds sold \_\_\_\_\_

- (a) Total pounds sold (brought forward from bottom of preceding page)
  (b) Pounds of butter fat fed in form of whole milk to calves raised during the 12 months period (Add 25 pounds of BF for each calf raised to 2 months of age on whole milk)
  - (c) Pounds of butterfat used as whole milk, cream & butter by people. regularly on the farm during the period covered by the inventory. (Add 35 pounds per person including children)
  - (d) Total pounds of butterfat produced during the year (a + b + c)
  - (e) Average annual butterfat production per cow. (d + Average No. cows)
  - (f) Average annual butterfat production per cow on farms with profitable herds 300 lbs. or more
     Comments: On present feeding and management practices (these should cover (a) contents of concentrate ration, (b) type & amount of dry roughage fed, (c) type & adequacy of pasture)

2. Inventory of hog enterprise

•

(a)	Number of sows kept to farrow last spring (Dec. 1 to May 30)	
<b>(b)</b>	Number of sows kept to farrow last fall (June 1 to Nov. 30)	
(c)	Total number of expected litters $(a + b)$	
(d)	Number of last spring's pigs raised to date of sale or slaughter (exclude pigs purchased)	
(e)	Number of last fall's pigs raised to date of sale or slaughter (exclude pigs purchased)	
(f)	Total number of pigs raised exclusive of those purchased $(d + e)$	
(g)	Average number of pigs raised per litter per sow kept $(f + c)$	
(ĥ)	Ave. No. raised per litter to date of sale on well-managed farms	7 pigs or more

Comments: On present feeding & management practices. (These should cover - (a) contents of concentrate ration, (b) disease and parasite control, (c) pasture program, (d) market dates and wts.)

3. Inventory of beef enterprises

Number cows in breeding herd last	springNumber	r of calves raised to weaning _	
Percent calf-crop (calves raised	cows in herd)	$_\%$ calf-crop in well-managed	herds <u>95+</u>
Number put on feed last year	_Ave. initial wt	_Days on feedAve. sale	wt

Comments: On present feeding and management practices. (These should cover - (a) winter feeding program for breeding herd, (b) calving period, (c) adequacy of pasture, (d) fattening ration.)

### 4. Inventory of sheep enterprise

Number breeding ewes in floo	k last spring	Number of lambs raised to weaning	1
% lamb-crop (lambs raised	ewes in flock	% lamb-crop in profitable flocks (Med. w.	135%
Pounds of wool shorn	lbs.perfleece	Œfine_w.	90%
Lambs put on feed last yr	Ave. initial wt	Days on feedAve. sales wt	

Comments: On present feeding and management program (These should cover - (a) winter feeding program for breeding flock, (b) type and adequacy of pasture, (c) parasite control, (d) fattening ration.)

Inventory o	f poultry enterprise			
(a) number (b) Number (c) Number (d) Average (e) Dozens	of hens and pullets in l that died were sold or of birds in laying flock number of birds in la of eggs sold during the	aying flock Oct. 1, 1 consumed at the end of the ye ying flock during th 12 months period -	ast y <b>e</b> ar ear e year <u>(a + c)</u> 2	
Oct	Jan	Apr	July	
Nov	Feb	May	Aug	
Dec.	Mar.	June	Sept.	
(ĝ) Total "e (h) Egg pro (i) Egg pro (i) Number	ggs'' produced (e + f x duction per hen (g + d) duction per hen on farn of chicks purchased la	12) ns with profitable float st spring	ocks	150 or
(k) Number (1) Number	that were sold and con that were placed in the	sumed on the farm a laying flock this fa	11	
	On present feeding an concentrate ration fed parasite control pract	d management pract l laying flock, (b) ra lices, (d) type of rar	tices (These should ) tion fed growing floc nge, (e) culling practi	cover - (a) conte k, (c) disease ar ice, (f) date chic
Comments:	put in brooder.)			
Comments:	put in brooder.)			

J. Inventory of Building Facilities, Present Condition and Adaptability

Type of Building	Size & capacity (bu., tons, head, etc.)	• Equipped for & adaptable to (type of livestock)	Present condition (list major repairs needed)
Main dwelling house			
Tenant house			
Barns and attached sheds			
•			
Machine Storage			
Small grain Storage			
Corn cribs			
Farrowing house or houses			
Poultry houses			
Garage & shop		•	
Silos			
Other buildings			

K. Inventory of Available Market Outlets -

Type of road past the farm - Hard surface, , Gravel	, Dirt		
Is it an all year road for auto and truck?	· · · ·		
Distance to (a) local shipping point ; (b) established livestock market			;
(c) established fruit and vegetable market			
Market outlets available for dairy products (a) Retail milk route ;			
(b) Fluid milk distributor; (c) Manufactured milk or cheese plant		•	
(i) Cream route; (e) Cream station		-/	
Market outlets available for poultry products (a) Retail		•	
(b) Local buyer ; (c) Auction		<b>-</b> 19	
Market outlets available for special products (a) Sugar beet plant		•	
(b) Canning factory; (c) Alfalfa hay dryer			

Comments on markets:

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	Number	Size	Condition	Present utility value
Tractor (G.P.)				
Tractor plow				
Other plows				
Disk harrow				
Spring teeth harrow				
Spike tooth harrow				
Cultipacker or roller	-			
Corn planter				
Tractor cultivater				
Horse cultivators				
Grain drill				
Grain binder				
Mowing machine			·	
Side delivery rake				
Hay loader				
Manure spreader		· · ·		
Wagons and racks				
Other equipment				
		an a tha dhe a tha an		
Other miscellaneous equipment				
Total Value				

# •L. Inventory of machinery and Power now on the Farm

# M. Inventory of the Labor Supply

M. Inventory of the Labor Supply				
Supply now on farm that is available for work	Months per year	Permanence of present supply of family labor and certainty of obtaining hired labor		
Operator				
Operator's wife				
Children of working age				
Other family labor				
Regular hired labor				

N. Inventory of Farm Capital and Income

	1.	Farm	financial	statement	
--	----	------	-----------	-----------	--

Assets	Dollars	Liabilities	Dollars
Land and buildings		Real estate mortgages	
Power and equipment		Chattel mortgages	
Livestock		Accounts payable	
Feed and supplies		Other liabilities	
Cash and other assets		Total liabilities	
Total assets		Not worth	

Circle the amount of capital that is available for improvements in the farm program during the next 24 months -

ຸລະວບ ,ລວບບ ,ລາວບບ ,ລະວບບ ,ວ	or a
------------------------------	------

2. Farm income from the present organization (turn to page 28 to compute)

Price at which computed

	Present	Long time ave.
Estimated gross cash receipts	\$	\$
Estimated expenses	\$	\$
Estimated annual income	\$	\$

### II DIVIDING THE FARM INTO CROP, PERMANENT PASTURE, AND WOOD LAND

Type of Use	Present acreage	List changes considered desirable in the use of the land and give reasons	Revised acres
Cropland			
Cropiand			
			•
Permanent			
pasture			
Woodland			
Formatord			
waste, etc.			

# III SELECTING THE TYPE OF FARMING

Type of Farming or			Check	if resour t	ce availa ype of fa	ble is suit rming or e	able and nterprise	will be fue for the conside	ully utiliz ered	zed by the			Indicate if suitable
Enterprise					Bldgs.	Power			Labor	Ability	Size		or can be made so.
Considered	Soil type	Topo- graphy	Drain- age	Climate	and Fences	& Equip- ment	Capital	Market Outlets	Supply & Skill	& Expe- rience	of Farm	Feed Crops	List change needed
General Crops -													
Corn											XXX	XXX	
Wheat											XXX	XXX	
Oats											XXX	XXX	
Soybeans											XXX	XXX	
Clover											XXX	XXX	
Alfalfa					· · · · · · ·	1					XXX	XXX	
Special enterprises -											XXX	XXX	
Seed production											XXX	XXX	
Sugar beets											XXX	XXX	5
Potatoes						•					XXX	XXX	
Tobacco											XXX	XXX	
Canning crops												XXX	
Purebred livestock													
Types of farming -												•	• •
Cash crops (no or													
Deirm (fluid mills)	+		1			·							
Dairy (Ind milk)		-											
Doi my (anon or mfg													
milk) and gon'l arong	1												
Major livestock hogs	·												
with general crops													
Major livestock fat													
cattle with gen, crops													
Major livestock poul-	1							<u> </u>					,
try with gen. crops													
Beef breeding herd		1					1	t					·
with general crops													
Pasturing beef or													
sheep crops primari-												$(1,1)^{1} = (1,1)^{1}$	
ly hay													
General livestock													-
and general crops				. • • • • • •									
Fruit farming			1.1		1. 		1.00						
Truck crop farming													

The best adapted types of farming (enterprise or combination of enterprises) for this farm are -

First choice \_\_\_\_\_\_ Second choice \_\_\_\_\_\_

Third choice

### IV PLANNING THE NEW CROPPING SYSTEM

#### A. Proposed Crop Rotation

Major Rotation

#### Minor Rotation

List crops in the rotation in order grown	Total acres of each crop to be raised in a com- plete rotation	Ave. acres of each crop to be raised per yr. in rot.	List crops in the rotation in order grown	Total acres of each crop to be raised in a com- plete rotation	Ave. acres of each crop to be raised per yr. in rot.
1st yr.			1st yr.		
2nd yr.			2nd yr.		
3rd yr.			3rd yr.		
4th yr.			4th yr.		

#### B. Summary of Proposed System with Suggested Soil Treatment, Anticipated Yield and Total Production

	Average		Anticipa	ted Average
Crops and Pasture	acreage per year	Soil treatment per acre (lbs. fertilizer & loads of manure)	Yield per acre	Annual total production
Clean tilled crops - Corn				
Soybeans				
Small grain crops - Wheat				
Oats				
1st yr. sod crops - Hay, kind				
Hay, kind				
Rotation pasture				
2nd yr. sod crops - Hay, kind				
Hay, kind				
Rotation pasture				
3rd yr. sod crops - Hay, kind				-
Rotation pasture				
Pasture on hay stubble		• /		
Pasture on new seedings	5			
Permanent pasture				
Woods pasture				
C rops not harvested or pastured but plowed dow	n			

# The Soil Productivity Balance of Cropland

An engineering "yardstick" by which to measure the rate of rise or fall in the producing capacity of a farm's cropland. By it, all forces—good and bad—making up soil productivity, are reduced to a single over-all figure. The procedure is in terms of the individual farm's own conditions; the answer, arithmetic; its meaning usable, rendering the fate of cropland predictable.

Sod Grop GRAZED or MOWED for Hay     ACRES     FACTOR     FOIRTS       *Alfalfa, seeded 1 yr. before     +2.5 +       *Alfalfa, seeded 2 yrs. before     +0.5 +       *Alfalfa, seeded 1 yr. before     +2.0 +       *Common Clovers, seeded 1 yr. before     +2.0 +       *Common Clovers, seeded 1 yr. before     +1.25 +       *Common Clovers, seeded 1 yr. before     +0.25 +       *Timethy, seeded 2 yrs. before     +0.25 +       *Timethy, seeded 1 yr. before     +0.25 +       *Timethy, seeded 1 yr. before     +0.25 +       *Timethy, seeded 1 yr. before     +3.0 +       *     (See Schedule A)     +       *Sweet Clover, seeded 1 yr. before     +3.0 +       *     (See Schedule A)     +       *     *     *       *     Sweet Clover, GREEN, plowed this year     +       *     *     *       *     *     *       *     *     *       *     *     *       *     *     *       *     *     *       *     *     *       *     *     *       *     *     *       *     *     *       *     *     *       *     *     *								
a       b       a x b         ** Alfalfa, seeded 1 yr. before       +2.5 +         ** ** Alfalfa, seeded 2 yrs. before       0       0         ** Common Clovers, seeded 1 yr. before       +1.25 +         ** Common Clovers, seeded 1 yr. before       +1.25 +         ** Common Clovers, seeded 1 yr. before       +0.25 +         ** Time-low, Mix. seeded 2 yrs. before       +0.25 +         ** Time-tow, seeded 1 yr. before       +0.25 +         ** Time-tow, seeded 1 yr. before       +0.25 +         ** Time-tow, seeded 1 yr. before       +0.25 +         **       Time-tow, seeded 1 yr. before       +0.25 +         **       **       **         **       Sweet Clover, seeded 1 yr. before       +*         **       **       **         **       Sweet Clover, MATURED, ungrased this year       +*         **       **       **         **       **       **         **       **       **         **       **       **         **       **       **         **       **       **         **       **       **         **       **       **         **       **			Sod Crop GRAZED or MOWED	for Hay	ACRES	FACTOR	POINTS	
1       *Alfalfa, seeded 1 yr. before       *2.5 +         2       *Alfalfa, seeded 2 yrs. before       0       0         3       *Alfalfa, seeded 3 yrs. before       0       0         4       *Common Clovers, seeded 1 yr. before       0       0         4       *Common Clovers, seeded 1 yr. before       0       0         5       Clov-tim.Mix. seeded 2 yrs. before       0.025 +         7       Timothy, seeded 1 yr. before       0.025 +         7       Timothy, seeded 2 yrs. before       0.00         9       *Sweet Clover, seeded 1 yr. before					8.	Ъ	axb	
2       *Alfalfa, seeded 2 yrs. before       0       0         3       *Alfalfa, seeded 3 yrs. before       0       0         4       *Common Clovers, seeded 1 yr. before       0       0         5       Clov-tim.Mix. seeded 1 yr. before		1	*Alfalfa, seeded 1 yr. bef	ore		+2.5	+	
3       *Alfalfa, seeded 3 yrs. before       0       0         4       *Common Clovers, seeded 1 yr. before       +2,0 +         5       Clov-tim.Nix. seeded 1 yr. before       +1,25 +         6       Tim-olov.Mix. seeded 2 yrs. before       +0,25 +         7       Timothy, seeded 1 yr. before       +0,25 +         8       Timothy, seeded 1 yr. before       +0,25 +         9       *Sweet Clover, seeded 1 yr. before       +3,0 +         10       (See Schedule A)       +         11       For RESTORATIVE CROPS Harvested		2	*Alfalfa, seeded 2 yrs. be	fore		+0.5	+	
4       *Common Clovers, seeded 1 yr. bsfore       +2.0 +         5       Clov-tim.Wix. seeded 1 yr. bsfore.       +1.25 +         6       Tim-olov.Mix. seeded 2 yrs. bsfore       +0.25 +         7       Timothy, seeded 1 yr. bsfore.       +0.25 +         8       Timothy, seeded 1 yr. bsfore       +0.25 +         9       *Sweet Clover, seeded 1 yr. bsfore       +0.25 +         10       (See Schedule A)       +         11       For RESTORATIVE CROPS Harvested       -         12       Sweet Clover, MATURED, ungrased this year       +3.5 +         13       Sweet Clover, GREEN, plowed this year       +2.5 +         14       (See Schedule A)       +         15       ESIDUES left on land from one year's crop:       +0.25 +         16       Sum of CREDITS for Crop MANURE and RESIDUE		3	*Alfalfa, seeded 3 yrs. be	fore		0	0	
5       Clow-tim.Nix. seeded 1 yr. before.       +1,25 +         7       Timolow.Mix. seeded 2 yrs. before       +0,25 +         7       Timothy, seeded 1 yr. before       +0,25 +         8       Timothy, seeded 2 yrs. before       0.0         9       *Sweet Clover, seeded 1 yr. before       +5,00 +         10       (See Schedule A)       +         11       For HESTORATIVE CROPS Harvested		4	*Common Clovers, seeded 1 y	r.before		+2.0	+	
6       Tim-clov.Mix. seeded 2 yrs. before       +0.25 +         7       Timothy, seeded 1 yr. before       0.0         8       Timothy, seeded 2 yrs. before       0.0         9       *Sweet Clover, seeded 1 yr. before       +3.0         10       (See Schedule A)       +         11       For #ESTORATIVE CROPS Harvested		5	Clov-tim.Mix. seeded 1 yr.	before.		+1.25	+	
7       Timothy, seeded 1 yr. before       +0.25 +         8       Timothy, seeded 2 yrs. before       0.       0         9       *Sweet Clover, seeded 1 yr. before       +5.0 +         10       (See Schedule A)       +       +         11       For EESTORATIVE CROPS Harwested		6	Tim-clov.Mix. seeded 2 yrs	• before		+0.25	+	
8       Timothy, seeded 2 yrs. before       0.       0         9       *Sweet Clover, seeded 1 yr. before       +3.0 +         10       (See Schedule A)       +         11       For RESTORATIVE CROPS Harvested		7	Timothy, seeded 1 yr. befo	re		+0.25	+	
9       *Sweet Clover, seeded 1 yr. before       +3.0 +         10       (See Schedule A)       +         11       For RESTORATIVE CROPS Harvested		8	Timothy, seeded 2 yrs. bef	ore		0,	0	
10       (See Schedule A)       +       +         11       For RESTORATIVE CROPS Harvested		9	*Sweet Clover, seeded 1 yr	• before		+3•0	+	
11       For RESTORATIVE CROPS Harvested		10	(See Sch	edule A)		+	+	
Material NOT REMOVED from the Land       ACRES       FACTOR       POINTS         12       Sweet Clover, MATURED, ungrased this year       +3.5       +         13       Sweet Clover, GREEN, plowed this year       +2.5       +         14       (See Schedule A)       +       +         15       Sweet Clover, GREEN, plowed this year       +2.5       +         16       (See Schedule A)       +       +         16       Sum of CREDITS for Crop MANURE and RESIDUE		11	For RESTORATIVE CROPS Here	ested				
Material NOT REMOVED from the Land       ACRES       FACTOR       FOINTS         12       Sweet Clover, MATURED, ungrased this year       +3.5       +         13       Sweet Clover, GREEN, plowed this year       +2.5       +         14       (See Schedule A)       +       +         15       Sweet Clover, GREEN, plowed this year       +2.5       +         16       Sum of rom one year's crop:       +0.25       +         16       Sum of CREDITS for Crop MANURE and RESIDUE								
12       Sweet Clover, MATURED, ungrased this year       a       b       a x b         13       Sweet Clover, GREEN, plowed this year       +3.5       +         14       (See Schedule A)       +       +         15       Corn stalk, soy and grain straw(Schedule A)       +       +         16       Sum of CHEDITS for Crop MANURE and RESIDUE		Viat	arial NOT REMOVED from the	Iand	ACRES	FACTOR	POINTS	
12       Sweet Clover, MATURED, ungrased this year       +3.5       +         13       Sweet Clover, GHEEN, plowed this year       +2.5       +         14       (See Schedule A)       +       +         15       ESIDUES left on land from one year's crop: Corn stalk, soy and grain straw(Schedule A)       + 0.25       +         16       Sum of CHEDITS for Crop MANURE and RESIDUE					a	Ն	axb	
13       Sweet Clover, GREEN, plowed this year       +2.5 +         14       (See Schedule A)       +         15       MESIDUES left on land from one year's croppi Corn stalk, soy and grain straw(Schedule A)       +0.25 +         16       Sum of CHEDITS for Crop MANURE and HESIDUE	12	Sweet Cl	over, MATURED, ungrased this	year		+3.5	+	
14       (See Schedule A)       +       +         15       NESIDUES left on land from one year's crop: Corn stalk, soy and grain straw(Schedule A)       +0.25 +         16       Sum of CREDITS for Crop MANURE and RESIDUE	13	Sweet C]	over, GREEN, plowed this ye	ar		+2.5	+	
HESIDUES left on land from one year's crop: Corn stalk, soy and grain straw(Schedule A)       +0.25 +         In       Sum of CREDITS for Crop MANURE and RESIDUE	14		(See Sched	ule A)		+	+	
16       Sum of CREDITS for Crop MANURE and RESIDUE	15	RESIDUES	left on land from one year lk. soy and grain straw(Sch	's crop: edule A)		+0.25	+	
16       Sum of CREDITS for Crop MANURE and RESIDUE								
CONTROLS and PROTECTIONS on Cropland       ACRES       SLOPE       FACTOR       POINTS         In SOD over winter and summer: (Items 11 plus 12)       +1/10 +       +	16		Sum of CREDITS for Crop MA	NURE and	RESIDUE		••••	+
on Cropland     a     b     o     a x b x c       In SOD over winter and summer: (Items 11 plus 12)     +1/10 +     +1/10 +       In LIVE CROPS over winter only: (Item 26, 13, & 14 if applicable)     +1/20 +     +1/20 +       In ROW & SPRING DRILLED CROPS on CONTOUR and/or STRIPPED and/or TERRACED land (Items 25,27,28,29)     +1/20 +       20     Credits for CONTROLS in operation against EROSION	[	CONT	ROLS and PROTECTIONS	ACRES	SLOPE	FACTOR	POINTS	
In SOD over winter and summer: (Items 11 plus 12)			on Cropland	a	Ъ	0	axbxc	
In LIVE CROPS over winter only:	17	In SOD ( (Items	wer winter and summer: 11 plus 12)			+1/10	+	
In ROW & SPRING DRILLED CROPS on CONTOUR and/or STRIPPED and/or TERRACED land (Items 25,27,28,29)       +1/20         20       Credits for CONTROLS in operation against EROSION	18	In LIVE ~(Item 26	CROPS over winter only: . 13.& 14 if applicable)		1 316	+1/20	+	
Credits for CONTROLS in operation against EROSION	19	In ROW 8 CONTOUR TERRACEI	e SPRING DRILLED CROPS on and/or STRIPPED and/or bland (Items 25 27 28 29)		Iten	+1/20	+	
ADDED to SOIL during Crop Year       TONS       FACTOR       POINTS         ADDED to SOIL during Crop Year       a       b       a x b         Fertiliser in terms of SINGLE Strength: (Item 21, Schedule C)       +1.5 +         Manure produced on CROPLAND during GRAZING: (Item 22, Schedule B)       +0.15 +         Manure produced in BARN and OPEN-LOT: (Item 23, Schedule B)       +0.15 +         Manure produced in BARN and OPEN-LOT:       +0.15 +         Manure of Credits for MANURE AND FERTILIZER	. <b>.</b>					<b>-</b>		
ADDED to SOIL during Crop YearTONSFACTORPOINTSaba x bFertilizer in terms of SINGLE Strength: (Item 21, Schedule C)+1.5+Manure produced on CROPLAND during GRAZING: (Item 22, Schedule B) (Item 23, Schedule B)+0.15+Manure produced in BARN and OPEN-LOT: (Item 23, Schedule B)+0.15+Sum of Credits for MANURE AND FERTILIZER	-0	• • • • • • • • • •	reality for controls in oper	ation aga	Inst ERUS	TON®®®®	• • • • • • • • • • • • • • •	+
ADDED to SOIL during Crop Year a b a x b Fertilizer in terms of SINGLE Strength: (Item 21, Schedule C)	ſ				TONS	FACTOR	POTNES	
Pertilizer in terms of SINGLE Strength: (Item 21, Schedule C)       +1.5         Manure produced on CROPLAND during GRAZING: (Item 22, Schedule B)       +0.15         Manure produced in BARN and OPEN-LOT: (Item 23, Schedule B)       +0.15         Manure produced in BARN and OPEN-LOT: (Item 23, Schedule B)       +0.15         Sum of Credits for MANURE AND FERTILIZER			ADDED to SOIL during Crop Y	ear	8	b	axb	
Manure produced on CROPLAND during GRAZING: (Item 22, Schedule B)	n	Fertili	er in terms of SINGLE Stren (Item 21. Schedule C	gth:		+1.5	+	
(Item 22, Schedule B)       +0.15 +         Manure produced in BARN and OPEN-LOT:       +0.15 +         (Item 23, Schedule B)       +0.15 +         Sum of Credits for MANURE AND FERTILIZER       +	22	Manure p	roduced on CROPLAND during	GRAZING:				
(Item 23, Schedule B)       +0.15 +         24       Sum of Credits for MANURE AND FERTILIZER       +	,	Manure p	(Item 22, Schedule B roduced in BARN and OPEN-LO	)•••••• T:		+0.15	+	
24 Sum of Credits for MANURE AND FERTILIZER +	5		(Item 23, Schedule B	)		+0.15	+	
	24		Sum of Credits for MANIRE	AND FEPT	ILTZER.			+
• Either straight stands or mixtures in which this legume con-	• 1	Either stra	ight stands or mixtures in which	h this learn	me con-			

Either straight stands or mixtures in which this legume constitutes 50 per cent or more (by weight) of the forage.

ROW and DRILL Crops Harvested	ACRES	FACTOR	POINTS
and the second	&	Ъ	axb
orn, beet, tobacco, potato	•	-2.0	-
Rye, winter wheat, winter barley.	•	-1.0	-
Oats, spring wheat, spring barley	•	-1.0	-
Soybean, as seed and/or hay	•	-0.5	-
(See ScheduleA	.)	-	-

Acres of all CROPLAND ON FARM (Items 11,12,14,30)	Estimated SLOPE of all Cropland Ft. fall in 100 Ft.	FACTOR	POINTS
8.	Ъ	c	axbxc
		-1/10	-

32

31

Debits for EROSION assuming no controls......-

Debits for WASTE of Manure.....

	WASTE of Manure	TONS a	FACTOR b	POINTS axb
33	Manure produced in OPEN-LOT, subject to wasting (Item 33, Schedule B)		-0.07	-

34

41

Net

(Item 40)

 SUMMARY

 35
 CROPPING PATTERN (Items 11,30).....

 36
 CROP RESIDUE (Item 16)......

 37
 CONTROL & EROSION (Items 20,32).....

 38
 MANURE & FERTILIZER (Items 24,34).... +

 39
 GRAND TOTALS......

 40
 NET of Totals......

 40
 NET of Totals......

Cropland

(Item 31a)

Form 4368



Supporting Schedules appear on reverse side.

# SCHEDULE A—Productivity Factors for Cropland

Brome grassSame as timothy Orchard grassSame as timothy Lespedess, annual	Brome grassSame as timethy Orchard grassSame as timethy Red top	Item 10	FORAGE CROP AND SO USED FACTOR	
Orchard gressSame as timothy Red top	Orchard gressSame as timothy Red topscame as timothy Lespedess, annual		Brome grass	
Red topshow as timothy Lespedess, annual	Red top		Orchard grassSame as timothy	
Lespedeza, annual +0.5 Serica	Lespedess, annual +0.5 Serica		Red top Same as timothy	
Series	Series		Lespedesa, annual +0.5	
Item 14       GREEN CROP MANURE AND WINTER COVER CNOP       PACTOR         Alfalfs, top growth left on land	Item 14       GREEN CROP MANURE AND WINTER COVER CROP       PACTOR         Alfalfs, top growth left on land	×	Serica +1.0	
Alfalfa, top growth left on land	Alfalfa, top growth left on land	Item 14	GREEN CROP MANURE AND WINTER COVER CROP	FACTOR
Clovers, ecmnon, top growth left on land	Clovers, ecmeon, top growth left on land +2.7 Clovers, ecmeon, top growth left on land +2.0 Grasses, top growth left on land +1.0 Serics, top growth left on land +1.5 Timothy, top growth left on land +1.5 Timothy, top growth left on land +1.5 Corpse, turned under green +1.5 Crimson clover, turned under green +1.0 Hubam clover, turned under green +1.0 Hubam clover, turned under green +1.0 Hubam clover, turned under green +1.5 Soybean, turned under green +1.5 Soybean, turned under green +1.5 Soybean, turned under green +1.5 Soybean, turned under green +1.5 Item 15 CROP RESIDUE LEFT ON LAND <u>FACTOR</u> Beet tops		Alfalfa, top growth left on land	+3.0
Clover-timothy, top growth left on land	Clover-timothy, top growth left on land +2.0 Grasses, top growth left on land +1.0 Serica, top growth left on land		Clovers, common, top growth left on land	+2.7
Grasses, top growth left on land	Grasses, top growth left on land	1997 - N. 19	Clover-timothy, top growth left on land	+2.0
Serica, top growth left on land	Serica, top growth left on land		Grasses, top growth left on land	. +1.0
Timothy, top growth left on land	Timothy, top growth left on land		Serica, top growth left on land	• +1.5
Buckwheat, turned under green	Buckwheat, turned under green		Timothy, top growth left on land	. +1.0
Compas, turned under green	Compea, turned under green		Buckwheat, turned under green	+0.5
Crimson elever, turned under green	Crimson olover, turned under green		Cowpea, turned under green	+1.5
Huban clover, turned under green	Huban clover, turned under green		Crimson elever, turned under green	. +1.0
Corn, turned under at tasseling stage	Corn, turned under at tasseling stage		Huban clover, turned under green	• +1•0
Soyban, turned under grom	Soyban, turned under grom		Corn, turned under at tasseling stage	. +1.5
Small grain cover or op, turned under or olipped '0.5 Vetch, turned under rrosmannen (*),5 CROP RESIDUE LEFT ON LAND PACTOR Beet tops	Small grain cover crop, turned under or olipped *0.5 Veich, turned under rrosm		Soybean, turned under green	+1.5
Item 15       CROP RESIDUE LEFT OF LAND       FACTOR         Best tops	Item 15       CROP RESIDUE LEFT ON LAND       FACTOR         Best tops       +0.25         Chaff, from combining alfalfs seed +0.25         Chaff, from combining timethy seed +0.25         Tomato vines         Tomato vines         Buckmeat         -1.5         Carming pea         -0.5         Cropland, fallowed         -1.5         Onion         Prittrees, oultivated         -2.0         Poporn         -2.0         Swest corna         -1.5         Sorgums         -1.5         Sorgums         -2.0         Swest corna         -2.0         Swest corna		Small grain cover crop, turned under or clip	ped +0.5
Team 18       CROP RESIDUE LEFT ON LAND       FAUTOR         Beet tops	Team 18       CKOP RESIDUE LEFT ON LAND       FACTOR         Beet tops		Telon. Curned under grown and and and	
Beet tops	Beet tops	Item 15	CROP RESIDUE LEFT ON LAND FACTOR	
Chaff, from combining alfalfs seed 40.25 Chaff, from combining timothy seed 40.25 Tomato vines	Chaff, from combining alfalfs seed +0.25 Chaff, from combining timothy seed +0.25 Tomato vines		Beet tops +0.25	
Chaff, from combining timothy seed 40.25         Tomato vings	Chaff, from combining timothy seed +0.25 Tomato ving		Chaff, from combining alfalfa seed +0.25	
Tomato vines         +0.25           Item 29         CROF HARVESTED OR GRAZED FACTOR           Bucksheat	Tomato vines		Chaff, from combining timothy seed +0.25	
Item 29       CROP HARVESTED OR GRAZED       FACTOR         Buckmeat	Item 29       CROP HARVESTED OR GRAZED       FACTOR         Bucksheat		Tomato vines	
Buckmeat	Bucksheat	Item 29	CROP HARVESTED OR GRAZED FACTOR	
Oabbage	Oabbage		Buckwheat	
Carming pea	Carming pea		Cabbage	
Compension       -0.5         Cropland, fallowed	Compea		Canning pea0.5	
Cropland, fallowed0.5 Cropland, ille	Cropland, fallowed		Cowpea	
Cropland, idle 0 Flax	Cropland, idle 0 Flax		Cropland, fallowed0.5	
Flax	Plax		Cropland, idle 0	
Fruit trees, oultivated       -2.5         Willet	Proit trees, oultivated       -2.5         Willet		Flax1.0	
Millet1.5 Onion2.0 Popoort2.0 Rape	Millet		Fruit trees, oultiwated2.5	
Onion	Onion		Willet1.5	
Popoora	Popcorta		Onion2.0	
Rape	Rape		Popcorn	
Sorghums	Sorghums		Rape1.5	
9 materia _ 20 1	Sweet corness		Sorghums	
Swood COTTLessessesses	Sudan grass		Sweet cornection -2.0	
Sudan grass	Timerand within tod _2 E		Sudan grass	
	TINGVERG. CUITIVETOGAAAAA SCAD		Vineward. cultivated2.5	

The Ohio State University and United States Dept. of Agriculture, Cooperating

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Agricultural College Extension Service, H. C. Ramsower, Director, Columbus, Ohio

# SCHEDULE B-Tonnage of Manure Produced for Cropland

TO ESTIMATE the tonnage of manure available for Cropland in a single year, one of the two following methods may be employed.

Method I - Based on Estimated Loads Hauled (less accurate)

	Estimated acreage of CROPIAND SOD well grazed	
	About how many MONTHS so grazed during the year	
Item 22	Tonnage of MANURE directly on GRAZED Cropland (above acres x months x 1/2 ton)	
	*Estimated tonnage hauled from BARN or SHED	
ltem 33	*Estimated tonnage hauled from OPEN LOT	
T± 28	Cambined Tenners Prem BADN and IOT	

(Sum of above)

Method II - Based on Numbers of Livestock (more accurate)

	GRA	ZED on (	Cropland	SOD		Livest	ock in H	BARN & O	PEN-LOT
	HEAD	MONTHS IN FIELD	TONS per Mo. per Hd.	TONNAGE of MANURE	KIND	HEAD	MONTHS Con- fined	TONS per Mo. per Hd.	TONNAGE of MANURE
	<u>a</u>	Ъ		axbxc		<u>a</u>	Ъ	c***	axbxc
			0•8		•••••• Horses & Mules ••••••			1.2	
			0•7		Cows kept		-	1.0	
			0.3		••••• Young Cattle (not veal)			0•4	
			0.6		Beef Cattle fattened			0.8	
			0.3		•••••• Sows kept			0•4	
			0.06		•Pigs fed out: raised &/or bought.			0.12	
			0.03		····· Ewes kept ·····			0.12	
			0.03		.Lambs fed out:raised &/or bought.			0.05	
			0.005		••••••Peultry			0.01	
Item 22	On GRAZ	ED Crop	land		Item 23 Combined Tonnag	e in BA	RN & OPI	en-lət.	
				· · ·	OF	the win	ter-prod	luced Mar	nure,

Item 33

\* Standard spreader = 1 ton; large size  $1\frac{1}{2}$  tons.

- \*\* Amounts (no bedding) have been adjusted to the equivalent of cattle manure.
- \*\*\* Amounts (including bedding) have been adjusted to the equivalent of cattle manure as measured by crop-producing effect.



Item 21

Item 15

# SCHEDULE C—Fertilizer Tonnage Applied to Cropland within a Single Crop Year

ON CROPLAND	ACRES TREATED	WITH 0-20-0 0-14-6 0-10-10	WITH 0-21-9 3-18-9 3-9-18	WITH 0-44-0 0-20-20 4-24-12	TOTAL AMOUNT Expressed as Single Strength
	8.	2-12-6 4-10-6 etc. b	etc.	eto.	l x a x b or l <sup>1</sup> 2 x a x c or 2 x a x d
		lbs./acre	lbs./acre	lbs./acre	lbs./yearly
Corn					
Wheat					
Oats, barley					
Beets, tobacco					
Cotal on Cropland Y	early (in	terms of	Single Str	ength)	lbs.
Expressed as Tons o	f Single	Strength g	oods (1bs.	÷2000)	tons

# SCHEDULE D—Residue from Crops and Bedding Needs

		A REAL PROPERTY AND ADDRESS OF ADDRE		
MATERIAL	ACRES Har- vested a	Normal YIELD of GRAIN b	STRAW per bu.of Grain c	Estimated RESIDUE Produced & x b x c
		bu. acre	lbs.	lbs.
Soybean straw			110	
Wheat straw			100	
Oats straw			55	
Corn stover			55	
RESIDUE material pr	oduced (	sum ÷ 2000	)	tons
BEDDING NEEDED by L	ivestock	(Item 23	x 15%).	tons
NOT NEEDED for Bedd	ing (Dif:	ference)	•••••	tons

# SCHEDULE E—Performance in Some Soil Practices

		Actual	Desirable
Average	Rate of Manuring Each Acre Yearly (Item 22 plus 23 ÷ Item 31a)	tons	3 to 4
Average	Eats of Fertilizing Each Acre Yearly (Item 21 x 2000 + Item 51a)	lbs.	100 or up
Percent	of Cropland Receiving Residue Yearly (Item 16 ÷ Ttem Sla)	¥	20 to 40
Renewal	of Soil Tilth:% of Cropland in Sod Yearly. (Item 17 ÷ Item 51a)	%	40 to 60

#### V PLANNING THE LIVESTOCK SYSTEM

If a new crop program is to replace an old one on a farm which is at present stocked, some revision in the type and number of livestock may be necessary. If no changes are made in the crop system some revisions in the livestock program may nevertheless be desirable. In planning a new or revising an old livestock program one must consider the type and amount of feed that a good soil maintaining cropping system will produce, buildings, supply of man labor available, market outlets, and the experience of the operator. Personal likes and dislikes are often costly to satisfy in regard to one's choice of livestock enterprises.

List types of livestock and num- ber of head of each included in	List typ	es of feed	l (grains,	supplem	ents, rou	ghages, pa	asture, et	tc.) and a	mount to	be fed an	nually	Pasture
the proposed program												Requirements
					-							
-							· ·					
· · · · · · · · · · · · · · · · · · ·												
			· · · · · · · · · · · · · · · · · · ·									
				-								
										-		
	•											
	·		· · · ·			,						
				+								
							Y					
									•			
Total feed required by												
Farm produced feed pasture avail-												
able (see proposed crop plan)												
Surplus or deficit of farm			and the second s	1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-			1 1 1 1 1 1 1					
feed and feed to be purchased												

# A. Type, Number, and Feed Required by the Proposed Program

B. Temporary Adjustments That Can Be Made in the Proposed C 1. In years of very unfavorable crop and pasture conditions	rop and Livestock Systems
2. In years of very favorable crop and pasture conditions	

#### VI PLANNING TO GET THE WORK DONE

- A. Equipment and Power Needed to Put the Plan into Operation
  - 1. Operations to be performed on crops and time available

List operations.	Aci	ces covere	ed per ope	Total Acres	Minimum work		
to be performed						operation	time available
				•			

List equipment to be used	Size Required	Cost per unit of use	Owned Personally	Owned Jointly	To be hired	Check if now available for use		
			<u> </u>					
			:					
			· · · · ·					
				·				

2. Equipment required, size, & whether to be owned individually, jointly or hired

B. Man Labor Needed to Put the Plan into Operation

1. Man labor required annually to produce crops in the proposed plan (Form at top of next page)

The following is an illustration of the determination of the hours of man labor required to produce 10 acres of oats on farmer B's farm. Farmer B sows his oats on corn stalk ground without plowing. Instead he disks it once over and if any or all need to be gone over a second time he does so. On the average he disks one-half of the ground the second time. He generally attaches his cultipacker behind the disk and pulls them with his tractor, covering about 20 acres per day. He uses his two-horse drill to sow the oats and usually seeds 10 acres per day. To harvest the oats he uses a 7' grain binder drawn by the tractor which cuts at the rate of 16 acres per day. He has found that one man can shock about 7 acres of average oats per day and that some additional time must be allowed for re-shocking. The stationary thresher which he hires requires a crew of 14 men and threshes about 40 acres of average oats per day.

<u>Operation</u>	Acres Covered	Rate per 10 Hours	Total Hours	
Double disk and cultipack 追 times corn				
stalk ground - Tractor power	15	20 acres	8	
Drill oats - 2 horses	10	10 acres	10	
Cut oats with binder - Tractor power	10	16 acres	8	
Shock and re-shock oats	10	7 acres	16	
Thresh (14 men crew 28 cylinder machine)	10	40 acres	35	
Total man hours required.			. 77	

#### the second second

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1.	Man	labor	required	annually	to	produce	crops	in	the	proposed	plan	(continued)	
						F				Package.	P		

List crops requiring man labor	Acres	Total man hours		
Total Man Hours				

## 2. Man labor required annually to care for livestock in proposed plan

List livestock included in plan	Number	Man hours per unit	Total hours
		Hand milked 160 hrs. per yr.	
Cows - fluid milk production		Machine milked 130 hrs. per yr.	
Cows - home use or cream production		Hand milked 130 hrs. per yr.	
Dairy replacement stock			
(calves, yearlings & 2 year olds)		25 hrs. per yr.	
		Kept in bull pen 90 hrs. per yr.	
Bulls, Dairy or Beef		Kept with herd 49 hrs. per yr.	
Beef breeding herd - Brood cows		30 hrs. per yr.	
Growing & replacement stock		15 hrs. per yr.	
Beef cattle on feed		2 hrs. per month on feed	1997 - A. S. A.
Medium wools		6 hrs. per yr.	
Sheep breeding flock Fine wools		4 hrs. per yr.	
Lambs on feed		hrs. per month on feed	
Brood sows - Less than 5 per farm		45 hrs. per yr.	
5 or more per farm		35 hrs. per yr.	
Pigs (weaning to 220 lbs.) less than 35 per farm		6 hrs. per pig	
35 or more per farm		5 hrs. per pig	
Poultry - Laying Flock - Commercial Flocks		Per bird 2.0 hrs. per yr.	
Small Farm Flocks		Per bird 1.6 hrs. per yr.	
Chickens raised		Per 100 chicks started 30 hrs.	
**		00 have a set	
Horses		90 nrs. per yr.	
Total man hours	xxx	XXX	

#### 3. Total man labor required annually and the hours available

Type of Work	Total Hours
Labor on crop enterprises (see form top of page)	
Labor on livestock enterprises (see form above)	
Total labor required for crop and livestock enterprises	
Total maintenance and miscellaneous labor (1)	
Total labor required to operate the farm	
Total family labor now available	

 Maintenance & miscellaneous labor requires approximately 1 hour for each 3 hours spent on crops & livestock.

		Hours	spern	eriod	on cro	op and	lives	tock e	nterpr	ises		Total	Total	Labor
M O N T H												labor on crops and live- stock	labor avail- able	Avail- able for Misc. work
Jan.								2						
Feb.														
Mar.														
Apr.											-			
May														
June					-									
July														
Aug.														
Sept.				-										
Oct.	× · · · ·								4					
Nov.														
Dec.														
Total														

### 4. Distribution of man labor required for crops and livestock

 Total man labor required for all types of work\_\_\_\_\_ hours.
 hours. Total labor available\_\_\_\_\_ hours.

 Annual surplus or deficit\_\_\_\_\_\_ hours.

#### VII DETERMINING THE PROBABLE RECEIPTS EXPENSES AND FARM INCOME

A. Annual Receipts Under Old Organization & Those Anticipated Under New Plan When "Fully" Established

	Quantity avail	able for sale	Price p	oer Unit	R	eceipts (dol	lars)
	Old			Long	Old organi	zation with	New plan with
Products	Organization	New Plan	Present	time	Present	Long time	long time
	Units	Units	Price	average	Price	Ave. price	Ave. price
Dairy products					\$	\$	\$
Dairy cattle							
Veal calves		· · · · · · · · · · · · · · · · · · ·					
Boof gattle		,					
Deel Cattle							
Lambs							
Wool							1
Market hogs							
Eggs			_				
Poultry							
			+				
Crops		·					
	· · · · · · · · · · · · · · · · · · ·						
Misc. income							
Total receipts	XXX	XXXX	XXX	XXX	\$	\$	\$

B. Annual Expenditures Under Old Organization & Those Anticipated Under New When "Fully" Established

Product or Service	Quantity required for operation		Price per unit		Expenditure (dollars)			
	Old Organization Units Used	New Plan Units Used	Present Price	Long time average	Old organ Present Price	ization with Long time Ave. price	New plan with long time Ave. price	
Labor hired								
Feed purchased								
Seeds & plants								
Sub-totals carry forward	xxx	xxx	xxx	xxx	\$	\$	\$	

## B. Expenses (continued from preceeding page)

Product or Service	Quantity required for operation		P <i>r</i> ice per unit		Expenditure (dollars)			
	Old			long	Old Organization with New plan with			
	Organization	New Plan	Present	time	Present	long time	long time	
	Units Used	Units Used	Price	Average	Price	Ave. price	Ave. price	
Sub-totals								
proceeding pg.	XXX	XXXX	XXX	XXX	\$	\$	\$	
Fertilizer			;					
Lime								
Fuel & oil								
Twine, etc.				•				
	-							
Threshing								
Combining					······································			
Baling					:			
Corn picking								
					а. С			
Veterinarian		-						
Farm share automobile								
Farm share								
inglit & phone				· · · · · · · · · · · · · · · · · · ·				
Live stock purchased								
Chicks purchased								
Taxes Bool & porcorol							a start and a start and a start and a start a s	
Insurance				i				
fire & wind								
Industrial					1			
		·····						
Average annual co	st for repairs.							
improvements and	replacements on							
A - Machinery, tractors, tools, etc.								
B - Buildings, fen	ces, arains, wells	, etc.						
-								
Total annual expense					\$	\$	\$	
Farm income (receipts less expenses)								
Deduct interest & debt payments			· · · · · · · · · · · · · · · · · · ·					
Remainder available for family living					\$	\$	\$	

<u> </u>	······································	·	 	
VIII	PUTTING THE NEW PLAN INTO			
	A. Steps to be taken the "first"			
	(1)	(5)		
	(2)	(6)	 	
	(3)	(7)		
	(4)	(8)	 -	







