

4175

Our
FARM PRODUCTION PLAN
and **BUDGET**
for Next Year



FARM MANAGEMENT I

UNIVERSITY OF MISSOURI

COLLEGE OF AGRICULTURE

AGRICULTURAL EXTENSION SERVICE

4-H Circular 135

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OUR FARM PRODUCTION PLAN AND BUDGET FOR NEXT YEAR

FARM MANAGEMENT I *

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What Is Farm Management?

Good farm management is first making the right decisions on *what* to do and then acting on the decisions made. No farmer has time or money or credit in a given year to do everything he knows needs doing on his farm. The successful farmer first considers *all* of the things he *could* do. Then he selects what he thinks will be most profitable and what he has the time and the money or credit to do. After he decides *what* things to do he must do them in a manner that gives him high production at a low cost per bushel, pound, etc. The farmer who is shrewd at selecting the right things or which to spend his time and money, and then is skillful at doing the selected things well, is much more successful in making money than the man who does, in a haphazard fashion, the jobs that first come to mind.

In farm management, *deciding* what to do is *organization*; putting decisions into action is *operation*.

Organization is deciding what crops to grow and where to grow them; what machinery is needed; what kind of livestock to keep and what buildings and equipment are needed to care for them. Any farmer has to make some of the above decisions and perhaps several others. Usually he cannot decide what crops to grow without considering what livestock to keep or what soil treatments to use. He must keep in mind his whole farm operation.

When he makes his decisions on the basis of the whole farm operation and for one year only, he has an *annual production plan*. If he makes his decisions on the basis of the whole farm operation to cover a period of years, he has a *Balanced Farming plan*.

Even though a farmer has a long-time Balanced Farming plan, he still needs an annual production plan. For a farm not already fairly well balanced, several years are usually required to make changes from the old to the new

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*To be used with *Annual Budget and Production Plan* sheet.

plan of operation. So the annual production plan is needed to maintain balance in grain, roughage, pasture and finances while changes are in progress. In this project we shall consider only the annual production plan for your farm. In another project you may want to work out a long-time Balanced Farming plan. If so, experience with making annual production plans will help you make your Balanced Farming plan.

In this project each member will study the next year's operating plan for his own farm.

Make an Accurate Map

First you need a good map of your farm. Aerial photos are available for all Missouri farms. Perhaps your father has one for your farm. If not, go to your county ASC office and ask permission to make a tracing. Put the photo where the light is good. Lay a piece of tracing paper over the photo and with a soft pencil lightly trace the outlines of the farm and fields. Write on your map the acres in each field as shown on the photo.

Next, with your father's aerial photo, or your tracing as a guide, draw a map of your farm on page 2 of the plan sheet. Let each square on the map equal 10 acres. Four of the squares will equal 40 acres. A "forty," in farmers' language, means a square piece of land, measuring one-fourth mile on each side and containing about 40 acres. The size or shape of your fields may have changed since the photo was made; if so, get your father's help in making the changes to show the fields as they actually were last year.

When you have finished your map do the following:

1. Begin at the upper left-hand corner of your map and letter the fields (left to right) A, B, C, etc. until you come to the right side of the map. Then return to the left side and continue lettering the fields left to right until you have given a letter to all fields.

2. On each field record acres, yield and soil treatment as follows:

A-20 A. Corn 40 bu.
300# 4-16-4 Plowed under
100# 4-16-4 Starter

Leave room to write in plans for next year's crop and soil treatment. If the field is too small to do this, put only the letter and acreage on the field and then write the other information outside the map, thus:

B-5 A. Sorgo silage -15 T.
300# 3-12-12 under
100# am. nitrate

3. Ask your father what crops are to be in each field next year, what soil treatments, if any, are to be used, and what yields he expects, if the season is average.

Estimate Your Crop Production

You are now ready to estimate your crop production for next year in

the table, "Crop Production Summary" on page 2 of the "Annual Budget and Production Plan" sheet. For example, add the acreage of all fields to be in corn and put the total in line 1, column 2; calculate the production for all fields and put the total in column 4; calculate the average yield per acre and put in column 3. Multiply column 4 by the factor in column 5 to get column 6, the corn equivalent value in feeding value of feed grains. Repeat the foregoing procedure for all feed grains to be raised and total column 6.

In a similar manner fill out the sections for hay, silage, and cash crops and transfer the totals as directed in each section.

Figure the Feed Balance

The next step is to compare the feed produced with the feed requirements of your livestock. First enter the different kinds of livestock to be on hand during the year in column 2. Then multiply column 2 by the feed requirements in columns 3, 5, 7, and 9 and put the respective results in columns 4, 6, 8, and 10. If no silage is fed, divide the silage requirement by 3 and add the result to the hay requirement.

Total columns 4, 6, 8 and 10 in line 14; compare with totals in line 15 and enter the differences in line 16. If you have a surplus of feed, put a (+) in front of the difference; if a shortage, put a (-). If any of your figures are minus, your estimate shows that you will feed more than you raise. Would the use of more nitrogen or other fertilizer help your grain supply? Would putting some hay land in alfalfa to supply your hay release more land for feed grains yet provide more hay? Could you use oats, a low-yielding grain crop, for silage and release your "row crop" land for grain production? These are some of the questions you might ask yourself, if you were the farm manager, in trying to balance your crop production to support your livestock program.

In this project we won't try to make these adjustments. They need to be carefully figured through on a whole farm basis to determine what long-time plan would be best for your farm. This activity will be reserved for a more advanced project.

Does Your Pasture Balance?

Next let's study the "Pasture Balance" (page 3) on your farm. Add up the acres of each different pasture crop as listed in this section and put the acres in column 2. Then multiply acres (column 2) by the factor for each month that the pasture is available. Do not use decimal points; enter the nearest whole number.

The factors in the columns are the number of animal units (abbreviated A.U.) that one acre of pasture will carry for one month. (An A.U. is approximately 1,000 lbs. live weight).

The factors in the table are for land that would produce 40 bushels of

corn or 35 bushels of barley per acre. If you apply nitrogen to pasture crops, or if your land would produce more or less than the above yields you can adjust the factors up or down to fit the fertility level of your land. For example, if your land would produce one-fourth more corn (50 bushels) increase the factors one-fourth.

When you have figured each pasture crop, total all columns. These totals are the number of animal units of pasture available for each month.

Now you are ready to figure the number of animal units you had on hand to eat the pasture you had available. First put in columns 3 to 13 the number of *head* of livestock in each class listed in column 1. Then multiply the number of head on hand each month by the animal unit (A.U.) factor; this gives you the number of animal units required each month. Total each column on line 20 and compare with totals on line 13. Enter the difference on line 21. If you have a surplus of pasture, put a (+) in front of the difference; if a shortage a (-).

What months are you short on pasture? What months long? If you are short of pasture in July and August could you shift some acres out of fall or spring pasture into sudan? Or could you grow more lespedeza in small grain crops? Would good fall pasture reduce the amount of winter feed you will need?

Again we shall not try to calculate the results of changes you might make in your pasture system. But perhaps you would like to get your father's opinion as to whether the changes, if made, would add to the income above cost.

Estimate Receipts and Expenses

How will the farm come out "cash-wise" next year? This you estimate for page 4. Use your father's farm account book or income tax report as guide and the cropping system intended and estimate what the cash outlay for the year will be. Then estimate the cash receipts from sales of farm products. Subtract "total expenses" from "total receipts" and you have "net cash" income.

Net cash income does not give you true farm income which is what the farm actually might produce next year. You may sell next year what the farm has produced this year; or, you may not sell next year all that you raise next year. In Farm Management II, Farm Accounts and Analysis, you will learn how to make these and other adjustments.

However, "net cash income" serves a very useful service because it indicates approximately how much money you may have to spend for farm and family purposes. Cash is needed for the following:

1. Social security tax
2. Personal income tax
3. Principal payments on debts
4. Life insurance premiums
5. Cash family living expense
6. Purchase of new or replacement farm machinery, buildings, equipment or breeding stock

7. Purchase of new or replacement appliances and furnishings for the home
8. Purchase of more land, government bond or other investment

The first five must be met each year and cannot be delayed without causing serious trouble; so these obligations must be paid out of net cash receipts in order to keep your financial position secure. The remainder of net cash receipts are available for the last three purposes. This remainder will limit the amount you spend for the last three classes unless you borrow money and go deeper in debt. Further borrowing may or may not be advisable depending on circumstances; but discussing wise use of credit is not a part of this project. So with "net cash" receipts we end this project.

However, your family may wish to discuss the remainder of the items on page 4 and the items on page 1 of the Annual Budget and then decide what distribution of net cash receipts is best for the welfare and happiness of the whole family.

How Good an Estimator Are You?

There is only one way to find out: Keep a record of cash expenses and receipts. If your family is not now keeping such a record, you might get a Missouri Looseleaf Farm Record Book from your leader or county agent and be the family bookkeeper on cash receipts and expenses. There are other records provided for in the book and these are necessary for a study of the farm business. But only the cash expenses and cash receipts are necessary to know how good an estimator you are. Also if you have these records, you can do a better job when you make the production budget for the following year.

UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE AND THE UNITED STATES DEPARTMENT OF AGRICULTURE COOPERATING

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J. W. BURCH, Director, Agricultural Extension Service

OUR FARM PRODUCTION PLAN AND BUDGET

FOR NEXT YEAR

Farm Management I -- 4-H Circular 135

Project Record

Name _____ Age _____

Address _____ County _____

Name of Club _____

Project Leader _____

My Club Activities

Farm map completed (Date) _____

Crop production estimated (Date) _____

Feed balance estimated (Date) _____

Pasture balance estimated (Date) _____

Cash receipts and expenses estimated (Date) _____

Number of community meetings attended _____

Number of project meetings attended _____

Number of times I demonstrated _____

Number of times I exhibited _____

Took part in tour? Yes _____ No _____

Club activities I helped with _____

Community service activities I helped with _____

APPROVED _____ Leader, Date _____

STORY