UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE
AGRICULTURAL EXPERIMENT STATION
M. F. MILLER, *Director*

CIRCULAR 272 Columbia, Mo. JULY, 1943

Sharing Earnings and Management to Hold Workers on Farms

O. R. JOHNSON

Missouri farmers have made a real contribution to the war effort. They have not only contributed sons and daughters to the military and naval forces, but they have given up approximately 40 per cent of their normal hired labor supply to these forces or to other war industries. Missouri farmers have expanded their activities, while they have been denied normal replacements of farm equipment or the substitution of more machines for the labor force lost. They have nevertheless expanded their activities, they have worked longer hours and have called on members of the family for greater effort. At the same time they have conscientiously tried to do their share in helping finance the war. In an attempt to keep the remaining labor force from leaving the farm for what seems to be more attractive industrial employment, farmers have increased the inducements they offer workers from 30 to 40 per cent in money wages and an average of 20 per cent in perquisites.

Judged by the number of inquiries that are coming to the University, farmers are not overlooking other means by which they may hope to keep the working force on the farm. In addition to the pressure that is being put on agriculture to utilize every acre of available land, every tool, and every hour of the workers, there is also the problem of providing normal opportunity for young men to acquire experience and assume responsibility as farm operators. Farmers who because of age would normally step aside are staying on the job through patriotic motives, while the young men who would ordinarily succeed these retiring farmers must postpone becoming farm operators. Farmers recognize this difficulty and are arranging for these young men to share responsibility for the management of farms and also the returns resulting therefrom.

If properly worked out, this should accomplish several important objectives. Young men who acquire management training under the guidance of men with long years of experience have more than a mere wage interest in their work; they may accumulate good foundation stock for their own farms when there is once more opportunity

to become full farm operators. The experienced operator also is aided in holding on his farm in this critical time a worker of much more than average ability.

The recent action of the man-power authority in giving essential industry classification to workers on farms has helped the situation from the standpoint of keeping workers on farms, but it has not met the other requirement of giving young men experience in carrying responsibility. It is also true that placing responsibility on the worker has increased his interest in the job and his willingness to see it through. Thus better service is being rendered than where the worker's responsibility is more limited.

A number of instances have been observed where proprietors who formerly have been employing their farm superintendents on a straight wage basis are now shifting to a part wage and part share in the proceeds basis.

Sharing Earnings Without Sharing Management Responsibility

Providing incentive beyond the mere size of the monthly pay check was first developed on the farm as an application of the industrial bonus principle. Its essential features involved the determination by the farmer of the average yield per acre of the major cash crops and the average production per cow, sow, or hen of the major livestock enterprises. After this determination was made the employer promised to share with his farm hands any improved production which they could develop through the year by exercising unusual diligence and care with the enterprises in question. In some cases the manager would promise the workers a half and in others all of the increased production. A simple enlarging of the enterprise would not bring bonuses. The number of pigs saved per sow, the number of pounds of milk produced per cow, or bushels of wheat grown per acre were the determining items. For instance, if the average wheat yield on the farm was twenty bushels and for the current year they succeeded in producing twenty-five, the workers would share in the five bushels per acre increase. This had the effect of giving workers an increase in good years while assuring them of their regular pay in average or below average years. This plan works well on farms where there are a limited number of farm hands. The plan often applies to only a single important income producing enterprise where a worker has a major responsibility for doing the work. It generally constitutes a special agreement with the individual worker. Instances have been observed where this bonus plan has resulted in increases of as much as fifty per cent in the total pay received by a worker.

A similar sharing of increased returns due to price improvement has sometimes been used. In the cases of increases due to either or both production and price, such increase improves the ability of the employer to pay higher wages so that he is really offering to share unexpected gains with his workers. As has been intimated,

this plan does not usually involve much sharing in management. Subsequent policies discussed will involve both the matter of sharing management and of returns.

The Father-Son Arrangement

Probably the most common inquiry in this connection is one where the owner wishes to give one or more of his sons a share in the management and in the returns from the business. Some states have prepared a special father-son contract form for this particular case. The Missouri College of Agriculture is distributing what is called a flexible lease form which will serve the same purpose although it is not labelled as a father-son lease contract. It is not the purpose of this brief report to discuss the form of the rent contract as this is discussed in other available publications*. It is proposed here to concentrate on specific arrangements between farm owners and workers or semi-tenants with the hope that the information given will help to answer many of the questions which are now arising in farmers' minds.

The typical father-son situation is about as follows: They have the home farm under operation and under the active administrative management of the father. The son usually 16 years of age or older would like to have more of an interest in the business than that normally possessed by the farm boy who helps do the work but who is not consulted in making the major decisions.

The Single Enterprise Agreement.—The first step in initiating a son into a share in the farm business usually involves a single farm enterprise. The father and son agree that the son is to give his full attention to the farm as a worker. He will live at home and eat at the family table just as he has been doing. He will receive a nominal wage in addition to the living which his father and mother provide. This wage will generally be anywhere from 50 to 100 per cent of a good hired hand's wage. In addition, the son will be given the responsibility for carrying on some particular enterprise. He may, for instance, be told that the sheep enterprise is to be under his care. He is to see that the ewes are bred at the proper time, and that all necessary sanitary measures are planned for and carried out. He is to be responsible for saving the lambs at lambing time, for docking and castration, for carrying out the proper feeding system, for shearing and preparing the wool for market. He is to cull the breeding flock and decide on what replacements must be made, etc. He must keep a careful record of the enterprise. When the year's work is finished the results are to be computed and the son is to receive a specified share of the net income. This may be anywhere from a fourth to all the net income from that enterprise.

*See Missouri Experiment Station Bulletin 409.

Major Plans Must be Jointly Developed.—The general plan of operation is agreed upon by father and son at the beginning of the year and any major decision is usually discussed between them. Care must be taken that the father does not over-rule the son's judgment in every decision of significance. If this were true, the son would soon realize that he was only a nominal supervisor and that his decisions had no weight.

Such a plan may be applied to any farm enterprise, to any number of enterprises or to the entire farm business. The reason for beginning with just one enterprise is that here the son can acquire experience in making decisions before a major part of the farm business is placed under his control.

Giving the Son a Share in the Entire Business.—When it comes to giving the son an interest in the entire farm business instead of confining his interest to one enterprise, the share received by the son will ordinarily be 5 or 10 per cent of the net sales and increase for the first year. This figure will be increased by some amount each year thereafter, frequently one per cent, until the son's share may be as much as a fifth to a third of the net sales and increase.

By net sales and increase is meant the difference between total sales and increase in inventory of livestock and feeds, and crops held for sale on the one hand, and the cost of livestock and feed purchased, or any decrease in inventory of livestock and feed for the year on the other. Net sales and increase do not include farm operating expenses (See Table 1). They involve only those animals and feeds on hand, those grown and any that may be bought during the

TABLE 1. NET SALES AND INCREASE B-F.A.S.-'37
(From an Actual Record of a Sheep Enterprise)

First Inventory:			Second Inventory:		
27 Ewes & Lambs	$395.00		40 Ewes & Lambs	$520.00	
1 Ram	50.00		1 Ram	50.00	
			3 Weathers	10.00	
Total Investment		$445.00			$580.00
Sheep Purchases		0.00	Sales:		
Feed Purchases		0.00	Wool, 266 lbs.	$ 95.86	
			Sheep (7 head)	134.76	
			Premiums	6.50	
			Total Cash Receipts from Sales		$237.12
To Balance: Net Sales and Increase		$372.12			
Totals		$817.12			$817.12

This shows the method of computing net sales and increase for a farm enterprise. It should be noted that the first inventory plus any purchases made during the year are deducted from the second inventory plus sales. The difference in this table is the balancing figure $372.12. This would be the net sales and increase for the year.

year to add to the herds and flocks for feeding or breeding, and any feeds that may have been purchased. The assumption is that the son has helped produce all farm grown feeds and all livestock reared on the farm. Also that there are no net sales and increase unless there is at the close of the year more cash or livestock and feed than were on the farm when the farm year began.

Operating Expenses are Paid by the Father.—The son's share in the total farm business may seem small but we must remember that the father is responsible for all operating costs (and his living expenses), including the wage he pays the son. It is not unusual for a son's share in the net sales and increase to reach as much as 15 or 20 per cent of the total net sales and increase.

Sharing Net Receipts With the Son.—Sometimes the son's share will be computed as a share of the net receipts from the business (See Table 2). In this case, the percentage would be larger because net receipts from the business would occur only after all operating expenses are paid in addition to the maintenance of inventories. Thus there would be deducted from total sales and inventory increases all operating expenses including wages paid for hired labor, repairs, veterinary bills, feed, seed, medicines, breeding fees, taxes, insurance, normal replacements, etc. In this case the father's share of the net farm income would have to cover a return to his capital and wages to him for his time and management. His wages would be expected to take care of family living expenses over and above what the farm contributes toward family living. Farm contributions to living might or might not be regarded as income in computing the net farm return. If they are so regarded, then the son's share and that of hired labor in these contributions should be regarded as expense in computing net farm income. Ordinarily these contributions are not regarded in the same class with the actual sale of products. In reality they are just as important.

Any improvement made to the farm during the year would not be regarded as farm expense, but maintenance of improvements would be so regarded. Thus the repair of a pump or the painting of the kitchen would be a farm expense, while the building of terraces or the erection of a new cattle shed would not be called expense but would be regarded as an improvement to the farm and the second inventory would be increased by the cost of these improvements.

The Case of Sharing With Two Sons.—In one case recently called to our attention the father had two sons and wanted both of these boys to have some share in management responsibility and some share in earnings. In this particular case the situation was complicated by the additional circumstance that one son was married while the other was single. Both sons and the daughter-in-law lived in the home with father and mother. In a case of this type two or three things are evident and must be allowed for. First, the father has

TABLE 2. NET INCOME FROM A FARM ENTERPRISE (Showing Method of Computing) B-F.A.S.-'37

First Inventory:			Second Inventory:		
27 Ewes & Lambs	$395.00		40 Ewes & Lambs	$520.00	
1 Ram	50.00		1 Ram	50.00	
			3 Weathers	10.00	
Total		$445.00			$580.00
Cash Expenses			Cash Receipts		
Marketing	$ 7.50		Wool sold (266 lbs.)	$ 95.86	
Wool cord	1.00		Sheep sold (7)	134.76	
Medicines	.15		Premiums	6.50	
Repair of shearing machine	1.20				
Feed purchased	31.00				
Total		$ 40.85			$237.12
Distributed Costs (Except unpaid labor and interest on capital)					
Building & Equipment	$ 7.06				
Taxes & Insurance	1.22				
Feed (farm produced)	109.07				
Overhead	8.68				
		$126.03			
*To Balance: (Net Income)		$205.24			
Total		$817.12			$817.12

*This represents returns to capital invested in the sheep enterprise and wages to the operator and his family for caring for the flock for the year. The average capital was $512.50. Allowing 5% on this would give $25.63 interest deduction. The remainder or $179.61 would be return to labor and profit. One hundred seventy-two hours of labor were expended on this enterprise. Thus the enterprise paid almost $1.05 per hour of labor. Or if this labor is charged at 30 cents per hour, a deduction of $51.60 would be made, leaving a profit of $128.01 after paying for labor and use of capital.

In the above table showing how to compute net income from an enterprise, it will be noted that all expenses except the labor of the farm family and interest on the capital involved are allowed for before net income is determined. Thus net income is the return to unpaid family labor and capital.

two full-time assistants, both of whom are presumably giving their full attention to the farm business. If these boys are of equal strength and ability, their share in the earnings of the business should apparently be equal.

A second evident factor is that the married son and his wife are getting at least twice as much benefit from living in the home as is the single son. If the daughter-in-law helps with the home work, as was the case in this instance, then she is certainly "earning her keep" so that her husband need not be penalized because the farm is keeping two persons instead of one.

A third fact is that the single son should not be penalized because his brother and sister-in-law are getting twice as much support from the farm as is the single son. All such considerations must be allowed for in drawing up an agreement. In the above case, for instance, it is probably true that the cash wage paid to the two sons should be the same. It is also probably true that the father can spare as a contingent return to his two sons the same portion of the net sales and increase which would go to a single son, increased by the amount of wages which the business is saved from paying because the second son takes the place of a hired hand. Thus if it is possible to allow one son only ten per cent of the net sales and increase from the business, it would probably not be possible to allow two sons double this amount, but the business should be able to allow them something between ten and twenty per cent. Basing conclusions on estimates from a two-man farm as contrasted with a three-man farm, the share in net sales and increase going to two sons would be in the neighborhood of 15 to 17 per cent of the net sales and increase.

If the father has a fairly diversified farm business, it would be feasible for him to assign to each boy an enterprise. This would not be as complicated as computing a percentage share of the net sales and increase from the entire farm business.

Sharing With Young Men Not Related to the Owner.—There are instances where an owner operator is making an arrangement similar to the above with a promising young farm hand not related to the proprietor. There is no reason why this should not give the young man a good chance to build some capital which would eventually permit him to become a full-fledged farm operator.

Share in Earnings Without A Wage Allowance

There are numerous instances where a modification of the above arrangement is put into effect either with a son or with a capable young man not related to the proprietor. The modification involves the elimination of a cash wage and the shifting of the young man's prospective income exclusively to a share in the net sales and increase. This removes from the expense account the wage paid to the young man in the earlier cases, and introduces his assumption of the position of a tenant operator with greatly increased managerial responsibility. Cash for his current needs is generally provided by advances from farm sales. At the end of the year these advances are deducted from the young man's share in the net sales and increase. This is perhaps a little more liberal than would ordinarily be expected.

It is a common thing for a tenant who assumes full responsibility for the business to furnish all the man labor and receive one-third of the net sales and increase at the end of the year. If tractors, a milking machine and other power devices are used, this tenant

would be expected to pay one-third of the gas, oil and electricity bills each month, on the assumption that these power devices are either saving him labor expense directly, or indirectly by saving horse feed which the tenant would normally be expected to produce with his own labor. It is entirely possible that retaining effective farm workers in the business at the present time may be so important that more should be allowed these workers than has been customary in the past.

It is commonly regarded as more desirable for the young man to invest his own capital in the business as this capital accumulates. Thus he should acquire his proportionate interest in livestock, equipment, and seed as rapidly as his earnings will permit. Allowing a one-third share in the net sales and increase from the farm business to a tenant who has contributed no capital has often led to accusations that tenants without an ownership interest in work stock and equipment do not give as good care to that property as would be the case if they owned an interest in it.

A Partial Ownership Interest in the Increase Complicates the Arrangement

If, at the end of the year, the son has due him in settlement represented as increase in inventory, a share in the livestock, this share should be determined by disinterested third parties and paid to the son in cash in lieu of the share. This is because a small ownership interest complicates the settlement for a second or third year to a point where a fair settlement is almost impossible to compute. This warning is inserted because if a boy had $200 coming to him he might like to take it in breeding stock. It is simple to take it in this way if he removes this breeding stock from the farm and keeps them entirely outside the farm business. On the other hand if he accepts this return in breeding animals and keeps them on the farm, then we have a multiple ownership situation which makes very complicated bookkeeping. It simplifies the matter much more to always settle in cash at the close of each year. There is the additional probability that the farm is already stocked to capacity and any increase in stocking through trying to maintain a son's livestock would mean over-stocking of the farm or reducing the father's livestock.

The obligation of a tenant who contracts to furnish all the labor to operate a farm business includes furnishing enough labor to make normal repairs and replacements of improvements on the farm.

What Are Normal Replacements?—A frequent cause of dispute between tenant and owner lies in the question of what constitutes normal repairs and maintenance. The owner may expect the son or tenant to give an unusual amount of his time to tasks which the tenant may regard as improvement in the farm rather than repair

and maintenance. This may occur in the case of fence replacement, building terraces, repair or improvement of buildings and water supply, etc. A practical means of determining what constitutes normal repair and replacement is illustrated with fencing as follows. How long will the kind of fencing used on this particular farm last? What is its normal life? Suppose it is agreed that the normal life is twelve years, then the problem becomes a simple one. One-twelfth of that fancing would be normal replacement each year. If one is required to replace more than one-twelfth *on the average*, the excess replacement over one-twelfth constitutes improvement. The same procedure can be followed although not so simply with most other kinds of repair and maintenance tasks.

The Farm Should Provide a Home for the Son or Tenant.—Nothing has yet been said about providing a home and farm products for a married son. This is a common occurrence and deserves attention. Normally, when a man rents a farm to a young operator that farm is expected to provide the new tenant with a house and the other farm improvements that go with it, space for a garden and truck patch, whatever tree fruits and small fruits the farm produces which the tenant needs in his own family for food and which his wife can preserve for that purpose, a limited number of pigs to butcher for meat for his own family, either the dairy products which the farm provides and which are needed in his family or the privilege of keeping one or more milk cows to provide these dairy products, whatever poultry products the farm will supply that this new tenant needs for his living, or the privilege of keeping a limited number of hens and using from the farm whatever feeds the farm provides toward the ration of these hens. In the case of both dairy products and poultry products, if the tenant owns the milk cows and the flock of poultry, he is expected to pay for whatever purchased feeds are required beyond the feed the farm provides. If the former operator, who is now the landlord, remains on the farm, it will be necessary for him to reserve in his lease agreement whatever quarters and other facilities he expects to have for his own use. This would include granary, crib, hay barn, garden space, house, cellar, etc. If he expects to use products which result from the jointly operated property but which involve the tenant's labor, this reservation must be clearly set forth and will generally be regarded as offset to generous allowances to the tenant beyond the customary ones.

Can the Owner Expect the Same Income as Before?—Where the arrangement is a family affair, there sometimes arises a problem which results from the father's trying to maintain for himself and his family the same total income they enjoyed before the son assumed part responsibility. Unless the new arrangement results in increased farm earnings, this can not be done and still be fair to the son.

If the father shares responsibility with the son and offers him a share in the return as a reward for that responsibility, then the father must expect his income under the new setup to be less than formerly by about the proportion which he has granted to the son.

Furnishing Breeding Stock to a Farmer on a Share Basis

In a great many communities there is another common practice which deserves comment when considering these problems. This practice involves one person's providing, as an investor, to a second party, who is an active farm operator, a certain number of breeding or feeding animals and arranging to receive some share in the income resulting from caring for and feeding those animals through a season. An illustration is that of some local business man, retired farmer, or professional worker who will buy for a farmer a herd of breeding cows and a bull. The farmer who did not have sufficient capital to make this purchase himself will agree to accept this breeding herd, feed them, care for them, and manage them in as productive a way as he knows how. Then when the calf crop is sold the man who furnished the breeding herd will receive as a return on his investment a share of the proceeds from the sale of the calf crop. He sometimes expects when cows are culled from the herd and replaced by heifers raised to receive all of the income from the sale of the cull cows. He has been known to receive a half of the calf crop. This arrangement is frequently used in the case of brood sows or breeding ewes. A brief examination of the expense account attached to such an enterprise will generally indicate that the farmer who provides feed, labor, and shelter is providing about 90 per cent of all costs, especially when he agrees to maintain the breeding herd from the increase. If he shares in the income in the same ratio that he shares in cost, it is obvious that the investor's share in the income must be materially below a half and even below one-fourth. There are two auxiliary considerations which may be of little or great importance. One of these is the risk run by the person who furnishes the capital. If he entrusts this capital in the form of breeding stock to some farmer whose ability is unknown, then it is true that he is running considerable risk. On the other hand, if he carefully selects the farmer to whom he entrusts this breeding stock and if he has the additional safeguard that replacements are to come from the increase, then his risk is reduced to a very small item. The caretaker of this breeding stock also has some risk involved. He risks his year's work in feed and labor. On the other hand he is provided a means by which he can materially improve the condition of his soil if he exercises good judgment in the care and feeding of this stock. This is of considerable importance to him. There are produced herewith tables developed from cost studies at the Missouri Experiment Station which have significance in this connection. These tables (Tables 3 and 4),

TABLE 3. DISTRIBUTION OF COSTS IN CROP PRODUCTION*
(In Per Cent of Total Cost.)

Cost Item	Crop							
	Corn	Wheat	Oats Threshed	Soybeans Grain (Cult.)	Cotton	Alfalfa	Mixed Hay	Soybean Hay
Man Labor	22	13	14	18	43	20	12	20
Horse & Tractor Labor	23	16	17	20	11	15	9	25
Seed	2	10	11	7	2	4	8	11
Manure & Fertilizer	3	5	2	--	1	6	6	--
Equipment	8	5	5	7	4	7	3	8
Threshing or Combining	--	8	10	17	14**	--	--	--
Miscellaneous	7	8	6	4	0	13	10	4
Land Use	35	35	35	27	25	35	52	32
Total	100	100	100	100	100	100	100	100

*Adapted from Tables 11 and 12, Missouri Experiment Station Bulletin 315, and Table 20, Missouri Experiment Station Bulletin 467.
**Hauling to gin and ginning.

TABLE 4. DISTRIBUTION OF COSTS IN LIVESTOCK PRODUCTION*
(In Per Cent of Total Cost.)

Cost Item	Class of Livestock							
	Work Stock	Dairy Cows	Farm Milk Cows	Beef Steers	Hogs	Sheep	Poultry	
							Farm Flock	Commercial
Man Labor	11	20	27	5	6	12	25	17
Horse & Truck Labor	1	4	1	1	1	1	1	1
Feed	70	55	57	84	80	65	57	56
Equipment & Building Charge	10	5	4	2	3	5	6	12
Taxes & Interest	6	8	7	6	3	9	4	4
Incidentals & Miscellaneous	2	8	4	2	7	8	7	10
Total	100	100	100	100	100	100	100	100

*Adapted from Tables 11 and 12, Missouri Experiment Station Bulletin 315, and other cost records.

by showing the percentage of total cost contributed by the various items of cost, may be used as guides in deciding what the division of proceeds from a farm enterprise should be. For instance, suppose some investor interested in livestock furnishes a farmer with some breeding ewes and a ram. The farmer will provide all labor, feed, housing and other expenses. If we refer to Table 4, which shows that man and horse labor make up 13 per cent of the cost of caring for the flock of sheep, feed 65 per cent of the cost, equipment and shelter 5 per cent, and incidentals which would include veterinary, medicines, etc. 8 per cent, we find that the farmer is contributing 91 per cent of the total cost of maintaining that flock of sheep. If the investor pays the taxes and gets interest on his money, he is providing 9 per cent. Therefore, if the income is fairly shared when it is divided between the investor and the farmer in the same ratio as the expenses are divided, the investor should receive 9 per

cent of the income from that sheep enterprise. Similar use may be made of the crop cost distribution shown in Table 3.

It should be kept in mind that these costs are averages and that there will be some variation from them in specific cases. They must, therefore, be used mostly for general guidance. They should be interpreted rather broadly. Thus in the illustration used above, where it appears that the one furnishing the flock of breeding stock is contributing only 9 per cent of the total cost, it might be decided that he should have 10 or 15 per cent of the net sales and increase.

Conclusions

In conclusion, it seems there are three or four important considerations to bear in mind when a farm operator or owner is attempting to decide what concessions he should make to a second party, who is going to assume some administrative responsibility in connection with either an entire farm or an enterprise. These would seem to be as follows:

(1) Fairness suggests that returns from a business, whether it be an enterprise or a farm, should be divided among those contributing in proportion to their various contributions. This calls for some kind of record which will permit a fair determination of each contribution.

(2) That standards for making such divisions based on general results of accounting work may be used as preliminary guides in helping draw up an agreement. This agreement, however, should be subject to modification at the close of the year when the actual accounting results can be determined. Adjustments which are designed to increase the fairness of the preliminary agreement are then in order.

(3) Sharing administrative responsibility with a son or a hired worker is a highly useful means of accomplishing the objectives of giving the young person experience in making decisions; keeping the worker more interested in doing a careful and conscientious job; giving the worker an interest in unusual returns due either to a better job of management or increasing prices; avoiding the obligation of paying wages above what the farm can afford should prices fall; giving the young farmer a chance to accumulate some stock against the day when he can start for himself.

(4) Farm proprietors can be much more successful in competing with other kinds of employment for the service of particularly efficient workers by giving those workers this interest in the business, which interest is certainly more than a wage earner's interest.