## UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE AGRICULTURAL EXPERIMENT STATION

F. B. MUMFORD, Director

# Acquiring Farm Ownership by Payments in Kind

A Plan to Permit Tenants to Buy Farms Through Annual Product Payments

O. R. Johnson



COLUMBIA, MISSOURI

## PROPOSED STEPS TOWARD FARM OWNERSHIP

Making an adequate down payment without exhausting his credit resources is probably the greatest single barrier between the young man and farm ownership.

At present the purchaser must assume all risk of short crops, a fluctuating price level, tax increases, and losses due to diseases, storms, and other causes.

If the farm were purchased on an annual product payment basis, the seller would have assumed the risk due to changing prices for farm products. The purchaser would still carry the other risks; for him the price level, as it affects principal and interest payments, would be stabilized.

With such a procedure there would be greater incentive on the part of the operator to improve the productivity of his soil and the appearance of his farm. Also the purchaser would not be required to exhaust his credit reserves nor would he be prevented from acquiring ownership because of a prohibitive initial down payment.

Governmental policies which tend to stabilize the price level would, to the extent that it did stabilize, remove the risk assumed by the seller of a farm. Any policies looking toward insurance against weather risk would likewise lighten the purchaser's load of risk assumption.

The federal encouragement of proper land use and soil conservation helps protect the seller against depletion by the purchaser of the productive quality of the farm. Such protection must be assured.

### ACKNOWLEDGMENT

The following proposal is not made with the idea that it is entirely new or that it is a completely satisfactory solution to the difficulties involved in acquiring farm ownership. On the contrary, this proposal with variations has long been used in individual cases. Also a stabilized price level would undoubtedly be a much more adequate solution to one phase of the present land purchase difficulties, but the possibility of achieving price stabilization in the near future is considered remote. The pioneering in those individual cases where land has been transferred on a basis something like that suggested here, and the critical and constructive suggestions of my colleagues must be given credit for an important part of this proposal. The material is presented in the hope that in addition to the other advantages gained it will concentrate attention on the problem of protecting such long-time commitments as are involved in land ownership transfers from the risk associated with promises to make constant dollar payments with income from farm products which have highly variable dollar values.

## Acquiring Farm Ownership by Payments in Kind

## A Plan to Permit Tenants to Buy Farms Through Annual Product Payments

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Almost 40 per cent of the farms in Missouri are now operated by men who do not own those farms. Three counties in the State—Mississippi, New Madrid, and Pemiscot—have more than 80 per cent of their farms operated by tenants. Atchison county has over half its farms in the hands of tenants. These figures are from the 1935 Census. It is generally admitted that in our best agricultural regions too many of our farms, for the best interest of all our people, are in the hands of tenants.

In addition to the admitted tenant farms we have a large number of farms so heavily mortgaged that they are quite likely to become tenant farms in the near future. A man who has no ownership interest in the land, or who is in imminent danger of losing his ownership interest, does not have much incentive to maintain or improve that land. He does not know how many more years he can remain on that farm to enjoy improvements which he may have made. More than 40 per cent of Missouri's tenants remain on a given farm two years or less. Seventy-seven per cent of them remain on the same farm less than five years. Only eleven per cent remain on the same farm over ten years.

All the physical and social handicaps of a transient are found with these tenants who are permitted to remain on a given farm in a given community for such a short period of time. School programs, not only of the children themselves, but of the administrative school unit cannot be well developed under such conditions. Neither the tenant nor his family can become enthusiastic participants in the social life of a community where they must adapt themselves to a new social group every two or three years. This changing nature of the population of some of our best agricultural communities is one of the biggest single problems in developing conservation programs, Farm Bureau activities, boys' and girls' clubs, and most of the other attractive movements in agriculture. Lack of interest in the farm and its improvements seems to be a necessary adjunct of this condition. The result in far too many cases is unsatisfactory from the standpoint of the owner of the land, the tenant operator of that land, and the neighbors of this tenant.

It is well recognized that not all tenants suffer from the above handicaps. Many of them do have excellent arrangements with their landlords whereby they are reasonably well satisfied as regards permanency of residence, adequacy of working agreement with the landlord, and ability to assume community responsibilities. For tenants so fortunately situated, acquiring ownership of property may not always be very appealing.

## Ability of Tenants Varies

Anyone wrestling with this tenant problem must recognize that there is variation both in the ability of tenants and in circumstances under which they work. There is probably no practicable or desirable means of transforming all tenants into owners, regardless of either ability or inclination. It is, however, considered feasible to adapt certain procedures to this problem in such a way as to facilitate the movement of tenants toward ownership in those cases where tenants desire to become owners and where they have demonstrated ability to manage property independently. The proposal hereafter set forth in no way interferes with the development of additional desirable landlord-tenant arrangements. Nor does it in any way imply that it would be substituted completely for the method of direct sale of land to tenants for a single payment of a given number of dollars. This proposal promises only an additional means of transferring a farm from an owner, who no longer wishes to have active charge of the management of that land, to an active manager, under desirable conditions as regards permanence of residence and the eventual acquirement of complete ownership by that manager.

At the present time there seem to be at least two rather serious difficulties in the way of an individual farm operator stepping from the position of a tenant to that of the owner of a farm. The first is making an adequate down payment. Under our present system of land transfers the experience of the Federal Land Banks, and other agencies which have in the past few years become unwilling owners of large acreages, indicates that unless a substantial down payment can be made (at least 25%) and unless this down payment leaves the purchaser with adequate livestock and equipment, unincumbered, for the operation of the farm, there is slight chance that he will be able to meet subsequent payments.

The second difficulty, which really arises out of the first, is that many purchasers strain every resource to make the necessary down payment, and find themselves without adequate equipment, livestock, or working capital to effectively operate the farm. They are burdened with a heavy interest payment and working at a great disadvantage because they have inadequate equipment and no shock absorbing reserve in case of unfavorable seasons.



Fig. 2.—Owner-occupied homes show a care in maintenance not so frequently found on tenant-occupied farms.

Up to the present, the only means by which many tenants have been helped to farm ownership has been through loans in an amount equal to or near the full value of the farm in question, and occasionally these loans have included necessary funds for the purchase of work stock and machinery. Extending credit to this extent might occasionally be justified, but in most cases can hardly be called good business procedure.

Is there then any means by which worthy tenants, who have demonstrated ability to manage a farm and who have acquired a reasonable amount of work stock, other livestock, and farm machinery -who have an established reputation for integrity and a willingness to work hard-practice good farm management-and cooperate with neighbors in community activities, may acquire an ownership interest in a farm without having the necessary resources to make a reasonable down payment on that farm? If such a plan can be developed and still be kept within the realm of sound business practice, it should be a contribution which would help to rectify the present trend toward more tenant operated farms. In other words, can there be developed a means by which a skillful farm operator can know that, without handicapping himself with an impossible mortgage debt covering both his land and his personal property, he can place himself on a good farm, where, with reasonable attention to good farm management, he has every prospect of becoming eventually the owner of that farm? If he does follow good management practices, can he enjoy the permanent residence of an owner-operator and improve the farm with reasonable certainty that when a given number of years have passed he or his heirs will have clear title to the property so improved?

#### Plan of Land Sale

It is proposed that a plan of land sale based on payment in kind be undertaken. Specifically, this plan would involve a determination of a fair productive value of the property satisfactory to both owner and tenant, and then, the computation of the number of annual payments in product, which payments would, when completed, equal the full productive value of the property plus a fair interest charge on unpaid balances from year to year. Such payments would be much like the payment of rent and would not encounter the difficulties commonly confronted in a single cash payment. In other words, the proposal is to develop a system of amortizing the full value of the farm through annual payments for an agreed upon number of years, the payments to be made in product or the cash equivalent value of that product at the time each payment is due. There is no reason why such a plan could not be used with, or without, down payments. Calculating annual payments in product would avoid the long-time hazard of a fluctuating price level.

The sale would be made by means of a contract which would specify that the purchaser would pay annually to the seller a definite number of units of a generally recognized farm product of a definite grade, or the cash equivalent value of those units in the particular year when the payment is made. The payment might be in one product where grade or quality can be easily determined, or in a combination of such products. It might be in bushels of wheat of a given grade, in the wheat region, or bales of cotton of a given grade and staple for a cotton farm, or bushels of corn of a given grade, or pounds of butterfat. The payment could be made in products or in the money value of that quantity of product of specified grade at the time the payment is due. With some products the tenant could hedge his payments by purchases in the futures' market or by storage in years of abundant crops. He could do this through federal warehousing; or if crop insurance plans are developed and put into use, he could partially insure his production to avoid some of the hazards of unfavorable seasons. The seller could also hedge his position by sales in the futures' market for those products where futures' markets exist.

The sum of payments made would have to equal the estimated value of the farm plus a reasonable interest charge on unpaid balances. The amount of each annual payment could be readily computed through the use of amortization tables. Every payment the tenant made would bring him one year nearer complete ownership of the property. The sale contract might provide conditions for extra pay-



Fig. 3.—This farmstead represents the next step toward an owner's ideals of a farm home.

ments if the tenant found himself in the position to make extra payments, thus decreasing the period of time between partial and complete ownership. There is no economic reason why such a contract could not be made transferable. Either the tenant or the owner should be able to sell his interest in such a contract. Such sale would have to be with the approval of the other party to the contract, to avoid certain obvious difficulties. A buyer of the tenant's interest in the contract would be reimbursing the tenant for payments already made and would give himself the privilege of completing the contract and owning the farm. The seller would be largely in the position of the owner of a matured annuity contract except that the annual income would be specified as a given quantity of a given grade of farm product or the cash equivalent of that quantity. This would mean that the seller would be assuming the risk of price level change. The buyer would be carrying the risk of seasonal variation in yields in addition to his assumption of responsibility for taxes and upkeep of the property.

Under such a plan the value of the farm is "frozen" at a determined level of productivity at the time the sale is made. Any subsequent improvement in productivity would accrue to the benefit of the purchaser. Any decrease in productivity would be to his disadvantage and would mean that the percentage of total production which the purchaser must pay annually would increase as the productivity of the land decreased.

It would be very necessary to protect the former owner against deliberate depletion on the part of the tenant. The contract would have to be strict in requiring the tenant to follow conserving practices, and surrender of possession should be provided if the tenant failed in this respect.

Determination of productivity of the land would have to be made in terms of crops produced. It would be a simple matter to express the productivity of one crop in terms of another crop which might have a more commonly recognized local market value. From the standpoint of either economics or good farm management, there seems to be no good reason why such a contract cannot be made, and made to conform to all customary transfer requirements, from the standpoint either of purchase or sale of such a contract or inheritance and settlement of estates.

Special consideration should be given to the fact that such a procedure accomplishes some of the objectives sought in stabilizing the price level. It also conforms to the objectives of the Soil Conservation and Domestic Allotment Act by making mandatory, on the part of the purchaser, conformance with conservative principles, and gives a second incentive—that any improvement which he makes will unquestionably accrue to his own benefit as the new owner. This plan will also articulate admirably with the crop insurance proposal recently made by the President's Committee. The better federal crop insurance plans and price level stabilization plans develop, the more will risk be removed from the shoulders of both buyer and seller under this proposal, and it does of course accomplish the objective of placing good tenants on land as owners of that land without requiring them to stretch their credit beyond the point of good business practice for both themselves and the agencies furnishing the credit.

### How Plan Works

In an attempt to illustrate more clearly just how the proposal would be applied an example is given in Table 1 of a hypothetical farm, with a number of considerations involved in the footnotes following that table. Special application of the considerations involved are given in three cases which are regarded as typical of the chief use of this proposed method.

Case I. Farm owner "A," 65 years of age, wishes to retire from active management of his farm. He does not want to sell it on a basis that he may have to take it back within five or ten years when he would be even less able to manage it; neither does he want it thrown back on his wife or his heirs after somebody else has had a chance to allow the farm to run down. He does know a good young manager who has accumulated enough livestock and equipment so that he could properly operate the farm. He knows this young manager to

Table 1.—Illustration of One Possible Method of Computing Annual Payments to Amortize Productive Value of a Farm.

Acres	Gross Rent Income	Conversion Factor	Corn Equivalent Value (in. bu.)
40	480 (at 2/5 rent) 200 (at 1/3 rent) 10T (at 1/2 rent) 960 cow days	1.00 1.04 .60	480 223 214
. 14	140 cow days	.175	192
	\$120.00		200
. [ 160			1309
bushels	per acre		. 480
ent Val	ue		829 bu.
	40 40 20 40 14 6 160 3 bushels	Acres Income  40 480 (at 2/5 rent) 40 200 (at 1/3 rent) 10T (at 1/2 rent) 40 960 cow days 14 140 cow days 6 \$120.00 8 bushels per acre 8 ent Value	Acres Income Factor  40 480 (at 2/5 rent) 1.00 40 200 (at 1/3 rent) 1.04 20 10T (at 1/2 rent) 60 40 960 cow days 14 140 cow days 175 6 \$120.00 1.75

_	Number of Payments (years)				
Annual Payment Needed to Amortize (in bushels). At 6%	25	30	40	50	
	1,080.8	1,003.7	918.2	876.5	
	1,326.6	1,198.5	1.047.1	964.7	

Notes: In the above illustration the land classification used is typical of the distribution of acreage for much of our medium grade agricultural land. Gross rent income for harvested crops is the most customary rate used in Missouri for land of this grade. The rent income for pasture land is converted to corn equivalent and to cow days for the most customary cash rent rate for this quality of pasture, using a corn equivalent factor of 9.8 pounds of corn equivalent per cow day. The rent income for building block is the estimated use value converted to corn equivalent on the basis of the most customary rent allowance for a farm of this quality, and a 60 cents per bushel allowance for corn. The conversion factor to corn equivalent is based entirely on the net energy equivalent evaluation of the different crops. The tax and upkeep charge is also converted to bushels of corn from the dollar cost for taxes and upkeep taken from representative farm cost records for this quality of land.

Attention is called to the results from computing the amortization rate for 25, 30, 40 and 50 year periods. Using a capitalization rate of 6 per cent and a 50 year period for amortizing the productive value of the farm, the operator would have to pay only 47.5 bushels of corn or its equivalent above the net rent value to become complete owner of the land in 50 years. On a 4 per cent basis he would have to pay 135 bushels per year above the net rent value. On a 30 year basis at a 6 per cent capitalization rate he would have to pay 174.7 bushels above the net rent rate to own the farm in thirty years. This would have to come from his share of the crops or from his income from livestock operations. Few farmers could spare the excess charge over net rent to amortize the principal in 25 years; but 30 annual payments or more are readily within reach of most good operators on a reasonable sized farm.

be a careful farmer with a high degree of integrity and to have an intense interest in having good neighbors and being neighborly. Owner "A" therefore contracts with this young manager for sale of the farm to the young man. The young man agrees to operate the farm in a conservative manner, pay all taxes, keep the buildings insured and maintained. He agrees to pay the first party to the contract annually a stipulated amount of products of a given grade. Owner "A," the first party to this contract, agrees to accept these products or their money equivalent on the date the payment is due. At the end of the stipulated period when the total number of annual payments are completed, the second party to the contract is to receive a clear title to the property. If the first party, owner "A," should die before all the payments have been made, the payments will continue, accord-

ing to the contract, to farmer "A"'s heirs, and the requirements of the contract will still be binding on the purchaser.

Case II. Farmer "B" is a man 60 years of age with four children. He has a good farm which one of his sons would like to operate and eventually own. He also has other interests and would like to turn this farm over to this son. He contracts to sell his son this farm on a basis of 30 annual payments. Contracts and safeguards in this contract are the same as in Case I. This son is thereby provided with a farm which he feels he can afford to improve and make his permanent home. On the death of his father prior to the completion of the contract he continues his annual payments in kind to his father's estate. Each of the other three children has an heir's interest in the income from this contract. The son who operates the farm under the contract does not have to mortgage his business to the limit in order to buy out other heirs who insist on having cash, because he is protected by the contract. Incidentally this son, himself being one of the heirs, assuming that the four children are the only heirs, holds a one-fourth interest in these annual payments.

Case III. The Land Bank or insurance company having a number of farms which they would like to place in the hands of owner-operators but having experienced difficulty in finding prospective purchasers who have adequate funds for making safe down payments, might contract with capable tenants under this proposal. Such an agency, having long-time existence and having such resources and sources of income that the immediate receipt in cash of the sale price would not be a significant item, could collect such payments as indicated above and would have adequate machinery and personnel to handle the problems connected with such a plan of settlement. The Land Bank might accept payments in kind, have the products stored under the Federal Warehousing Act, and arrange a cooperative agreement with other federal agencies dealing with the problem of carry-over of surpluses. This would be most workable in case a considerable volume of such transactions were executed.

It is recognized that the application of this procedure would be more feasible in a commercial farming section, such as the corn, wheat or cotton belt, than in areas where farms are more nearly on a subsistence basis or where location or other features would lend farms particular value. In other words, determining the productive value of a farm when there is the possibility of earnings from summer boarders or when that farm provides only subsistence for a family would certainly introduce complications. A means might still be found for applying such procedure to these farms but it would not be simple. Studies need to be made to perfect the mathematical, legal,

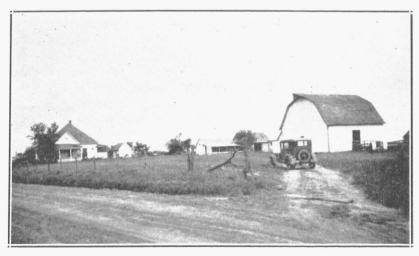


Fig. 4.—These conservative but adequate farm improvements were achieved only after years of a farm owner's careful planning.

and mechanical details of this proposal, and to make them applicable under rather widely varying conditions. But it seems quite clear that the mechanics can be perfected so that this method would apply not only in the corn, wheat and cotton areas but with dairy farms, fruit farms, truck farms, grazing farms, and many other types. The method of expressing productive value in terms of one of the leading commodities of the community might vary with different regions, but is nevertheless within the field of practicability.

## Preliminary Steps Completed

The productive value of land has been rather widely studied the last two or three years in the Agricultural Adjustment Administration. In applying the Soil Conservation Act in the various states the normal productivity of every cropable field on most farms has been agreed on, chiefly by local committees of farmers. This wealth of preliminary material would certainly form the foundation for the application of this procedure. Information available in the Farm Credit Administration would certainly aid in determining the number of payments and the size of the annual payment practicable.

Such a procedure might well be tried first by some such agency as the Land Bank or the Resettlement Administration. Before it is used to any very great extent by individual owners in transferring their farms, some demonstrations would probably have to be made by such agencies as the above. It is believed that much of the ground has been broken by studies, demonstrations, and practice both here and in some European countries. Their experience might throw light on some of the problems involved. This procedure does seem to articulate admirably with a number of movements now under way

to conserve soil, and reduce risks for farm operators and owners; and it promises to help in improving the tenancy situation without introducing subsidies or a federal land buying program which might unduly influence current market prices for land.

The plan does not involve the abolition of direct sale of land for a cash consideration. That avenue of disposal will still be open to any owner. It should, however, make unnecessary the granting of loans in excess of a reasonable percentage, for the purchase, by tenants, of a farm and its equipment. It will prevent a tenant's pledging every cent of his assets in order to secure temporary title to a farm and thus be left without any shock absorbing resources.

Certain additional techniques will undoubtedly need to be developed to facilitate the application of this plan. One of these involves a more adequate method of measuring the productive value of lands not crop land. Agricultural Adjustment studies have not included measuring the productive value of pastures although approximately one half of our farm acreage in Missouri is pasture land, and we have already learned that its productive value in the same neighborhood may vary as much as 400 per cent. This is much greater variation than will be found with crop land in that same community. Some work is being done which will assist in dealing with this particular problem. The Bankhead-Jones Pasture Productivity Project under way at the Missouri Experiment Station will contribute part of the answer to this problem.

A second problem is that of determining the use value of farm improvements. Methods of making such determination are not as yet well standardized, but are being applied more or less effectively and with various modifications. Practical methods of handling this particular problem are rather easily applied; though they may not be as scientific as could be desired, they will undoubtedly serve, and be improved and perfected as the need for such methods is emphasized through the application of this suggested approach. A third problem, or rather a series of problems, relates to the legal aspects of this plan. No claim is here made that present legal provisions will or will not permit the complete application of this proposed procedure. The author is not familiar with the legal problems involved nor with the adequacy with which present legal safeguards meet those problems.

It is felt, however, that the objectives of such a procedure are clearly desirable, and that the proposal articulates admirably with a number of progressive programs in soil conservation and the improvement of the economic and social status of agriculture. It does not seem to violate any important principles of either banking and credit or farm management. It should, therefore, contribute to the objective of helping capable and worthy tenants become farm owners.